

Dynamics of Fulfillment: A Comparative Exploration of Life Satisfaction in European Muslim and Christian Communities

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ABSTRACT

Life satisfaction has become an important indicator for understanding the welfare level of countries, particularly today when immigration is increasing for various reasons such as war and the desire for better living conditions, good job opportunities, and high-quality education. This study investigates the life satisfaction of people who have left their community and established a new life at the expense of being a foreigner and a member of a minority community. In this study, the data of people living in Europe were used. Since the dominant religion in Europe is Christianity, Muslims are considered a minority. The study selects Islam as one of the minority religions in Europe and examines whether the life satisfaction of people who state that they are Muslim differs from that of non-minority Christians. For this purpose, ten countries with Muslim minorities were selected from the data of the European Social Survey (ESS). The life satisfaction of two groups, Muslim minority and Christians, was analyzed through a path model, which consists of socio-economic indicators, and the trust component, using the path analysis method. Age, income, interpersonal trust, and governmental trust indicators were significant variables in both groups. Unexpectedly, religiosity was shown to have a positive effect on life satisfaction only for the Christian group and had no significant effect for the Muslim minority group.

Keywords: Minority, Majority, Path Analysis, Life Satisfaction

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1. INTRODUCTION

Various kinds of indicators show levels of adaptation to the society in which one lives, such as subjective well-being, happiness, life satisfaction, and psychological well-being (Paparusso, 2021). Increased satisfaction in life is a result of attaining better living conditions and having a sense of belonging to a particular place and society. Life satisfaction is a visible quality of life that can be explained by individuals' mental and physical health and which indicates how well people are thriving (Veenhoven, 1996). The term life satisfaction is interchangeably used with different terms, such as happiness/well-being and subjective well-being, by some scholars.

Subjective well-being can be divided into three main components: (1) Life satisfaction as a general subjective judgment about one's entire life, (2) the frequency of one's positive emotional experiences, and (3) negative emotional experiences (Busseri, 2018). Life satisfaction covers only the cognitive dimension of happiness (Kortt et al., 2015) and is a measure of subjective well-being that assesses a person's feelings and attitudes about life at a given time (Boccaccio et al., 2021). Individuals' perceptions of themselves are important for their life satisfaction. If they feel good about themselves, they will most probably feel higher life satisfaction.

In a study conducted on a Portuguese group living in Paris, it was observed that the number of Portuguese friends and the perception of ethnic identity led to differences in life satisfaction. According to the results of the same study, life satisfaction decreases isolation, difficulties in the adaptation process, and social anxiety. At the same time, it strengthens integration and locus of control, that is, the idea that one's efforts are effective and produce results (Neto, 1995).

Conversely, when life satisfaction decreases, marginalization (social exclusion) increases (Kuo, 1978). Socially excluded people tend to be divided into groups. Life satisfaction also varies greatly among sexual minorities in Europe, largely because of the social stigma surrounding sexual minorities and the pressure to hide their sexual orientation (Bränström, 2017).

Minority groups are defined within the following categories: ethnicity, race, religion, sexual orientation, and/or state of being disabled (Ritzer, 2015). People belonging to a minority group are defined by sociologist Louis Wirth as people and/or communities who, because of being segregated based on any physical or cultural difference, face unequal treatment, and find themselves the subjects of collective discrimination (1993). It is known that minority groups have lower life satisfaction than non-minority (majority) groups (Tran et al., 1991; Utsey et al., 2002; Verkuyten, 2008).

According to the Religiosity as Social Value Hypothesis, which has been used by evolutionary psychology researchers, religiosity, as expected, is much more accepted in (same religion) religious cultures (Gebauer et al., 2012). If being religious is seen as valuable by society, then religious people living in a religious society have positive feelings and thoughts about themselves. However, in secular cultures, religiosity is not socially valued, and religious individuals feel less good about themselves. Belonging to one of the religious minority groups in a society directly affects an individual's life satisfaction (Gebauer et al., 2012).

Many European citizens are Christian, and there are religious minority groups such as Muslims, Jews, and Hindus. The largest religious minority group is Muslims (Pew Research Center et al., n.d.). Earlier studies on the life satisfaction of Muslims in the EU show a significant decline compared with those belonging to the majority religion (Christianity), with Judaists and Buddhists experiencing even lower levels of life satisfaction than Muslim groups (Ngamaba & Soni, 2018). When minority groups are faced with discrimination, it affects their well-being (Branscombe et al., 1999) and individual well-being is directly correlated with life satisfaction (Berlin & Fors Connolly, 2019).

