Master's Thesis

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The effect of sociodemographic factors in Greek citizens' estimations on migrant population in Greece

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Abstract

Perceptions on the number of migrants, despite being an understudied topic, are often subject to respondents' inaccurate estimations or even refusal to provide an estimate. Overestimations are the most frequent form of these misestimations, especially in Greece, where estimations exceed by far the actual percentage of migrants in the total population. This thesis investigates the socio-demographic determinants that result in these miscalculations, by employing data from Eurobarometer 88.2 survey, conducted in Greece in 2017. The role of the threats, realistic or symbolic, perceived by locals, regarding the presence of migrant populations is examined. In the meantime, various sociodemographic factors are associated with these perceived threats, thus unveiling the causal mechanism behind the creation of threat perceptions and consequently misestimations on the size of migrant population. On the one hand, respondents' education level and type of community are found to be substantially reliable predictors of their misestimations. On the other hand, income and employment status are far from this standard. Overall, sociodemographic factors that pertain to symbolic, cultural threats are more likely to lead individuals to miscalculations.

Keywords: Perceptions, migrants, public opinion, overestimations, Eurobarometer, sociodemographic factors, perceived threat, symbolic threat, realistic threat

1.INTRODUCTION

During the last years the refugee crisis and migration flows to European Union territory have become a major issue. Official data regarding the magnitude of the refugees and migrants strengthen the argument that this matter is crucial and consequently affects both migrants and locals. According to UNCHR, the United Nations Refugee Agency, the number of migrant arrivals in EU in 2015 exceeded 1 million people (Clayton**,** Holland & Gaynor, 2015). The fact that immigration is the major concern for EU citizens is confirmed by Eurobarometer polls of public opinion. According to the 2018 Standard Eurobarometer 89 poll that was conducted in the Spring of 2018 across the EU member countries migration tops the list of the concerns at the EU level with 38% (Standard Eurobarometer 89,2018).Thus, it is intelligible that migration as a general topic has stimulated widespread debate and studies regarding a number of sub-topics, including public opinion on this phenomenon.

Among various aspects of the migration flows topic, locals' perceptions on migrants is an interesting and thought-provoking sub-topic. Integration of migrants is an integral target set by the European Union as a response to the recent migration flows. To that end, locals' perceptions on migrants need to be identified and interpreted and Eurobarometer surveys serve this purpose More specifically, among various perceptions, perceptions on the number of migrants is a perspective that requires further investigation. However, since these surveys examine public opinion, respondents' individual characteristics, namely sociodemographic factors should be examined. Presumably, sociodemographic factors such as education, level, age, gender, income, employment status, and type of community comprise the respondents' background and may affect their perceptions. Arguably, the causal mechanisms behind the perceptions for the current migration flows crisis are still to be fully determined. Being at the external borders of the European Union, Greece has received a considerable amount of these migration flows, hence the estimations of Greek citizens on the migrant population needs to be examined and interpreted as well.

Therefore, the research question is formulated as follows:

What is the effect of Greek citizens' sociodemographic factors in their estimations on migrant population as a percentage of the total population of Greece?

Nevertheless, individuals tend to considerably overestimate the number of migrants (Herda, 2010; Costerdine, 2018). However, this is not the only form of inaccurate estimations on the numbers of migrants. Underestimation and nonresponse are also variations of this phenomenon. (Herda, 2013). This phenomenon, Innumeracy has been described as “an inability to deal comfortably with the fundamental notions of number and chance" (Paulos, 1988, p.3). Quite intelligibly, translating perceptions into numerical figures can turn out to be a challenging process. More specifically, when asked to estimate, respondents’ answers frequently are a multiple of 5 or 10, which runs counter to precision (Alba et al. 2005). Daniel Herda makes a further distinction between types of innumeracy, namely cognitive and emotional innumeracy that needs to be considered when engaging with the issue of innumeracy (Herda 2010). According to this distinction, cognitive innumeracy refers to misestimations that are a result of contact with the migrants, and media exposure. On the contrary, emotional innumeracy is linked to perceived threat, political conservatism and social distance between the respondent and the group whose numbers are estimated. Emotional innumeracy has been found to have a positive association with overestimation (Herda, 2013). Emotional innumeracy has deep roots and is connected to prejudice on a cultural level. Thus, individuals prone to emotional innumeracy face the effects of perceived threat, political conservatism and social distance that lead them to overestimations.

