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**THE IMPACT OF SELECTED SOCIAL INDICATORS ON  
INDIVIDUAL HAPPINESS IN THE REPUBLIC OF NORTH  
MACEDONIA**

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**Abstract**

Happiness as a complex combination of individual, collective, affective, rational, and circumstantial constituents is either integrated or should be integrated in the policy-making of modern states and societies, in line with the global endeavor towards achieving sustainable development goals. Given the social relevance of happiness, the most broadly accepted relevant indicators for its attainment, and the great gap that exists due to insufficient empirical treatment of the matter in North Macedonia, this exploratory paper aims to determine the impact of age, gender, health, unemployment, religion, ethnicity (by spoken language), and language-based discrimination on individual happiness in the Republic of North Macedonia.

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The research was based on descriptive statistical operations and regression analysis of the ESS 10 data regarding the Republic of North Macedonia, obtained for the first time for this country; as well as on secondary analysis of studies considering wide-range surveys, statistical data and reports.

Health, employment, ethnicity, and ethnic and linguistic discrimination represent strong determinants of happiness in this country. Indications are high that age and happiness are linearly correlated. The gender is less important in defining happiness in North Macedonia; however, women are slightly happier than men. The majority population, speaking the Macedonian language and practicing Orthodox Christianity, experience higher levels of happiness than the linguistic and religious native minorities in North Macedonia. Further in-depth research based on consistent and compatible data is needed, to the end of advancing research-based policies in the social, economic and healthcare systems of this county.

**Keywords:** *North Macedonia, Happiness, Social indicators, Discrimination, Employment, Health*

## 1. Introduction

Numerous academic disciplines, including sociology, psychology, philosophy, and economics, have conducted extensive research on the topic of happiness by using a wide variety of views, goals, and approaches. Happiness is a combination of individual, collective, affective, rational, and circumstantial constituents, grouped in various ways depending on the discipline or the author; as such. Modern governments, either directly or implicitly, integrate the factor of happiness by endeavouring compatibility with the global Sustainable Development Goals into their societies. These goals are largely a reflection of the aspiration for a high-quality life, which can be translated in terms of individual or social happiness.

In this context, many of the traditional socioeconomic measurements are complemented by self-reported life satisfaction and/or happiness, measured on an ordinal scale. Even though life satisfaction and happiness are not synonymous and differ across contexts, their overlapping points are significant and abundant; therefore, measuring life satisfaction is relevant in this paper. Steptoe (2019) refers to happiness as a concept encompassing affective well-being (feelings of joy and pleasure), eudaimonic well-being (sense of meaning and purpose in life), and evaluative well-being (life satisfaction) (Steptoe, 2019, p. 339). In other studies, life satisfaction and happiness are analyzed as measures of subjective well-being by psychologists, for which de Vroome and

Hooghe (2015) have considered the following derived definition: “Life satisfaction is the more cognitive component of subjective well-being, and can be defined as people’s evaluations and judgments about their quality of life as a whole, while happiness is the more experiential component, which can be defined as people’s feelings about whether they are generally in a positive mood” (de Vroome, Hooghe, 2015, p. 87).

Some of the research pertaining to the establishment of determinants of happiness are based on a network concept of indicators; some are nested and some are taken linearly or as isolated variables. However, a common notion can be adopted in which some of the more significant, salient factors in one’s life satisfaction are income, gender, age, civil status, number of children, employment conditions, religion, level of education, and/or place (context) of living (Rodriguez-Pose, Maslauskaitė, 2012, p. 79). Illustratively, Helliwell consider unemployment, health, and discrimination as risk indicators in the social environment (Helliwell et al. 2020).

Given the social relevance of happiness, the most broadly accepted relevant indicators for its attainment, and the great gap that exists due to insufficient empirical treatment of the matter in North Macedonia, this paper aims to determine the impact of age, gender, health, unemployment, religion, ethnicity (by spoken language), and language-based discrimination on individual happiness in the Republic of North Macedonia.

Some of the major surveys exploring the question of happiness are the European Social Survey (ESS), the Gallup World Poll, World Values Survey, European Values Study, Eurobarometer, and the General Social Survey. For the purposes of this paper, however, the data from the ESS are analyzed, since that survey is developed using high standards regarding the research design and data collection. It also sheds a contextual perspective on the Macedonian proximity to the European Union. Given that the tenth ESS round was the first time North Macedonia participated, a unique opportunity to map certain unexplored determinants of happiness were presented, though additional in-depth research should follow.

## 2. Literature overview

Even though there is abundant literature addressing the impact on happiness of each of the observed indicators in this research, general conclusion for some of them can be derived across various contexts, while, for others, their effect on happiness is heavily dependent on national and social circumstances.

### *AGE*

The relationship between age and happiness is not a definite notion, rather it depends on the research methods, the analyzed period, and the level and type of development of the country. By analyzing 72 countries, Blanchflower and Oswald (2008) determine a U-shaped age-happiness form,

while Angelini, by analyzing developed countries plus Poland and Estonia, positively relate age to self-evaluated life satisfaction, with, however, certain trade-offs (Angelini et al. 2012, p. 300).

However, the most relevant research in this instant, would be that of Kopnova and Rodionova, based on 2012 ESS data, which establishes that in the developing countries of Russia, Ukraine, Lithuania, Estonia, Albania, Hungary, Kosovo, Portugal and Slovenia the level of happiness decreased significantly upon reaching old age. In another group, Iceland and Norway, happiness is stable at any age or increases smoothly upon reaching old age. A third group of countries, Germany and France, had a U-shaped age-happiness distribution. Finally, in some countries, Belgium, Switzerland, Cyprus, Denmark, Finland, Israel, Italy, and Sweden, most people had reported feeling happy regularly (Kopnova, Rodionova, 2015, p. 1-5).