Studies evaluating the life satisfaction of minorities focus mainly on "being a minority based on ethnicity/race" (Castellanos et al., 2016; Kirmanoğlu & Başlevent, 2014; Neto, 1995, 2001; Safi, 2010; Verkuyten & Nekuee, 1999). Among previous research studies, there are some on religion, but they are usually centered on Christianity. There are some studies on Christianity and Eastern religions, but there is no comprehensive study that uses data on Muslims from more than 5 countries. Studies that have included Muslim minority groups have been conducted on a single-country basis and do not provide generalizable results.

This study conducts a comparative analysis of the impact of age, health, education, religiosity, income, interpersonal trust, and political trust on life satisfaction among Muslim minority and Christian groups across ten European countries. Using data from the year 2019 of the European Social Survey (ESS), this research employs path analysis to assess the life satisfaction of Muslim minorities and Christian majorities residing in European countries through two different path models. These models are examined separately for both the Christian majority and Muslim minority populations to investigate whether there is a statistically significant difference between these two groups in terms of life satisfaction indicators. To the best of our knowledge, no previous study has conducted research into this topic from the perspective of our selected countries using the models we use.

1.1. BACKGROUND AND HYPOTHESES

When examining studies addressing life satisfaction in the literature, it becomes evident that socioeconomic and demographic indicators such as age, education level, income level, health status, religiousness, interpersonal trust, and government trust have been identified as factors affecting satisfaction. In this section, we provide a review of the literature on factors that directly and indirectly affect life satisfaction and present the hypotheses that will be tested using path models.

Higher income levels are positively and directly related to life satisfaction (Boccaccio et al., 2021). In the model built within the framework of the findings of previous years, it is estimated that high-income status affects life satisfaction.

Hypothesis: As the income level decreases, life satisfaction decreases.

In a study by Verme (2011) using the World Values Survey (WVS), life satisfaction increased with increasing age. At the same time, according to a study using data from close to 2000 war veterans, age and life satisfaction are positively correlated (Angelini et al., 2012; Mroczek & Spiro, 2005). However, researchers have also pointed out that the reason for this is the interaction between age and health conditions. In other studies, a negative relationship between subjective well-being and advancing age, poor health, and physical disability has been reported (Edwards & Klemmack, 1973; Jeffers & Nichols, 1961). **Hypothesis: Age has a significant effect on life satisfaction.**

The research presents divergent views on the age-religiosity relationship; some posit a positive correlation, while others suggest a negative correlation. The moderating role of age in the connection between religiosity and life satisfaction is highlighted, where advancing age potentially facilitates the harmonization of internal (faith) and external (e.g., belief in a higher power) influences (Fiori et al., 2006). Moreover, age is linked to a protective aspect that mitigates depression, fostering spiritual growth. Notably, studies have indicated a positive age-related increase in religiosity for both Christianity and Islam (Stearns et al., 2018). **Hypothesis: Age has a positive effect on the level of religiosity.**

Various research results show that in the long run, people with higher education maintain a stable level of life satisfaction, whereas people with lower education experience a gradual decline in life satisfaction (Wetzel et al., 2016). Another study lists the factors positively associated with life satisfaction as higher education level, marriage status, high trust in people and institutions, the importance of religion, and the value of family and friendships in one's life (Verme, 2011). Stryzhak (2020) found that education not only contributes to income growth but also makes people happier. **Hypothesis: Education level has a positive effect on income level.**

In India, a study conducted on students in the years 2017 and 2018 found that higher educational attainment was negatively correlated with religiosity (Kumar & Voracek, 2022). When the population as a whole is compared, people with lower education and those from lower income strata are found to be somewhat more religious; however, the correlations are generally low and often insignificant (Ruiter & van Tubergen, 2009). In a study using the World Values Survey, education level has a small but significant negative effect on religiosity (Höllinger, 2019). **Hypothesis: Education level has a significant effect on the level of religiosity.**

Good health is one of the factors that positively affect life satisfaction (Monteiro & Haan, 2022), and each of these findings is consistent with existing life satisfaction research (Bartram, 2011; Helliwell, 2003). In addition, poor health has a negative impact on life satisfaction (Broman, 1997). In a study conducted on people over the age of 56 living in Europe, having good health was perceived as having higher life satisfaction (Angelini et al., 2012). **Hypothesis: Health status has a positive effect on life satisfaction.**