These perceived threats can be substantial in the creation of prejudicial negative attitudes towards migrants in general (Murray & Marx 2013). Hence, the weightiness of these perceived threats and by extension of the misestimations on the migrants’ numbers is highlighted. It should be noted that perceived size of migrants has a direct connection with prejudice, and thus with attitudes towards migrants (Strabac, 2011). Additionally, perceived size is more important for the creation of prejudicial attitudes than the actual size (Strabac, 2011). Consequently, determining the factors that create these perceptions and misestimations would provide useful insights regarding attitudes towards the phenomenon of migration flows in general. Sociodemographic factors of the local population appear to provide a broad scope of explanations on how these perceptions are created and preserved.

The Eurobarometer survey utilized in this research bears the subtitle "Integration of migrants in the European Union". The question regarding the perceptions on the number of migrants follows the same logic. Integration of migrants may be impeded or even not accomplished at all in case locals have inflated perceptions on the migrant magnitude. To that end, it is necessary to identify the factors that shape these misestimations on an individual level. Hence, this is where the societal relevance of this thesis lies. Determining whether sociodemographic factors influence these estimations in particular or not can be conducive to understanding the cause of inaccuracy in these calculations. Minimizing misperceptions on numbers, can minimize negative attitudes on migrants. Thus, anti- immigration sentiment can be mitigated, ultimately effective integration of migrants can be achieved.

Regarding the scientific relevance of this thesis, the contribution it makes stems from the lack of studies that associate individual sociodemographic factors with perceptions on the number of migrants. The extent to which these factors can be predictors of various levels of miscalculations has not been examined thoroughly. In addition, the association of these factors with theories examining perceived threat and prejudice, also adds to the scientific relevance of this thesis. A causal chain is identified, including perceived threat, misestimations and attitudes towards migrants, defining a path of influence leading to attitudes towards migrants. Sociodemographic factors link perceived threat, estimations and attitudes.

This thesis has the following structure: First, an overview on the existing literature is presented, aiming to identify aspects of the topic that have been discussed and analyzed, while certain gaps in literature are described. Following, the theoretical framework is defined, providing the conceptual basis upon which hypotheses are formulated. Afterwards the research design and the methodology that is used are described, defining concepts and data. Subsequently, data statistical analysis follows, with an interpretation of the findings presented. Finally, the conclusion chapter summarizes this thesis, with a discussion on the findings and limitations.

2.LITERATURE REVIEW

The existing academic literature mainly focuses on public opinion regarding the impact of migrants, therefore the EU citizens' attitude towards migrants and refugees has been the center of attention. The highlight of this current research shall be the perceptions of the Greek public opinion on migrant magnitude, and the factors that determine this.

It should be noted that the boundaries between the terms migrant and refugee have become quite blurred, especially after the migration crisis of 2015 in Europe. Even though according to UNCHR "Refugees are outside their own country because of a threat to their lives or freedom." (Migrant definition, n.d.), it is difficult for public opinion to have a clear view on whether individuals arriving in their country should be considered as migrants or refugees. Since this topic focusses on perceptions, public opinion categorization is taken into account. Individuals may be categorized as migrants or refugees interchangeably by public opinion, and under these circumstances, attempts to define causes that lead to certain public perceptions are further hindered.