### *HEALTH*

There is consensus in the research regarding the mutual interdependence of health and happiness. Happiness, wealth, and health are all highly correlated with each other. Wealth and health have the highest correlation, followed by wealth and happiness, and then ultimately health and happiness (Shackman, Wang and Liu, 2021, 3). A greater level of happiness is associated with better health, productivity, and motivation (Farrington, 2021, 2), while unhappiness deteriorates one's health status, reducing immune resistance and originating psychosomatic diseases that may lead to depression and suicide (Borghesi, Vercelli, 2010, p. 203).

This is confirmed and elaborated on by Biswas-Diener (2004), who states that age, gender, ethnicity, education, and beauty seem to correlate slightly with happiness. Another determinant showing a greater impact on happiness is health. Extremely poor health often leads to disabilities, but good health does not guarantee happiness. Biswas-Diener also claims that people in wealthy, industrialized countries are happier than those in poor, non-industrialized countries. It is suggested that more money at the national level translates into better utilities and infrastructure, less corruption, and improved healthcare. Helliwell (2020) consider good health and good governance as pillars for understanding nations' happiness. Ljunge (2016) asserts that health is an important determinant of individual well-being, quantitatively much more important than other demographic and economic characteristics.

These works are consistent with that of Subramanian, Kim, and Kawachi, who determined that health and happiness share important similarities with respect to their determinants, such as income, poverty, with social connections being consistently linked to both happiness and health, the latter being confirmed by Dunbar (2019). Interestingly, health declines with age, whereas happiness does not, though healthy people are not uniformly happy (given other inputs to happiness besides good health) (Subramanian, Kim, Kawachi, 2004, p. 664). Additionally, healthy communities are likely to be happy communities (Subramanian, Kim, Kawachi, 2004, p. 667).

Perhaps controversially, happiness and health are weakly correlated in developed countries (Borghesi, Vercelli, 2010, 225). Another paradox is worth mentioning: as European nations become happier, they tend to become relatively less healthy. Another interesting finding is that citizens in happy countries, on average, tend to die earlier, despite the fact that studies clearly show that their relatively happiest citizens live longer than the rest (Bjørnskov, 2008, p. 1756).

Regarding perception itself, Choi (2021) mentions the research establishing that the impact of self-awareness of one's health can be stronger than the actual physical condition, given that people with a poorer health perception tend to be more depressed and less satisfied with their life even if they are healthy (Choi, 2021, p. 500). Conversely, individuals who had better perceived health are more likely to be happy (Weech-Maldonado, Miller, Lord, 2017, p. 297).

### *GENDER*

There is an unresolved controversy when measuring subjective happiness, life satisfaction, and overall well-being according to the variable of gender. A significant obstacle for realistic self-assessment of gender well-being or happiness is that it could be affected by internalized stereotypes (Fisher et al. 2007, p. 20). Across broader, larger samples, there have been mixed findings on whether there are gendered differences in subjective well-being, but, as Batz and Tay put it, "Do men and women differ in levels of subjective well-being? As cliché as it sounds, at least for now, 'it depends'" (Batz, Tay, 2018, p. 11).

Montgomery (2022) notes that worldwide surveys consistently find that women report higher life satisfaction than men (Montgomery, 2022, p. 65). Women are happier than men, but these differences vary across countries and time. While studies around the year 2000 show greater happiness among women, studies following that year show declining happiness among women, thus reducing the gender gap concerning level of happiness. Still, women have remained, on average, happier than men for the last three decades (Choi, 2021; Blanchflower and Bryson, 2022). In fact, Montgomery (2022) also raises the question of why women report higher life satisfaction when their life experience is generally regulated by others: "They are granted fewer freedoms, are represented more negatively, experience more discrimination than men, and are more often victims of violence than men". In this work, the dilemma is resolved by adjustment of the scale, which leads to the conclusion that women are, in fact, less happy than men on average (Montgomery, 2022, p. 65).

Given the basic data of the tenth ESS round, women are happier than men across European countries. Yet, Blanchflower and Bryson (2022) find that lately, in the European Union, men are happier than women. Men report higher levels of well-being than women and are more satisfied than women in regard to broader questions about the state of the economy, democracy, and the state of health services and education in their country (Blanchflower and Bryson,

2022). Low-income countries mark lower levels of happiness for women than for men (Choi, 2021, p. 500).

Even though some studies do not relate women's rights and the level of happiness of women, others find women's personal optimism as the primary reason for their happiness (Arrosa and Gandelman, 2016). Thus, we can assume that overall social context and the development of perceptions of societal roles of women, which are increasingly present on the labor market, leave a conspicuous mark on women's happiness. For instance, employment benefits women in terms of economic independence, which positively affects other aspects of their private and social life; however, depending of the support systems, the level of other domestic responsibilities could represent a high physical and psychological burden. Such increased burden on working women is likely to be especially heavy in the most traditional societies, particularly where gender roles are deeply rooted (Torosyan, Pignatti, 2020, 4). Torosyan and Pignati (2020) find the happiness gap for working and stay-at home women mostly due to country-specific circumstances and not so much due to ethnic or cultural factors (Torosyan, Pignatti, 2020, p. 3). Fisher finds that multiple aspects of gender equality, such as political participation, are significantly associated with well-being, while others in the socioeconomic sphere do not bring much value to the personal assessment of improved well-being. (Fisher et al. 2007, p. 20). As previously mentioned, the socioeconomic context is highly relevant for gender-dissected happiness.