While life satisfaction increases with age, older people are more likely than younger people to rate their lives as "dissatisfied", and there is little difference in life satisfaction among participants younger than 75 years (Angelini et al., 2012). However, researchers have also pointed out that the reason for this is the interaction between age and health conditions. Other studies have also reported a negative relationship between subjective well-being and advancing age, poor health, and physical disability (Edwards & Klemmack, 1973; Jeffers & Nichols, 1961). **Hypothesis: Age has a negative effect on health status.**

Religion often provides a sense of purpose, meaning, and a moral framework for individuals, which can contribute to their overall well-being and life satisfaction. Religious beliefs and practices can provide individuals with a sense of control over their lives and a source of comfort during challenging times, such as through prayer or religious rituals (Pargament et al., 1988). There are studies suggesting that religious belief becomes a defense mechanism against stressful events in people's lives and acts as a stress buffer (McFadden, 1995). While religious coping methods can foster healthy conditions for believers, they can also, depending on an individual's interpretation of their faith, give rise to adverse circumstances, with the key determinant being how one understands their religiosity. Potentially influenced by their perception of their relationship with God and the utilization of religious coping mechanisms as harmful forms of religious coping, attitudes such as framing a religious event as a punishment from God also exist (Pargament et

al., 1988). The level of religiosity has been found to have a significant effect on life satisfaction, not only the level of religiosity but also the trust factor (social trust & political trust) has been found to be a significant factor in explaining life satisfaction among minorities (Wilkes & Wu, 2017; Ziller, 2017). Hypothesis: The level of religiosity has a significant effect on life satisfaction. **Hypothesis: The level of religiosity has a significant effect on interpersonal trust.**

Another study investigating whether there is a relationship between the level of religiosity of African Americans and life satisfaction did not find a direct link (Fiori et al., 2006). However, according to research conducted in the USA, the Netherlands, and Denmark, a positive correlation was observed between religiosity and happiness. The results obtained in the USA are stronger than those found in the Netherlands and Denmark, but positive but weak relationships were observed in all three countries (Snoep, 2008). **Hypothesis: The level of religiosity has a significant effect on life satisfaction.**

People with a high sense of trust have high life satisfaction (Calvo et al., 2012; Hamamura et al., 2017; Helliwell & Wang, 2010; Mansyur et al., 2008; Poortinga, 2006; Zhang, 2020). There are also studies in the literature, including one of 18 countries examining trust and life satisfaction, showing that trust in society, not interpersonal relationships, is positively related to life satisfaction (Zhang, 2020). Most studies in the literature show a strong, significant, and positive relationship between trust and life satisfaction (or happiness) (Helliwell & Wang, 2010). In a study conducted in European countries, it was observed that interpersonal trust, also known as social trust, affects political trust and vice versa (Bargsted et al., 2022). Hypothesis: The level of interpersonal trust has a significant effect on life satisfaction. **Hypothesis: The level of interpersonal trust has a significant effect on the level of governmental trust.**

Studies show that less trust in institutions makes a society less livable and affects life satisfaction. A study that used data from ESS found that trust in the state and state institutions positively affected life satisfaction in Eastern European societies (Baltatescu, 2009). Trust in the state does not change in terms of gender, but it has a significant effect (Herbst, 2011). A study using data from the European Values Study for the years 1972 to 1994 shows that there is a relationship between happiness and trust in the state and that life satisfaction is successful in predicting trust in the state (Brehm & Rahn, 1997). **Hypothesis: The level of governmental trust has a significant effect on life satisfaction.**

2. DATASET AND METHODOLOGY

The dataset used was the round 9 data collected for 2018 by the European Social Survey (ESS) and 31 different countries were included in the round 9 data. The countries selected for this study were determined according to the criteria. Care was taken to ensure that these countries are not Muslim-majority countries (Montenegro, Bosnia, etc.) because the selected minority group in this study is Muslims, and it is important to select countries where Muslims are a minority group so that the results of this selection support the hypotheses as strongly as possible. The countries selected for use in the analysis are Bulgaria, France, Sweden, Austria, Belgium, the United Kingdom, Germany, Norway, Denmark, and the Netherlands. Two more countries meet the mentioned criteria and could have been included in this list, but the data for those two countries, Greece and Switzerland, were not included in the ESS dataset (Pargament et al., 1988). Multigroup analysis was used to assess the differences between the Muslim minority and Christian groups.