Above all, with regards to perception on migrants, public opinion is quite clear. As stated by Eurobarometer: "Just under half of respondents say that there are at least as many illegally staying immigrants as there are legally staying immigrants." (Special Eurobarometer 469, p.5). Additionally, the proportion of migrants tends to be overestimated by the public opinion in the EU member states. Meanwhile, according to the same survey, a significant percentage of the respondents claimed lack of relevant information when it comes to the topic of migrants' proportion in their countries as a sign of their overall numerical impact (Special Eurobarometer 469). It can be argued that the EU citizens that participated in this survey either overestimate the magnitude of migration flows or have not the required knowledge on the issue. Either way this phenomenon can be translated as misinformation of public opinion, a form of innumeracy. The reasons that have contributed to this condition may be a combination of factors.

More specifically, in the 2018 OECD paper, the perception of citizens in host countries on migrants is investigated. According to its findings, these perceptions are affected by the employment status of the citizens. (Using statistics to assess migrant integration in OECD regions ,2018). Namely, high unemployment rate can lead to a negative perception on the impact migrants can have to societies in host countries. Inversely, low unemployment rate is a factor that correlates with more positive views

on the response migration flows may effectuate. The reason behind this attitude can be traced in the lack of work competition migrants pose for an employed local. On the contrary unemployed individuals perceive groups of migrants as an additional workforce that they have to compete against. Accordingly, unemployment is a factor that should be taken into consideration regarding EU citizens' attitudes towards migrants and refugees. Understandably, perceptions on migrants and their impact is a broader concept than perception on their magnitude. Hence, a factor that affects public opinion on migrants, unemployment, needs to be considered as a possible decisive factor in relation to perceptions on migrant magnitude.

Consterdine examines the topic of public perception on migrants under a different scope. By acknowledging that EU citizens have an explicit tendency to miscalculate the magnitude of migrants after the 2015 crisis, the author claims that the fact that public opinion is overestimating the number of migrants and refugees activates negative attitudes against them Consterdine (2018). In line with this paper, perceptions on numbers of migrants have a causal effect on the attitude of the public opinion. The factors that cause the EU citizens to have certain perceptions on the number of migrants are not thoroughly described. Nonetheless, high level of education is associated with favorable stance towards migrants and refugees. In consonance with Lahav, education is a factor that affects attitudes towards migrants (Lahav, 2004). Amongst various factors, the level of education defines perceptions on migrants, and their impact. Namely, high level of education is connected to broader acceptance of migrants. Consequently, level of education should be examined as a probable factor that may create certain perceptions on the magnitude of migration flows.

Since the literature concerning factors that cause the migration flows magnitude perceptions is limited, we assume, that the factors that affect attitudes towards migrants in general, possibly affect estimations on the migrants' numbers. As Meltzer et al point out, explanations on the attitudes on migrants derive from two main theoretical approaches: "Realistic group conflict and social identity theory" (Meltzer et al,2018 p.3). While the former is associated with a rational cost-benefit analysis of economic competition between locals and migrants upon which perceptions and public opinion is based, the latter theory introduced and described cultural differences as a decisive factor of critical importance regarding public opinion and perceptions on migrants. (Bobo &

Hutchings, 1996). It follows that possible factors that form attitudes and perceptions on migrants should also be analyzed under this categorization of possible factors.
With respect to the topic of possible factors that affect perceptions, individual income and individual skill and are seen as related to the creation and perseverance of public opinion attitudes (Facchini & Mayda , 2006).While low individual income is associated with negative attitudes towards immigrants (Paas, Halapuu 2012) , on the contrary individual skill, as a result of education is correlated with positive stance towards migrants. (Raijman, Semyonov & Schmidt 2003) It should be noted that the two factors, skill and income are considered as factors that affect perceptions on the impact of migrants, not on their numbers. However, since these factors have played a role in general perceptions, there is a positive possibility that they affect perceptions on numbers as well.

