

Can Religiosity Alleviate the Fear Caused by the Coronavirus? An Analysis from the Netherlands

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Abstract

The Corona crisis hit Europe with great force and power, causing deaths, distress and anxiety on the old continent. The goal of this paper was to analyze if religiosity - the level of religious commitment could alleviate the negative psychological outcomes of this crisis. The method used was to analyze data from a large longitudinal panel in the Netherlands that provides highly detailed information about respondents. Analysis showed that individuals with higher levels of religiosity had higher fear and distress levels and lower happiness levels compared to respondents with lower religiosity levels. So it appears that religion could do more harm than good regarding psychological wellbeing but that could be just one side of the coin.

Key words: religiosity, coronavirus, happiness, fear, distress

J.E.L. classification: M310

1. Introduction

What could make us feel better during the Corona crisis? The authorities were uncorrelated, the media sowed panic and distress, the hospitals were overcrowded and churches started closing down. This paper has the objective of analysing if religiosity - a key component of the complex religious construct can alleviate the negative psychological impact of the Corona crisis in the Netherlands. The first part of the paper discusses the different literature streams regarding religion and consumer behaviour concluding that religions influence on consumer behaviour is one of the most under researched topics in the marketing literature. Moving forward, the paper analyzes a topic that is on everyone's lips - the Corona crisis by using data from a large longitudinal panel and exploring the relationship between religiosity, happiness, fear and distress levels.

2. Theoretical background

According to Oxtoby & Hussain (2010), religion can be defined as a "sense of power beyond the human, apprehended rationally as well as emotionally, appreciated corporately as well as individually, celebrated ritually and symbolically as well as discursively, transmitted as a tradition in conventionalized forms and formulations that offers people an interpretation of experience, a guide to conduct, and an orientation to meaning and purpose in the world." Even though religion might appear to have lost its power and influence, still 84% of individuals worldwide identify with a religious group (The Global Religious Landscape, 2012) and the numbers are increasing each year. It is estimated that by 2050, the number of individuals unaffiliated with a religious group will drop from 16% in 2010 to 13% in 2050 (Lipka & Posts, 2015).

One important aspect of the religious construct is religiosity which is "the degree to which a person adheres to his or her religious values, beliefs, and practices, and uses them in daily life" (Worthington et al., 2003). According to McDaniel & Burnett (1990), religiosity has two dimensions: cognitive (intrapersonal) and behavioral (interpersonal). The intrapersonal dimension relates to an individual's belief in their religion while the interpersonal dimension relates to the level of practice of religion by individuals such as weekly church attendance, worship meetings and so on. The research conducted so far has clearly demonstrated the value of the religiosity construct as a

consumer behaviour predictor. It is related to aspects of consumer behaviour such as: lifestyle, retail patronage, shopping behaviour, attitudes towards advertising, purchase intentions of high involvement products and media usage (Delener, 1990a, 1990b, 1994; Delener & Schiffman, 1988; Hirschman, 1981; LaBarbera, 1987; 1990; Mokhlis, 2006).

One could assume that religion is a topic that has been over analyzed by the marketing research literature. But the exact opposite is true since most studies have dealt with the topic of segmentation, that divides the market based on religious affiliation or religious commitment - religiosity (E. A. Minton & Kahle, 2013). Classic examples of religion's influence on consumer behaviour are the avoidance of advertising products that do not comply to Jewish, Muslim, kosher and halal religious laws (Ahmad, K., Rustam, G. A., & Dent, M. M., 2011; Alserhan, 2010; Shafie & Othman, 2006). Other scholars dealt with the influence of religion on media preferences (Kahle & Valette-Florence, 2012), store patronage (Mokhlis, 2006), shopping behaviour (Essoo & Dibb, 2004), ethics (Hunt & Vitell, 2006; Patwardhan et al., 2012) and sustainable consumption (E. Minton, 2013). Prominent researchers call the need for further analysis on religion's influence on consumer behaviour. E. A. Minton et al. (2016) argue that the relationship between religion and consumption behavior is still severely under researched. Moreover, Mathras et al. (2016), argue that studies on the effects of religion on consumer psychology and behavior are scattered and have yet to be systematized, and much more remains to be analyzed.