When the data of the Christians and Muslims were selected, the observations outside these religion-based groups were eliminated, and the remaining total number of observations was 7746. The participants included in the study were Christian citizens, accounting for 7174, and Muslim citizens 572. Christians constitute 93% of the data and Muslims 7%. The distribution of how many data (Christian and Muslim) were received from which country in total is as follows: Bulgaria (1029), France (827), Sweden (498), Austria (1319), Belgium (684), the United Kingdom (723), Germany (1080), Norway (506), Denmark (722), and the Netherlands (358). The mean age of the total participants was 54.22 years (SD = 17.95), 52.8% female and 47.2% male.

The survey questions and scale types used in this study are listed in Table 1.

The interpersonal trust variable was created by taking the median value of 3 different variables from the ESS. The questions of the combined variables are as follows: "Would you say that most people can be trusted, or that you can't be too careful in dealing with people?" (scale range: 0-10), "Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?" (scale range: 0-10) and "Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?" (scale range: 0-10). Median values were used to form the "Interpersonal Trust" variable. The same process was used for the "Trust in Government" variable. The questions for the variables used are as follows: "It is important to her/him that the government ensures her/his safety against all threats." (scale range: 1-6), "To what degree would you say that the government in your country considers the interests of all citizens?" (scale range: 1-5) and "In your opinion, to what extent are decisions in your country's politics transparent, meaning that everyone can see how they are made?" (scale range: 1-5).

Table 1: Survey Questions and the Types of Scales

Variable Names	Questionnaire	Coding	The types of Scale
Age	In what year were you born?	Calculated by turning into age.	Ratio
Level of Income	In which decile (decile) do you think your household's total income after taxes and mandatory deductions from all sources belongs?	1 - 1st decile ... 10 - 10th decile	Ordinal
Interpersonal Trust	Would you say that most people can be trusted, or that you can't be too careful in dealing with people?	0 - You can't be too careful ... 10 - Most people can be trusted	Ordinal
	Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?	0 - Most people try to take advantage of me ... 10 - Most people try to be fair	Ordinal
	Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?	0 - People mostly look out for themselves ... 10 - People mostly look out for themselves	Ordinal
Level of Education	What is the highest level of education you have successfully completed?	Primary/Middle School, High School, University or Higher Education	Ordinal
Health Status	How is your health in general?	1 - Very good .. 5 - Very bad	Ordinal (reverse coded)
Religiousness	Regardless of whether you belong to a particular religion, how religious would you say you are?	1 - Not at all religious ... 10 - Very religious	Ordinal
Governmental Trust	It is important that the government is strong and ensures safety.	1 - Not at all ... 5 - A great deal	Ordinal
	To what degree would you say that the government in your country takes into account the interests of all citizens?	1 - Not at all ... 5 - A great deal	Ordinal
	In your opinion, to what extent are decisions in your country's politics transparent, meaning that everyone can see how they are made?	1 - Not at all ... 5 - A great deal	Ordinal
Life Satisfaction	All things considered, how satisfied are you with your life as a whole these days?	0 - Extremely dissatisfied ... 10 - Extremely satisfied	Ordinal

One of the methods employed in statistical analysis is path analysis which represents multivariate relationships between variables in accordance with theoretical principles (Suhr, 2008). Path analysis is a variant of multiple regression analysis and is a worthwhile method for examining causal relationships. Typically, path analysis is preferred when a predefined causal model is present. Later in this approach, to comprehend the cumulative results of related effects, separate regressions are conducted for every single dependent variable, which is illustrated using path diagrams (Stage et al., 2004).

Not only direct paths but also indirect paths are assessed using the path analysis procedure because causality between a set of variables is prioritized (Duncan, 1966). Independent variables are referred to as exogenous variables, while dependent variables are referred to as endogenous variables. Moreover, the arrows, which are called paths, between

two rectangles, which represent variables, that can be seen in the model show the hypothesis and indicate the direction of the effect (Baron & Kenny, 1986). Path coefficients or standardized partial regression coefficients (beta) indicate the rate of change in the dependent variables for which the predictor (i.e., exogenous) variable is responsible.