#### *EMPLOYMENT*

Employment is a widely-recognized major factor in a person's life, ultimately impacting one's economic stability and the preconditions for formulation of social and personal connections, including substantial family bonds. Despite some studies indicating that increased income has little effect on the level of happiness (e.g. Biswas-Diener et al, 2004), Rodríguez-Pose and von Berlepsch refer to previous studies' findings that unemployment has a negative, highly significant association with subjective well-being (Rodríguez-Pose and von Berlepsch, 2012, p. 19). Eichhorn (2014) confirms the negative direct effect of unemployment on life satisfaction, by accentuating the need to consider differences across countries.

#### *RELIGION*

Sander (2017) finds that individuals with a religious affiliation are happier than those without a declared religion, and the effect has not shown a significant change over the past forty years. This is in accordance with a previous study of Stavrova, Fetchenhauer, and Schlösser with the addition that this effect upon happiness depends on accepted social norms and is stronger in religious countries with dominant negative attitudes toward non-believers (Stavrova, Fetchenhauer, Schlösser, 2013, p. 90).

The effect of religious belief on subjective well-being can be seen through two dimensions, social networks, such as religious services, and the personal and inner dimension of religion, such as praying (Sinnewe et al.,

2015). The literature finds a positive correlation between religion and happiness, with a robust effect of church-attendance, while the results on internal religiosity are more ambiguous (Steiner, Leinert, Frey, 2020, p. 27). Many authors, including Bergan and McConatha (2001), confirm the relation between religious attendance and creation of social networks as more impactful on happiness than the private religious devotion. Steiner, Leinert, and Frey (2020) find the effect of church-attendance on happiness is quite sizeable, while Dunbar states those effects are not as great, with the primary effect of religious-attendance revolving around community bonds and interactions (Dunbar, 2019, p. 17). Nevertheless, religious attendance is translated into terms of increasing social capital that leads to greater levels of happiness (Rodríguez-Pose and von Berlepsch, 2012, p. 9-10). So far, women have reported a higher level of religiosity than men (Bergan, McConatha, 2001, p. 32).

#### *ETHNIC LANGUAGE AND DISCRIMINATION ON THE BASIS ON ETHNICITY*

Language is the crucial medium through which we access human sensations and thoughts (Wierzbicka 1999). Each language provides a set of specific axiological, social and emotional components creating unique sensation and apprehension possibility, However, currently, the more important question of language treatment is the question of the political, legal and social treatment of ethnicity in a given country or internationally. Even though there is a significant body of literature on immigrant happiness, the available literature regarding local or native majority and minority populations' happiness is much narrower. For instance, it has been established in the literature that well-being levels are lower among ethnic minorities than among majority-group individuals as far as immigrant minorities are concerned.

As far as native population is concerned, minority status is mostly related to lower happiness, and average happiness tends to be lower among ethnic minorities than among the general population with much variation across nations (Veenhoven, 2015, 389; Kööts-Ausmees, L., & Realo, 2016; de Vroome and Hooghe, 2015). By analyzing an ESS 6 sample, Kööts-Ausmees and Realo (2016) found that the negative impact of ethnic minority status on life satisfaction tended to be enhanced in former Communist Eastern European countries as well as in countries with higher ethnic diversity.

In general, respondents who describe themselves as belonging to a group that is discriminated against report lower life satisfaction (Helliwell et. al. 2020, p. 33). Discrimination is associated with reduced feelings of belonging, which can, in turn, have a negative impact on subjective well-being (de Vroome, Hooghe, 2015, p. 90). Regardless of whether discrimination derives from interpersonal experiences or from structural discrimination by institutions, it can adversely affect individuals' well-being, with minority members who feel discriminated against being less satisfied with their life (Kööts-Ausmees, L., & Realo, 2016, p. 3). The difference in levels of happiness between the majority and minority population can be fully explained by the fact that ethnic minority

members occupy more disadvantaged socioeconomic positions in European societies and experience more discrimination (de Vroome, Hooghe, 2015, p. 104).

Another point of view is the one of Baltatescu (2009), who considers two theories with different possible outcomes: (a) the social identity theory, which would associate national pride and identification with increased happiness, and (b) cosmopolitanism theories, which note that the better-off, younger groups identify more with supranational entities and institutions (Baltatescu, 2009, p. 185). Still, there is positive evidence that collective processes at a national level influence individual feeling, and both individual and collective identities are associated with subjective well-being (Baltatescu, 2009, p. 190).

### 3. Method

The main results stem from descriptive statistical operations and ordinal regression analysis of the tenth round of ESS data regarding the Republic of North Macedonia.

In the Republic of North Macedonia, the data collection for ESS was based on face-to-face interviews during the period between 23 January 2021 and 7 March 2022. This country did not resort to self-completion in the time of COVID-19 circumstances. The sample of this country (N=1,429) was representative of all persons aged fifteen (15) and above. Participants were selected by strict random probability methods at every stage (ESS, Methodology, Sampling, 2021). Additionally, the sample is rather large, given that the population of this country is just below two million.

Happiness was the main variable, and the research goal was to measure how health, religion, language, gender, nationality, age, and status of unemployment impact the happiness of people residing in North Macedonia. The main question on self-reported happiness was formulated as the following: "Taking all things together, how happy would you say you are?" The scale goes from zero (0) to ten (10), where zero corresponds to an extreme level of unhappiness; ten, to an extreme level of happiness. The remaining variables are quite clear. The question of one's level of religiosity is also specific and, thus, worth mentioning: "Regardless of whether you belong to a particular religion, how religious would you say you are?" The scale is the same as the aforementioned.

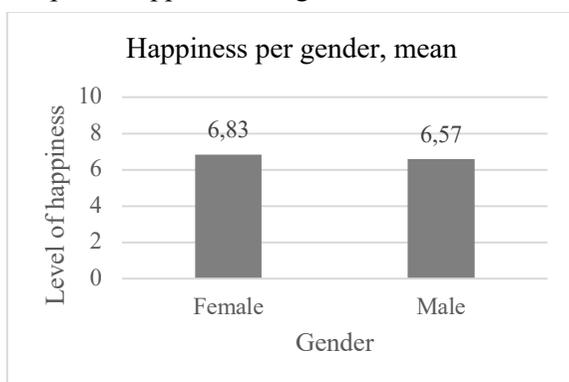
The research also entailed secondary analysis of studies referring to wide-range surveys, EU surveys, and national insights, in addition to analysis of reports and statistical data.