In December 2019 strange pneumonia cases appeared in the Wuhan Province in China. After investigation, it swiftly became known to the whole world that a new strain of Coronavirus is affecting the global health. The rapid proliferation of the disease has created a massive economic crisis alongside the health crisis. But the Corona crisis has also another powerful impact on the individual and on society, the psychological one. Rossi et al. (2020) discovered a high rate of negative mental health outcomes three weeks into the first Covid 19 lockdown in Italy. These include: post traumatic stress disorder, depression, anxiety, insomnia, high perceived stress and adjustment disorder. Salari et al. (2020) conducted a meta analysis into the scientific articles that researched mental outcomes from the Corona crisis. They discovered the prevalence of stress, anxiety and depression. Taking all this into consideration, the current research has the goal of analysing if religion can alleviate some of the negative psychological outcomes caused by the Corona crisis.

3. Research methodology

Research questions

In order to analyse the relationships between religiosity, happiness, distress and fear levels, the following research questions were created:

Rq 1. Is there a difference regarding happiness levels between individuals with different church attendance frequency?

Rq 2. Is there a difference regarding distress levels between individuals with different church attendance frequency?

Rq 3. Is there a difference regarding fear levels between individuals with different church attendance frequency?

Rq 4. Is there a difference regarding happiness levels between individuals with different prayer frequency?

Rq 5. Is there a difference regarding distress levels between individuals with different prayer frequency?

Rq 6. Is there a difference regarding fear levels between individuals with different prayer frequency?

Participants

This paper makes use of data provided by LISS Panel Data Archive (Longitudinal Internet Studies for the Social sciences), a panel administered by CentERdata (Tilburg University, The Netherlands). The LISS panel is a representative sample of Dutch individuals who participate in monthly internet surveys. The panel is based on a true probability sample of households drawn from the population register. Households that could not otherwise participate are provided with a computer and Internet connection. A longitudinal survey is fielded in the panel every year, covering a large variety of domains including work, education, income, housing, time use, political views, values and

personality. The author did not have access to any identifying information about the participants as the data were anonymized and de-identified prior to author access.

For this current paper, the twelfth wave (most recent) of the LISS data panel was used. The data was collected from the religion and ethnicity part of the study and also from the personality studies. The data for the religious and ethnicity were collected between 05-08-2019 and 24-09-2019 and the data for the personality studies were collected between 04-05-2020 and 30-06-2020, corresponding with the first wave of the Corona outbreak in Europe. The number of respondents was 4.426.

Measures

Respondents answered questions pertaining to their religion, which are part of the religion and ethnicity core studies from the LISS panel. Regarding religiosity, the respondents were asked two questions: a. "Aside from special occasions such as weddings and funerals, how often do you attend religious gatherings nowadays?" (1 = "every day", 2 = "more than once a week", 3 = "once a week", 4 = "at least once a month", 5 = "once or a few times a year", 6 = "never") and b. "Aside from when you attend religious gatherings, how often do you pray?" (1 = "every day", 2 = "more than once a week", 3 = "once a week", 4 = "at least once a month", 5 = "once or a few times a year", 6 = "never"). These were the independent variables of the research. The dependent variables used were happiness, distress and fear levels with the following questions: "On the whole, how happy would you say you are?" (ten point Likert type scale), "Indicate to what extent you feel, right now, that is, at the present moment distressed?" (seven point Likert type scale) and "Indicate to what extent you feel, right now, that is, at the present moment scared?" (seven point Likert type scale).

Procedures

For analysing the relationship between religiosity, happiness, distress and fear levels SPSS (Statistical Package for Social Sciences) version 19 was used on a Windows computer using Windows 10, 64 bits operating system. Regarding the statistical treatments applied, the author used the multivariate analysis of variance (MANOVA) in order to compare the different religious groups on a number of different, but related, dependent variables.

4. Findings

Table no. 1 presents the main results of the statistical analysis performed.