Model parameters are often estimated using maximum likelihood estimation in path analysis (Jöreskog, 1969). SEM software is used to assess model fit using goodness-of-fit indices such as CFI and RMSEA. The goodness-of-fit indicators of the model, such as CFI and RMSEA as well as the significance of direct and indirect relationships are based on t-statistics (Hatcher, 1996).

The goodness-of-the-fit is tested for the established models. For this test, fit indices showing how well the model fits the information obtained from the correlation matrices are examined, which is necessary to evaluate the adequacy of the model (Stage et al., 2004).

The chi-squared statistic is a traditional measure used to assess the overall model fit of covariance structure models, providing a fit test where the null hypothesis is that the model fits the population data perfectly (Kline, 2016). The values of CFI and GFI greater than .95 are indicators of a suitable model (Hu & Bentler, 1998; Tabachnick & Fidell, 2001). GFI is used to calculate the minimum discrepancy function necessary to obtain a perfect fit under maximum likelihood conditions (Jöreskog & Sörbom, 1996). RMSEA value close to zero is an indicator of a good fit (Kline, 2016), and while values below .08 are considered an acceptable fit, .05 or less is considered a good fit (Browne & Cudeck, 1992). The values below 0.05 for SRMR are indicators of an acceptable fit (Siguaw & Diamantopoulos, 2000).

As summarized in Figures 1a and 1b, Model 1 is adapted from research that examines the life satisfaction level of Roma groups living in Central and Southeastern Europe. The aforementioned research shows that life satisfaction level is affected by the impact of education level (Fleischmann & Phalet, 2016), income, and subjective health status (Kamberi et al., 2014). Also, Verme's (2011) study examining Muslim minority groups living in Europe formed the basis of Model 1.

In addition to the first model established, the explainability of minorities' life satisfaction with the variable of trust was examined using the path analysis method. Thus, it is expected that Model 2 will deepen the discussion. Variables within Model 2 are based on trust in the state, the state's attitude toward citizens' requests, and satisfaction with public services (Liu et al., 2020). All exogenous variables positively affect endogenous variables. A negative relationship was found between distrust towards people and life satisfaction (Baltatescu, 2009; Mueller, 2009). In this study, trust in people is predicted to affect life satisfaction positively; therefore, it is included in the model.

The studies on which Model 2 is based can be summarized as follows. One of them analyzed the life satisfaction of migrants and non-migrants using the SEM method. The results confirm the direct relationship between trust and life satisfaction for both non-migrants, i.e., natives, and third-world citizens. At the same time, it emphasizes that trust in politics and trust in people are equally important for third-world citizens, while for natives, trust in people is more important than trust in politics (Prada & Roman, 2021). The other study examined the extent to which life satisfaction in Western and Eastern Europe is influenced by government and interpersonal relationships, finding that Eastern Europeans' trust in political institutions influences life satisfaction, while Western Europeans' interpersonal trust has an impact on life satisfaction (Kamberi et al., 2014).

In Model 1, age, education level, health status, income level, and religiosity are used as mediators. In Model 2, interpersonal trust, trust in government, and religiosity variables are used as mediators. Life satisfaction was the outcome variable in both models. Believing in Islam or Christianity (religion) is used as a predictor and utilized as the multigroup variable. There are 11 and 5 paths (hypotheses) in Model 1 and Model 2, respectively.

3. FINDINGS

In the first stage of the application, descriptive statistics of some of the variables used in Model 1 and Model 2 were evaluated by independently considering Muslim and Christian communities. Descriptive statistics present significant and predictable differences; the Muslim minority group has lower values in every item except religiosity. Religiosity has the highest difference among all. Both groups display similar levels of trust in the government; however, there is a notable difference in interpersonal trust, with the Muslim minority exhibiting lower levels of trust. Furthermore, the Muslim minority group reported lower scores for life satisfaction than the Christian group. It is evident that the median values of the variables "life satisfaction, income, interpersonal trust, and governmental trust" obtained based on the Likert scale are higher for Christians.

Table 2: Descriptive statistics

	Sample 7746	Muslim 572	Christian 7174
	Median	Median	Median
Life satisfaction	8	7	8
Education	2	2	2
Income	3	2	3
Health	2	2	2
Religiosity	6	7	6
Interpersonal Trust	6	5	6
Trust in Government	3	2	3
Age	56	39	57

3.1. MODEL 1

The (unconstrained) goodness-of-fit indicators for the model with education, income, age, religiosity, and health variables are as follows: χ^2 /df ratio of Model 1 is less than 3 (0.903), which refers to a good model; the CFI statistics are greater than 0.90 (0.98), which is the threshold value for a good model fit, SRMR statistic is less than 0.05 (0.0031). Finally, the RMSEA statistic is also less than 0.07 (0.05), supporting a good fit for the model. Figures 1a and 1b reflect direct and indirect relationships between Christian and Muslim communities, respectively.