#### 4. Results

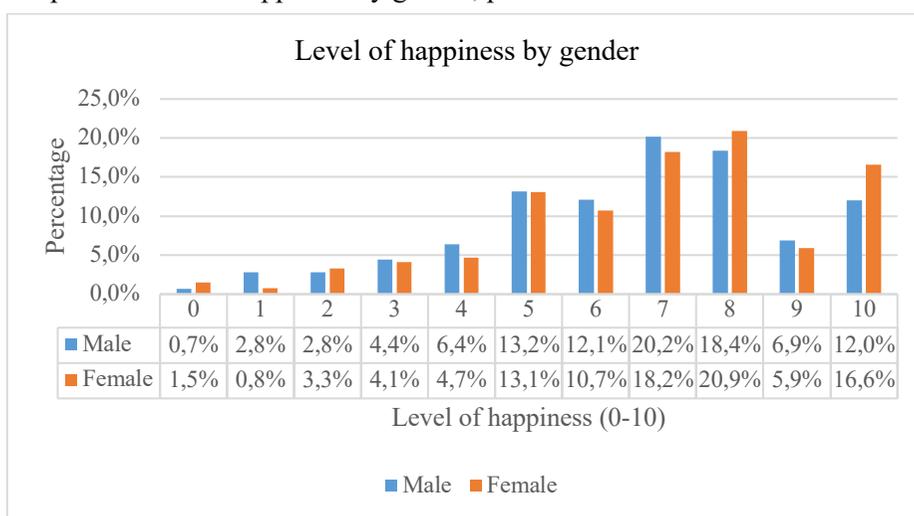
The results of the statistical analysis regarding said variables on happiness based on ESS 10 data will be presented in the following text.

We begin with the gender distribution of the study: From a total of 1,429 respondents, 780 are female; 649, male (and these numbers are weighted according to ESS guidelines). Graph 1 shows that the mean for happiness is higher for females (6.83) than for males (6.47) but not by much. Graph 2 depicts that the happiness per gender varies for each level of happiness, while the relatively high levels of happiness, 7 and 8, are most characteristic both for males and females (with as much as 38,9% of the total responses) and the women are distinctly happier according to the highest level – extreme happiness.

Graph 1. Happiness and gender, mean

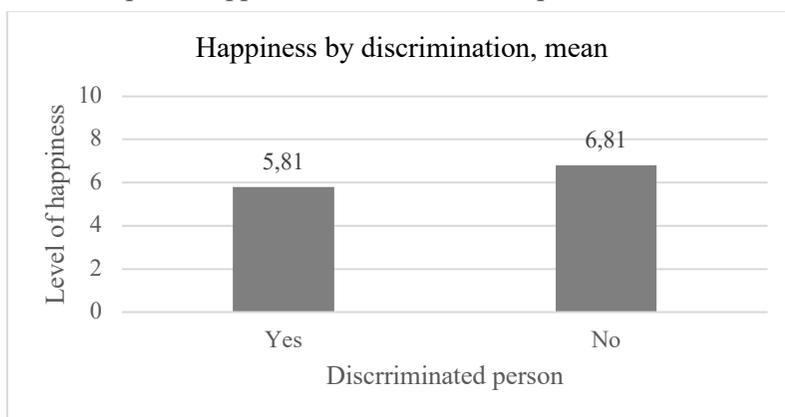


Graph 2. Levels of happiness by gender, percent

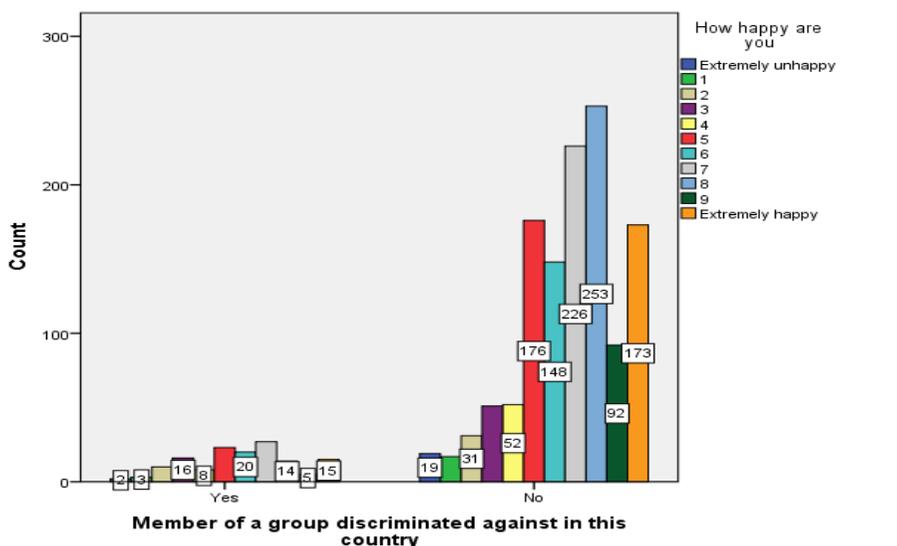


Graphs 3 and 4 provide another perspective on the relationship between happiness and discrimination. Graph 3 depicts that on average non-discriminated persons are happier than the members of a group that has been discriminated against. From all the respondents shown in graph 4, who feel discriminated against in North Macedonia (only 143 answered affirmatively, and the remaining 1241 answered negatively), only fifteen (15) were extremely happy, followed by five (5) who were mostly happy, twenty-seven (27) who were moderately happy, and two (2) who were extremely unhappy. From those who did not experience discrimination, however, most responses revolve around the highest levels of happiness: extremely happy (173), moderately happy (253), or somewhat happy (226).