Table no. 1. Research results

Research question	Results	Details
Rq 1. Is there a difference regarding happiness levels between individuals with different church attendance frequency?	No	A one-way between-groups multivariate analysis of variance was performed to investigate differences in psychological wellbeing between respondents with different church attendance frequency. Three dependent variables were used: happiness levels, distress levels and fear levels. The independent variable was church attendance frequency. There was a statistically significant difference between respondents with different church attendance frequency on the combined dependent variables, $F(15, 12196) = 4.991$, $p = .000$; Wilks' Lambda = .983; partial eta squared = .006. When the results for the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .017, was "fear levels", $F(5, 4420) = 8.503$, $p = .000$, partial eta squared = .010. An inspection of the mean scores indicated that respondents who frequent church gatherings frequently feel more scared than respondents who attend church less frequently or not at all.
Rq 2. Is there a difference regarding distress levels between individuals with different church attendance frequency?	No	
Rq 3. Is there a difference regarding fear levels between individuals with different church attendance frequency?	Yes	

Rq 4. Is there a difference regarding happiness levels between individuals with different prayer frequency?	Yes	A one-way between-groups multivariate analysis of variance was performed to investigate differences in psychological wellbeing between respondents with different prayer frequency. Three dependent variables were used: happiness levels, distress levels and fear levels. The independent variable was prayer frequency. There was a statistically significant difference between respondents with different prayer frequency on the combined dependent variables, $F(15, 12168) = 4.289$, $p = .000$; Wilks' Lambda = .986; partial eta squared = .006. When the results for the dependent variables were considered separately, all the three dependent variables reached statistical significance using a Bonferroni adjusted alpha level of .017.
Rq 5. Is there a difference regarding distress levels between individuals with different prayer frequency?	Yes	
Rq 6. Is there a difference regarding fear levels between individuals with different prayer frequency?	Yes	

Source: SPSS output

5. Conclusions

This paper has analyzed the relationship between religiosity and certain psychological aspects such as happiness, distress and fear levels. The underlying idea was that respondents who are very religious would experience lower levels of distress and fear and higher levels of happiness because religion would act as a protective buffer against negative feelings. When it came to church attendance, surprisingly the only significant difference was obtained regarding distress levels as the results showed that people who attend religious gatherings more frequently experience higher distress levels than respondents who attend religious gatherings less often or not at all. The results are surprising to say the least and are in contrast with other findings that portrayed religiosity as a coping mechanism in periods of uncertainty. Moving on to prayer frequency, another powerful construct of religiosity, we observe similar results. More exactly, people who pray more often experience higher levels of fear and distress compared to respondents who pray less frequently or not at all. Again, the results are in contrast with other findings.

So it appears that religiosity could be increasing people's anxiety and fear levels. But why is that? One answer could be that people who pray and attend church more often put forth in their prayers and church gatherings their feelings and anxieties, thus making them more salient. Thereby they could exhibit higher levels of these feelings. But on the other hand, they could also feel more at peace knowing that their God is in control. Exploring these relationships in more depth could be an avenue for further research. One of the important implications of the current research is that it contributed to the underresearched area of religion and consumer behaviour by analyzing large data sets from one of the largest longitudinal panels in Europe. Even though more variables and more detailed analysis could have been undertaken the results are intriguing and relevant for the current times.

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7. References

- Ahmad, K., Rustam, G. A., & Dent, M. M. (2011). Brand preference in Islamic banking. *Journal of Islamic Marketing*, 2(1)(74-82). <https://doi.org/10.1108/17590831111115259>
- Alserhan, B. A. (2010). On Islamic branding: Brands as good deeds. *Journal of Islamic Marketing*, 1(2)(101-106). <https://doi.org/10.1108/17590831011055842>
- Delener, N. (1990a). *Religious differences in cognitions concerning external information search and media usage*. Business Research Institute, St. John's University.