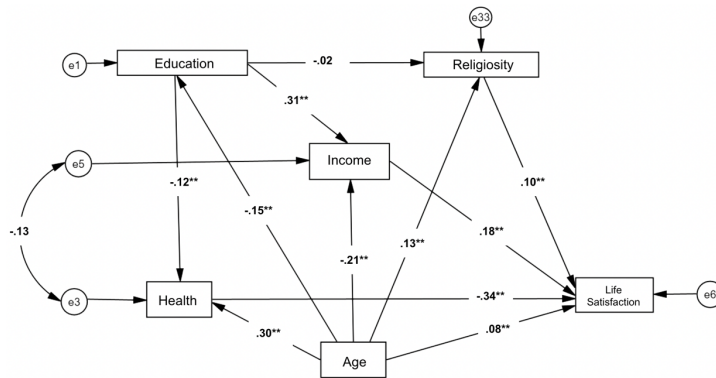


Figure 1a. Christian Group standardized β values for Model 1

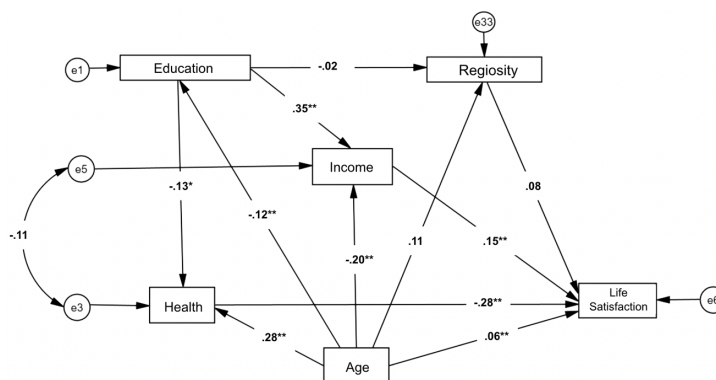


Figure 1b. Muslim Group standardized β values for Model 1

In Figures 1a and 1b, where the magnitude of direct and indirect relationships (standardized beta) are presented, ** values appear next to the coefficients that are significant at the 5% significance level.

According to the model, for both Muslim minorities and Christians, age negatively affects life satisfaction ($p < 0.05$), and level of education positively affects income ($p < 0.05$). Age positively affects religiousness ($p < 0.05$) for Christians but, contrary to our hypothesis, negatively affects the Muslim minority ($p > 0.05$). However, for the Muslim minority, it is not significant. Age negatively affects health status ($p < 0.05$) for both groups, although it is not a significant effect. The difference between the groups is demonstrated by the abovementioned hypotheses. Unexpectedly, religiosity has a positive effect on life satisfaction only for the Christian group ($p < 0.05$) and has no significant effect for the Muslim minority ($p > 0.05$). Table 3 shows whether the magnitude of direct and indirect relationships evaluated based on Model 1 is statistically different for the Muslim and Christian groups.

Table 3: β Coefficient and Z-Value Table for Model 1

Hypothesis	Direct Effects	β Coefficient (Christian)	β Coefficient (Muslim Minority)	Z-Value
H1.1	Age → Life Satisfaction	-0.091**	-0.118**	-4.228
H1.2	Age → Religiosity	0.138**	-0.065	-4.353
H1.3	Age → Education	-0.144**	-0.169**	-1.131
H1.4	Age → Health	0.294**	0.418**	4.032
H1.5	Age → Income	-0.212**	-0.205**	0.183
H1.6	Health → Life Satisfaction	-0.341**	-0.211**	1.899
H1.7	Religiosity → Life Satisfaction	0.096**	0.073	-0.174
H1.8	Education → Religiosity	-0.18	-0.028	-0.191
H1.9	Education → Income	0.326**	0.228**	-3.794
H1.10	Education → Health	-0.124**	-0.077*	1.299
H1.11	Income → Life Satisfaction	0.180**	0.175**	0.927