Graph 3. Happiness and discriminated persons, mean

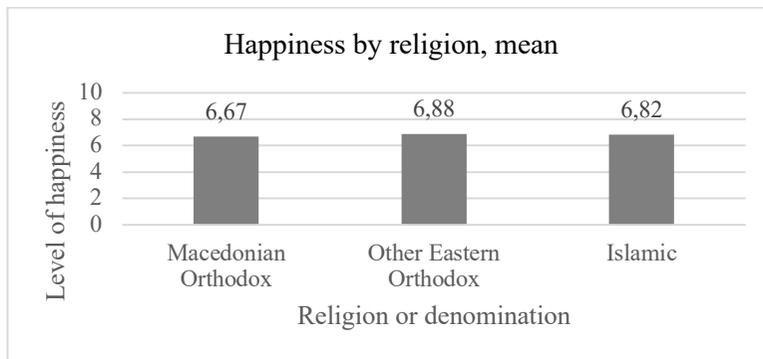


Graph 4. Happiness and discriminated persons, count

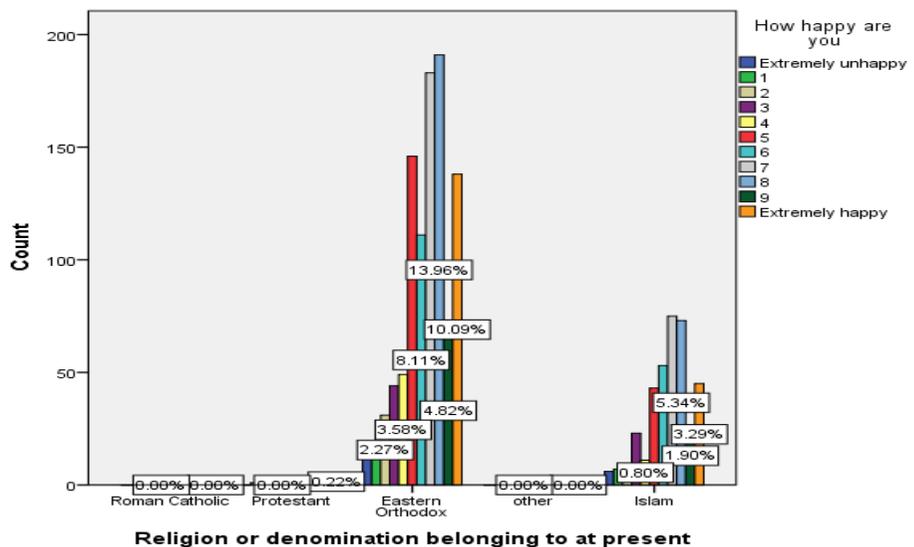


Graphs 5 and 6 shed a light on happiness and religion. In the questionnaire there are eight categories/types of religion provided: Roman Catholic, Protestant, Eastern Orthodox, other Christian denomination, Jewish, Islam, Eastern religions, and other non-Christian religions. The vast majority were Eastern Orthodox (986), followed by Muslims (370), Protestants (10), Catholics (4), and non-Christian denominations (1). Since there are very small strata for most of the religions, there is very little to no data for some of the religion categories. According to graph 5, the largest religious categories do not differ in a meaningful way in their average level of happiness, though Christian Orthodox are only slightly more likely to be happy in North Macedonia. Similarly, as seen from graph 6, Eastern Orthodox constitute the largest group, mostly being happy in category 8 and 7, followed by extremely happy (19.93%, 19.66%, and 14.3% respectively). Muslims are also mostly in category 8 and 7 of happiness.