- Delener, N. (1990b). The Effects of Religious Factors on Perceived Risk in Durable Goods Purchase Decisions. *Journal of Consumer Marketing*, 7(3), 27–38.
- Delener, N. (1994). Religious Contrasts in Consumer Decision Behaviour Patterns: Their Dimensions and Marketing Implications. *European Journal of Marketing*, 28(5), 36–53.
- Delener, N., & Schiffman, L. G. (1988). Family decision making: The impact of religious factors. *G. Frazier, C. Ingene, D. Aaker, A. Ghosh, T. Kinnear, S. Levy, et Al*, 80–83.
- Essoo, N., & Dibb, S. (2004). Religious Influences on Shopping Behaviour: An Exploratory Study. *Journal of Marketing Management*, 20(7-8), 683–712.
- Hirschman, E. C. (1981). American Jewish Ethnicity: Its Relationship to Some Selected Aspects of Consumer Behavior. *Journal of Marketing*, 45(3)(102-110). <https://doi.org/10.2307/1251545>
- Hunt, S., & Vitell, S. J. (2006). The General Theory of Marketing Ethics: A Revision and Three Questions. *Journal of Macromarketing*, 26(2)(143-153). <https://doi.org/10.1177/0276146706290923>
- Kahle, L. R., & Valette-Florence, P. (2012). *Marketplace Lifestyles in an Age of Social Media: Theory and Methods*. M.E. Sharpe.
- LaBarbera, P. (1987). Consumer behavior and born again Christianity. *Research in Consumer Behavior*, 2, 193–222.
- Lipka, M., & Posts. (2015, April 2). *7 key changes in the global religious landscape*. Pew Research Center. <http://www.pewresearch.org/fact-tank/2015/04/02/7-key-changes-in-the-global-religious-landscape/>
- LISS Panel Data Archive. (n.d.). Retrieved June 6, 2019, from <https://www.dataarchive.lissdata.nl/>
- Mathras, D., Cohen, A. H., Mandel, N., & Mick, D. G. (2016). The Effects of Religion on Consumer Behavior: A Conceptual Framework and Research Agenda. *Journal of Consumer Psychology*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2787454
- McDaniel, S. W., & Burnett, J. J. (1990). Consumer religiosity and retail store evaluative criteria. *Journal of the Academy of Marketing Science*, 18(2), 101–112.
- Minton, E. (2013). Religion and Religiosity's Influence on Sustainable Consumption Behaviors: An Exploratory Study. In *Communicating Sustainability for the Green Economy*, Editors: Lynn Kahle, Eda Gurel-Atay.
- Minton, E. A., & Kahle, L. R. (2013). *Belief Systems, Religion, and Behavioral Economics: Marketing in Multicultural Environments* (P. J. Romero & J. A. Edwards (Eds.); Kindle). Business Expert Press.
- Minton, E. A., Kahle, L. R., Juana, T. S., & Tambyah, S. K. (2016). Addressing Criticisms of Global Religion Research: A Consumption-Based Exploration of Status and Materialism, Sustainability, and Volunteering Behavior. *Journal for the Scientific Study of Religion*, 55(2), 365–383.
- Mokhlis, S. (2006). *The influence of religion on retail patronage behaviour in Malaysia* [University of Stirling]. http://www.storre.stir.ac.uk/bitstream/1893/87/1/Mokhlis_PhD.pdf
- Oxtoby, W. G., & Hussain, A. (2010). *World Religions: Western Traditions* (3 edition). Oxford University Press.
- Patwardhan, A. M., Keith, M. E., & Vitell, S. J. (2012). Religiosity, Attitude Toward Business, and Ethical Beliefs: Hispanic Consumers in the United States. *Journal of Business Ethics: JBE*, 110(1), 61–70.
- Rossi, R., Socci, V., Talevi, D., Mensi, S., Niolu, C., Pacitti, F., Di Marco, A., Rossi, A., Siracusano, A., & Di Lorenzo, G. (2020). COVID-19 Pandemic and Lockdown Measures Impact on Mental Health Among the General Population in Italy. *Frontiers in Psychiatry / Frontiers Research Foundation*, 11, 790.
- Salari, N., Hosseini-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and Health*, 16(1), 57.
- Shafie, S., & Othman, M. N. (2006). Halal Certification: an international marketing issues and challenges. *Proceeding at the International IFSAM VIIIth World Congress*, 28–30.
- *The Global Religious Landscape*. (2012, December 18). Pew Research Center's Religion & Public Life Project. <http://www.pewforum.org/2012/12/18/global-religious-landscape-exec/>
- Worthington Jr, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., & O'Connor, L. (2003). The Religious Commitment Inventory—10: Development, Refinement, and Validation of a Brief Scale for Research and Counseling. *Journal of Counseling Psychology*, 50(1)(84-96). <https://doi.org/10.1037/0022-0167.50.1.84>