** $p \leq 0.01$, * $p \leq 0.05$

Beta scores in Table 3 show that the strongest direct effect on life satisfaction is health status found to be significant for both the Muslim minority and the Christian group, which is in line with similar studies in the literature. For the Christian group, the lowest direct effect on life satisfaction is observed for religiosity. Also, the highest indirect effect on life satisfaction is age, which is a negative effect, and it is followed by education, a positive effect. For the Muslim minority group, the lowest direct effect on life satisfaction is observed for religiosity. The highest indirect effect on life satisfaction is age, which is a negative effect. This result is the same for the Christians, however, the indirect education effect is not as high for Muslims as Christians. According to Z scores, while the relationships between age-life satisfaction, age-religiosity, age-health, and education-income are different for both groups, the remaining direct and indirect relationships do not differ for both groups ($Z \leq 1.96$).

3.2. MODEL 2

The model with the trust variables shows a good fit in the fit index results with its unconstrained form. Vales for Model 2 are as follows: $\chi^2/df = 2.649$, CFI = 1.00, SRMR = 0.0056, and RMSEA = 0.007, supporting a good fit for the model.

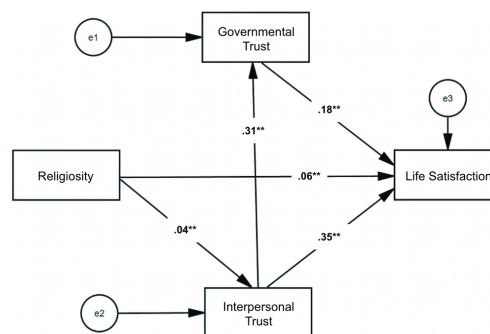


Figure 2a. Muslim Group standardized β values for Model 2

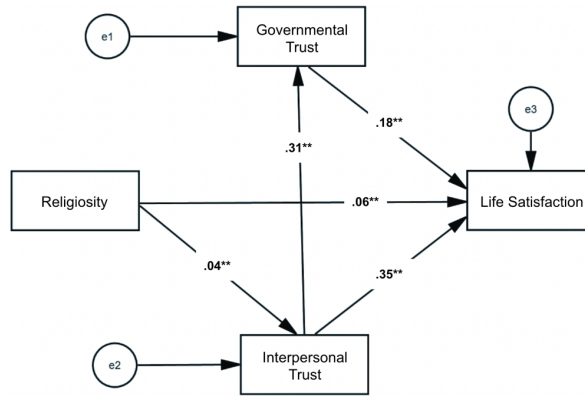


Figure 2b. Christian Group standardized β values for Model 2

According to the model, for both Muslim minorities and Christians, interpersonal trust positively affects governmental trust ($p < 0.05$). Being a Muslim minority or Christian makes a difference in the level of interpersonal trust in the government. Religiosity has a positive effect on life satisfaction only for the Christian group ($p < 0.05$) and has no significant effect for the Muslim minority ($p > 0.05$). Table 4 shows whether the magnitude of direct and indirect relationships evaluated based on Model 2 is statistically different for Muslim and Christian groups.

Table 4: β Coefficient and Z-value Table for Model 2

Hypothesis	Direct Effects	β Coefficient (Christian)	β Coefficient (Muslim Minority)	z-value
H1.1	Religiosity \rightarrow Life Satisfaction	0.065**	0.055	-0.202
H1.2	Religiosity \rightarrow Interpersonal Trust	0.040**	0.030	1.608
H1.3	Interpersonal Trust \rightarrow Governmental Trust	0.306**	0.279**	-1.986
H1.4	Interpersonal Trust \rightarrow Life Satisfaction	0.355**	0.220**	0.019
H1.5	Governmental Trust \rightarrow Life Satisfaction	0.172**	0.231**	0.095

** $p \leq 0.01$, * $p \leq 0.05$

Beta scores in Table 4 show that the strongest direct effect on life satisfaction is interpersonal trust found to be significant for both the Muslim minority and the Christian group. However, the highest direct and indirect effect on life satisfaction is governmental trust for Muslim minorities. The lowest indirect effect on life satisfaction is observed for religiousness for both Muslim minorities and Christians. According to Z scores, while the relationships between interpersonal trust and governmental trust are different for both groups, the remaining direct and indirect relationships are not different for both groups ($Z \leq 1.96$).