Graph 5. Happiness by largest religions, mean

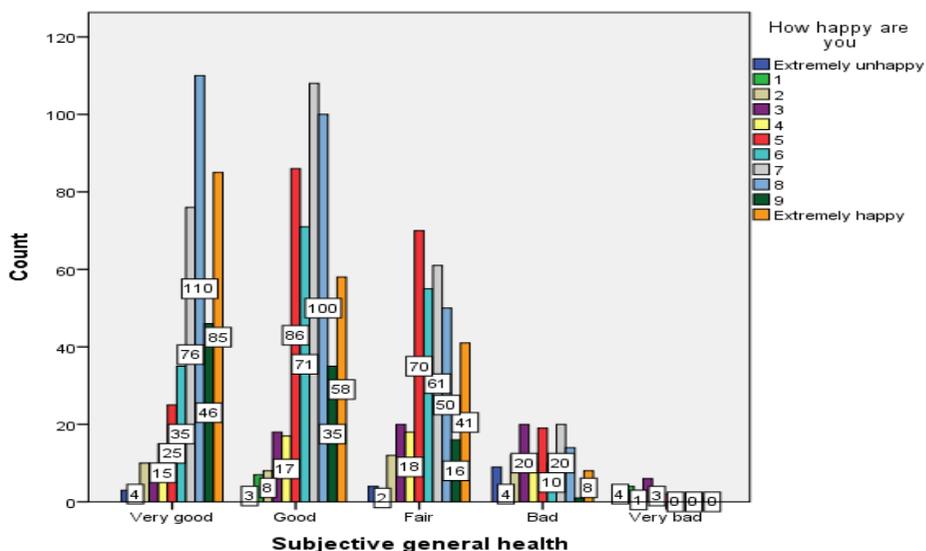


Graph 6. Happiness by religion or denomination, count



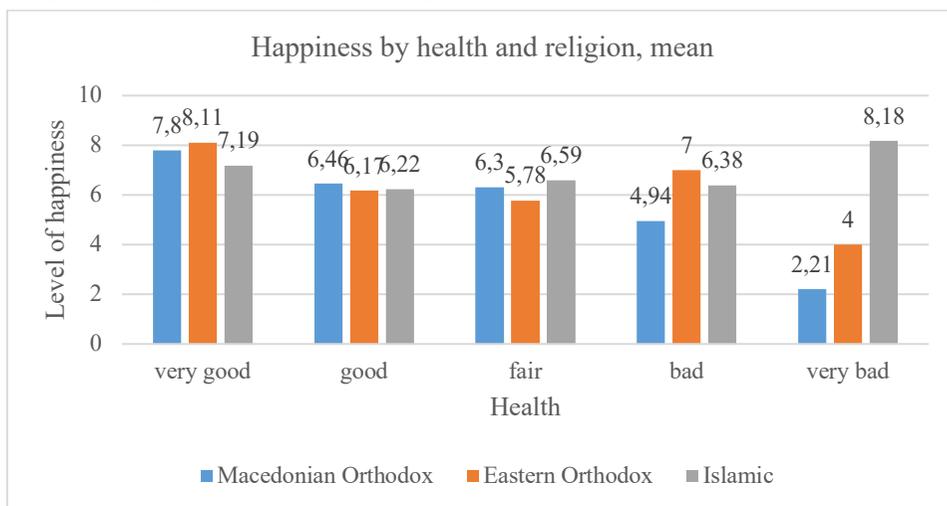
As shown in graph 7, the majority of those who stated that they were in very good health also responded that they were happy (110) or extremely happy (85). This pattern is the same as the previous analyses of religion/happiness and discrimination/happiness. Of those who have good health, fifty-eight (58) are extremely happy, and most other respondents were moderately happy. Only a small portion of the responses are ‘very bad’ concerning the subjective general health, twenty-one (21) of whom were extremely unhappy or very unhappy. Six of those with bad health also ranked low on happiness.

Graph 7. Happiness and health, count



In graph 8 we have amalgamated three variables (happiness, health, religion). The persons belonging to the three dominant religions in RNM have reported higher levels of happiness when self-assessing their health as very good (Macedonian Orthodox with very good health assess their happiness with 7.8, Eastern Orthodox with 8.11 and Islamic with 7.19). Macedonian Orthodox mark the steady trend of being happier as the health improves. Eastern Orthodox report higher levels of happiness and good health but also mark a higher level of happiness even with bad health -7, despite the other two categories that report lower level of happiness in that case, the Muslims – 6.38 and Macedonian Orthodox being the least happy when in bad health – 4.94. The greatest discrepancies are seen in the category of very bad health where the Muslims report as much as 8.18 on the level of happiness.

Graph 8. Happiness, health and religion, mean



*Model Building and Estimation*

To continue our analysis with an ordinal regression, we first analyzed the correlation matrix to see if there were any indications of correlation between variables of interest, since we did not want to make any assumptions in estimating the coefficients of the ordinal regression. As mentioned earlier, we attempted to determine whether there would be any causal relationship between or among happiness, age, religion, language, discrimination, and health. Since our variables are in categories, it is necessary to determine the result-reason of our dependent variable (happiness) and other independent variables. The ordinal regression is a form of logit regression (Hair Jr. et. al, 2014) and the model is as follows:

$$\text{logit}(P(Y \leq j)) = \beta_{j0} + \beta_{j1}x_1 + \dots + \beta_{jp}x_p$$

As expected, there was a positive linear correlation between level of happiness and health. Expected signs of correlation are in accordance with the results of the ordinal regression. Health has a statistically significant, negative correlation with age, meaning that these two variables go in opposite directions: younger people are healthier (the coefficient of Pearson correlation is  $r = -0.602$ ). Health is positively correlated to Muslims and Albanian-speaking people in North Macedonia (coefficients of correlation are  $r = 0.512$  and  $r = 0.189$  respectively). Christian Orthodox are positively correlated to Macedonian-speaking people, but negatively to those who speak Albanian at home. Our correlation analysis shows that language and religion are highly correlated (87% correlation coefficient of Pearson) which could be explained by the fact that most of the correspondents were Macedonian-speaking, so the vast majority are also Eastern Orthodox; thus, we will include religion but remove language from the model.

Table 1. Definitions and descriptive statistics of variables: happiness, age, religion, language, discrimination, gender, unemployment and health

<i>Variable</i>	<i>Definition</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
<i>Happiness</i>	Values of the variable “extremely unhappy, 1,2,3,4,5,6,7,8,9, extremely happy”	13 84	1.9	.304	1	2
<i>Age</i>	Numeric variable	14	51.4	17.6	15	89
<i>Gender</i>	gndr, “1=male” and “2=female”	13 29	5 1.55	17 .498	1	2
<i>Member of a group discriminated against in this country</i>	dscgrp, “1=yes”, “2= no” 1=“very good”, 2=“good” , 3=“fair”, 4=“bad”, 5=“very bad”	13 84	1.90	.304	1	2
<i>Health</i>	rlgdnm, 1=“Roman Catholic”, 2=“Protestant”, 3=“Eastern Orthodox”, 4=“other Christian denomination”, 5=“Jewish”, 6=“Islam”	13 71	0.10	0.30	0	1
<i>Religion or denomination belonging to at present</i>		14				
<i>Unemployed, actively looking for a job</i>	uempla, 0=“not marked”, 1=“marked”	29				

Table 2. Logit regression coefficient analysis for the dependent variable happiness

	(1)	The odds
	<b>Happiness</b>	
Age	-.002 (.642)	.998
Dscgrp=1	-.718*** (.000)	.488
Dscgrp=2	0 <sup>4</sup> ( )	
Gndr=1	-.090 (.357)	.914
Gndr=2	0 <sup>1</sup> ( )	
Uempl=0	.365** (.028)	1.441
Uempl=1	0 <sup>1</sup> ( )	
Health=1	3.666*** (.000)	39.095
Health=2	2.958*** (.000)	19.259
Health=3	2.572*** (.000)	13.092
Health=4	1.592*** (.000)	4.914
Health=5	0 <sup>1</sup> ( )	
Rlghnm=1	-1.780**	.169

<sup>4</sup> This parameter is set to 0 because it is redundant

	(.044)	
Rlgdnm=2	1.533	4.632
	(.012)**	
Rlgdnm=3	.197	1.218
	(.093)*	
Rlgdnm=4	2.092	8.101
	(.240)	
Rlgdnm=6	0 <sup>1</sup>	
	( )	
Observations	1311 valid	1429 total, 118 missing
Pseudo R-square	.150 (Cox and Snell)	.152 (Nagelkerke)
Goodness of fit	8544.84(Pears on Chi-square)	(0.0) p-value

*Note:* The model for happiness is a binary logit regression. The table reports regression coefficients and significance or p-value in parentheses.

\*\*\*p<0.01; \*\*p<0.05, \*p<0.1.

Tables 1 and 2 can be summarized as the following:

- The healthier people are, the more likely they are to be happy. This is shown by the signs of the coefficients, where the categories for health are one (1) for very good, two (2) for good, etc. All the coefficients are statistically significant with p<0.01.
- If people speak a language that is discriminated against in the country, then these people are more likely to be unhappy.
- The older people are, the more are likely they are to be unhappy; thus, younger people are happier, but the coefficient is statistically insignificant (p=0.441).
- Females seem to be more likely extremely happy compared to males, but the coefficient is statistically insignificant (p>0.05).
- Discriminated people are more likely to be unhappy compared to those who are not discriminated against. The coefficient is statistically significant (p<0.05).
- Eastern Orthodox are more likely to be happy compared to Muslims. The coefficient is statistically significant p<0.1. Roman Catholics are more likely to be unhappy.

- Finally, unemployment has negative impact on happiness, as people who are unemployed are more likely to be unhappy than people who work ( $p < 0.05$ ).

Furthermore, we have calculated the odds ratio (Columns Odds in Table 6) to see the odds of falling into a higher or lower category of the dependent variable—in our case, happiness, with a unit change in the independent variable.

The odds for being happier are 0.642 times lower for older people in comparison to younger ones. As categories for health increase (one for good health and lower for those that follow), the odds of being happy decrease, e.g. if people good health, then they are thirty-nine (39) times more likely to be extremely happy than those of category-five happiness. People who are discriminated against are 0.488 times more likely to be unhappy compared to those who do not experience discrimination. Unemployed people are 1.44 times more likely to be unhappy compared to those who work. Orthodox Christians are 1.218 times more likely to be happier than Muslims. Catholics are 0.169 times more likely to be unhappy compared to Muslims. Finally, females are 0.913 times less likely to be unhappy than males.

## 5. Discussion

At the approximate time of the survey, Macedonia ranked eighty-ninth in the World Happiness Index (2022), which, excluding Albania, is lower than that of the other countries in the region, as Serbia is forty-third; Croatia, forty-seventh; Bosnia and Herzegovina, sixty-seventh; Montenegro, seventy-fifth; and Bulgaria, eighty-fifth (Countryeconomy, WHI, 2022).

In a previous project that provided observations for the happiness level for both 2008-2012 and 2017-2019, where 118 countries had significant positive changes, Macedonia was ranked thirty-second according to the change in happiness (0.6 points), which can be regarded as positive (Helliwell et. al. 2020, p. 26-31). These rankings are similar but differ from the ESS findings, according to which, even though the population in North Macedonia is predominantly happy and the percentage of self-declared extreme happiness is significant (14,13% of the respondents), it is far from the standard of high happiness that is set e.g. by Switzerland, Finland, Iceland, the Netherlands, and Norway. Additionally, this country is the second last in respect of unhappiness (15.9%), where Bulgaria (17.0%) marks the highest level of unhappiness (ESS Round 10, 2022).

Regarding the background factors of happiness in the context of the European Union, North Macedonia is closer to the circumstances impacting the level of happiness of the Central and Eastern European (CEE) countries than to the highly-developed countries of Western Europe. CEE countries have lower,

more stagnant levels of happiness compared to the rest of EU. While robust relationships have been established between a set of individual characteristics and life satisfaction across countries (Blanchflower and Oswald, 2011, p. 6), the different levels of individual happiness in CEE are mostly determined by institutional factors, such as corruption, government spending, and decentralization (Rodriguez-Pose, Maslouskaite, 2012, p. 77).

In these terms, North Macedonia is a medium-developed country, despite having received a high Human Development Index of 0.77 for 2021 (HDI countries, 2023) and taking the fifty-seventh place with a score of 72.31 (SDR 2022) ranking according to SDG achievements. However, this country is also characterized by ongoing market transition, experiences of unlevelled and unambitious economic development based on low-productive economic sectors, as well as facing significant environmental challenges. In the arena of social justice, the situation is complex, divided between the formally-legal social character of the state and the manifold implementation challenges in every functional sector. The poverty or near-poverty rates in a medium-developed country like North Macedonia is related to unemployment, social exclusion, and suboptimal operation of socioeconomic systems. Despite the elaborate and adequate legislative basis pertaining to ethnic- and gender-based equality in every social and political area, the immature democracy and the multi-ethnic character of the state along with the prolonged mixed effects of consociationalism contribute to the societal complexity that makes these specific indicators of happiness all the more relevant.