4. DISCUSSION

This research primarily aimed to study how life satisfaction is affected by belonging to a minority group among European residents. Two path models were employed for this purpose. The first model, Model 1, aims to examine the extent to which the life satisfaction of minority groups is affected by socio-demographic characteristics, while Model 2 examines the effects of religiosity, interpersonal trust, and trust in the state. When the direct and indirect effects are also analyzed, the results of the analyses reveal some differences between the Christian and Muslim minority groups.

The most substantial factor directly affecting life satisfaction is health status, but it has a much more significant effect on Christian groups than on Muslim minority groups. Furthermore, for the Christian group, age is positively related to life satisfaction, but for the Muslim minority group, it has a negative effect. As age increases, resulting in the years of treatment due to being a minority, negative emotions increase. Also, as people grow, they start a family, and having a family could make one's life more satisfying but also the transition from individual concerns to family concerns can

be observed. Therefore, life satisfaction does not get better. On the contrary, in Christian groups, as age increases, the connection to the community and the place where one lives becomes stronger, and social support becomes more likely. While the literature shows that religiosity increases life satisfaction, this is not observed in the Muslim minority group. Being a Muslim living in Europe means being a minority in two different aspects; as a religious minority and as (most of the time) a racial minority.

The Rejection-Identification Model, which is used for intergroup discrimination, argues that group discrimination can lead people to identify with the stigmatized group and then help them survive (Wellman et al., 2022). According to this model (Branscombe et al., 1999), adopting one's stigmatized identity can counteract the negative consequences of discrimination on happiness (Wellman et al., 2022). As an example, high levels of religiosity reflecting religious group identity may protect life satisfaction from the negative effects of religious discrimination (Vang et al., 2019). However, the results found in this study do not support this model.

The most substantial factor directly affecting life satisfaction is health status, but it has a much stronger effect on Christian groups than on Muslim minority groups. Furthermore, for the Christian group, age is positively related to life satisfaction, but for the minority group, the Muslim minority, it has a negative effect.

As age increases, negative emotions increase with the treatment minority groups are exposed to, and with the establishment of a family, a transition from individual concerns to familial concerns occurs. Therefore, life satisfaction does not get better. On the contrary, in Christian groups, as age increases, the connection to the community and the place where one lives becomes stronger, and social support becomes more likely.

Another finding is that while the literature shows that religiosity increases life satisfaction, this is not observed in the Muslim minority group. Being a religious Muslim living in Europe means being a minority in two different ways: both as a religious minority and as a racial minority. For this reason, being religious/spiritual has no effect on life satisfaction for Muslim minority groups living in Europe.

Having a religious belief can sometimes mean being connected to a community of people who share the same belief. Such belonging can hinder individuals from belonging to another community. In some cases, belonging to a group creates a suitable environment for intense but dysfunctional behaviors. For example, Muslim minority groups living in a country may develop a deeper sense of belonging to the Muslim community as they feel more discrimination directed toward them. This situation leads to more radical (fundamentalist) behaviors in their beliefs (Güngör et al., 2011).

The fact that people become more "religious" as they get older is explained by the fact that their death becomes a tangible possibility, and as they get older, they begin to integrate religion into their lives more and more easily, especially among people who were not religious when they were younger (Moberg, 2001). Another theory suggests that the increase or tendency towards religious behavior stems from the fear of death, where individuals tend to turn to religion for inner solace, to feel more at ease when thinking about the afterlife and the impending end of their own lives.

Studies investigating the life satisfaction of minorities are very limited in the literature, especially those that focus on and compare Christian and Muslim minorities. Another difference that distinguishes this study from other studies is the fact that the sample covers 10 different countries. Apart from this, it differs from other studies in that it is a study that explains the state of being a minority with more than one model. As a result, the analyses show that there are differences that affect life satisfaction between the Christian and Muslim minority groups.

The findings from this study come with limitations. The presence of similar personality trait patterns across participants could interfere with the collected data. Therefore, data dependency might not be assured across the ten European countries.

Furthermore, variations in cultural norms and societal contexts could influence the perception and measurement of factors like religiosity and trust, due to the nature of cross-cultural studies. Additionally, the reliance on self-reported data introduces the possibility of response bias, whereby respondents might provide socially desirable answers that do not accurately reflect their true experiences.

Despite these limitations, this study serves as an auxiliary exploration of the inescapable connections between age, health, education, religiosity, income, interpersonal trust, and governmental trust on life satisfaction among Muslim minority and Christian groups in Europe.

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