#### *AGE AND HEALTH*

There is a high correlation between health and happiness in North Macedonia. While it is statistically insignificant that the younger people are happier and that happiness decreases with age, a slight disadvantage of older people is noted regarding happiness. As well, health also decreases with age, so it is indicative of the linear relationship between age and happiness and that the age-happiness relationship does not make a U-turn. This is an aspect that should be confirmed by subsequent research. What is interesting is that the healthiest people are not equally as happy; however, health definitely determines happiness.

While the mental well-being is increasingly addressed in North Macedonia, the systemic problems, especially physical health, exist in general, supported by insufficient trust in the health care-system and the medical providers in this country. (Maljichi et al., 2022). Despite the rare answers of the lowest category of self-reported health, there is a need to enhance the quality of the health-care systems.

### *GENDER*

Women are slightly happier than men in North Macedonia, but the extreme affects (both positive and negative) are not accentuated. Despite expectations, this does not coincide with the category of Central and Eastern European countries but is closer to the developed countries' ratios.

Given that the gender-related social situation is complex, a firm conclusion regarding the context and the reasons for the happiness of women in Macedonia cannot be established. The ratio of men and women in North Macedonia is near equal, and even though in certain working areas such a balance supposedly exists, there are greater gender discrepancies in for example construction, manufacturing, textiles, agriculture, and financial and security services. Additionally, female participation in politics is also disproportionately less (Dimitrovska et al. 2019, p. 9). However, the gender structure is highly balanced in all levels of education, while North Macedonia has leading numbers of female scientists in the EU. There is a greater number of women with advanced degrees than men. Women are also dominant in health and social protection. Women are less present in the labor market, though, and represent a smaller percentage of those with high-paying jobs. The present patriarchal mentality in many parts of the country and the traditional gender roles in the home are still an obstacle for achieving the highest levels of social inclusion (including gender-based violence), economic independence, and political participation (Dimitrovska et al. 2019, p. 10-11). However, psychological, emotional, and embedded preconception of gender roles are not accounted for in this research, so respective attention to these aspects should be provided in ensuing research.

### *EMPLOYMENT*

As expected, employment has a positive effect on happiness in Macedonia. This implies that the income and economic stability is important for the Macedonian population, but it also raises the question of other aspects of life satisfaction beyond the economic benefits of employment.

### *ETHNICITY, RELIGION AND DISCRIMINATION*

According to the last population census in 2021, out of 1,836,713 total inhabitants, Macedonian is the native language of 1,127,394 people; Albanian, 447,001; Romani, 31,721; Bosniak, 15,615; and Vlach, 3151 (MAKStat, 2021). While the state has been secular since the end of the World War II, the dominant population is religious. Even though some slight immigration is noted in North Macedonia, the emigrant trends have been strong for decades, and they pertain quite proportionally to all ethnicities. The vast majority of the population of all ethnicities in Macedonia is native.

Orthodox Christians, which largely coincide with ethnic Macedonians, are the happiest in North Macedonia, while Muslims, largely coinciding with

ethnic Albanians and Turks, are less happy than Macedonian Orthodox, yet happier than Catholics. Even though, as the data indicate, discrimination is not as present in North Macedonia as expected, what was expected and is confirmed is that people who experience discrimination are less happy than their counterparts. Discrimination toward people on the basis of language is the most ubiquitous and results in greatest unhappiness, and most respondents who have reported language discrimination are speakers of Albanian. Thus, we can safely conclude that the ethnic, linguistic, and religious majority (i.e. the Macedonians) are happier than other ethnic, linguistic, and religious groups in the country.

The situation in this area is also complex: While personal and structural ethnic discrimination has been evidenced for several decades, consociational democracy has been in place since 2001. According to the systemic measures and formal statistics, it has achieved and even outpaced its purposes of re-conceptualized power-sharing and advancement of group human rights. As a result, the assumption regarding the reasons of reporting lower levels of happiness and its correlation with general and language-specific discrimination lies not in the institutional sphere but, rather, in the social context. Perhaps certain psychological and emotional traits, ethnically-dissected should be further examined as well.

## 6. Concluding remarks

This article indicates that health, employment, ethnicity, and ethnic and linguistic discrimination represent strong determinants of happiness in the Republic of North Macedonia. People who report higher levels of self-perceived health manifest greater levels of happiness. The unemployed are less happy than those who are employed. The majority population, i.e. those who speak the Macedonian language and practice Orthodox Christianity, experience higher levels of happiness than the linguistic and religious native minorities in Macedonia. People who have experienced discrimination are less happy than their counterparts, and particular emphasis is needed here on the negative impact of language-based discrimination on happiness among Albanians.

Gender plays a lesser role in one's level of happiness; however, it does represent a factor: women are happier than men in Macedonian society, which casts this country among the gender happiness ratios of the developed countries in the EU. Age does not appear to provide clear picture on whether it affects happiness; nonetheless, from the context and other results, we might suggest a linear correlation between age and happiness as well.

Since, the goal of the research was to provide a first formal treatment of certain social indicators and their effects on happiness, further research is recommended. The limitations of this research include subjectivity and the self-awareness factor involved in self-reporting, internalized and/or predetermined gender and ethnic social roles, non-consideration of psychological and biological traits, both individual and collective, as well as lack of longitudinal ESS data concerning North Macedonia. Therefore, subsequent compatible data-gathering is recommended, including research in the following areas: the relationship among age, health, and happiness; (non)confirmation of female happiness and the happiness of employed people over unemployed ones; the multi-disciplinary approach regarding the reasons for these aspects; and the reasons for the dominant happiness of the majority population over ethnic and religious minorities.

The research also indicates the need for further development of the social, economic, and healthcare systems in North Macedonia, as well as political and social attention to ethnic aspects of discrimination and happiness, which might significantly contribute to the quality of life of the citizens of this country.

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