Furthermore, perceptions on the numbers of migrants in the EU during the recent crisis have been matter of discussion in a recent Bruegel report. In this paper factors that determine perceptions on migrants are identified as unemployment, education level and age can be crucial in forming and preserving public perceptions on migrants (Batsaikhan, Darvas & Raposo,2018). According to this survey there is a clear overestimation of the migrants' magnitude. As stated in this paper: "An IPSOS survey found that in all countries where the question was asked, people perceived that there were many more migrants than there actually were" (Batsaikhan, Darvas & Raposo, 2018 p.34). This strengthens the argument that EU citizens tend to have certain perceptions on the number of migrants, even if these perceptions do not correspond to reality. Likewise, as reported by Citrin and Sides in their paper concerning perceptions on the magnitude of migrants in Europe and in the United States, "The fact of overestimation in every country is obvious." (Citrin & Sides, 2008 p.41). Once more, there is no space for argument against the existence of this overestimation of the migrant numbers among EU citizens.

Overall, the existing literature appears to have perceptions on the impact of migrants as a focal point. There seems to be several factors that are instrumental in forming perceptions and attitudes of the public opinion on migrants and migration flows as an urgent issue. However, it should not be taken for granted that the same factors have the same impact on the sub-topic of perceptions regarding the migrants' magnitude in Greece during the last migrant/refugee crisis that peaked in 2015. It can be said that this particular sub-topic has not been examined and described in depth, even

though tendencies of overestimating the number of migrants has been detected from various surveys. Therefore, the factors that drive respondents to estimate the migrants' number higher than they are, or even admit that they do not have the required information to make an estimation on the question need to be examined. Nevertheless, there is a high possibility that they do not diverge substantially from the factors that affect general perceptions on migrants and their impact on local societies.

3.THEORETICAL FRAMEWORK AND HYPOTHESES

3.1 Theoretical framework

Attitudes towards migrants in general have an aspect of perceived threat, irrespective of their focus, namely cost-benefit analysis or cultural concerns. Perceived threat relates to prejudice as described by the "Integrated Threat Theory" (Stephan & Stephan, 2000). In the original form of this theory, four types of perceived threat are described; realistic threat, symbolic threat, negative stereotype, and intergroup anxiety. Among them, the realistic threat refers to a cost-benefit based approach with migrants and non-migrants competing for resources as mutually excluded groups, with economic interests and motives. Symbolic threats are linked to perceived threats, fueled by cultural differences. Eventually, the initial types were reduced to no more than two, namely realistic and symbolic threat, including all the antecedent categories of explanations for prejudice against migrants (Renfro & Stephan, 2002).

Hence, theoretical approaches regarding attitudes on migrants can be divided in two major clusters. On the one hand there are theories based on economic competition between locals and migrants, under a cost-benefit analysis scope. As stated by Olzak (1992 p.26) "Competition exists between two populations when the presence of one reduces the opportunities for the other." Quite intelligibly, migrants may be perceived as a threat to local individuals, when they appear able to challenge them in search of work opportunities. It should be noted that while the threat can be real or imagined, the labor market is a field of competition, and thus attitudes towards migrants are shaped in accordance to labor market antagonism. The core idea of this theory can be described as prioritizing economic factors, as the overarching determinant of perceptions and eventually attitudes regarding migrants. Moreover, the concept of "Relative Deprivation" as introduced by Runciman (1966) is associated with the competition mentality between groups of citizens, when they feel excluded from certain resources or benefits, thus affecting their well-being. Likewise, the Rational Conflict Theory, (Campbell ,1965) connects attitudes on certain groups with the perceived threats these groups pose. Limited resources lead to hostility due to the anticipated competition for resources. To sum up, the theories that constitute the cost-benefit analysis cluster, are based upon the principle of maximizing utility of individuals. In the meantime, the adoption of a critical stance towards migrants is a natural corollary, since certain groups of locals may find themselves competing with migrants over the same jobs and benefits.

On the other hand, predicting and explaining the perceptions and attitudes on migrants is based on a combination of cultural, social and demographic factors. The cornerstone of this group of explanations is the concept of identity. According to the "Social Identity Theory" individuals seek to belong to social groups and to develop a positive identity regarding their group. (Tajfel & Turner, 1986). A process of social categorization occurs, leading to a polarity between the group and the out-groups that stand out, due to their specific characteristics. Identifying as a part of a group results in making comparisons with the out-groups, which in turn shapes perceptions on the out-groups, namely migrants in this case. In agreement with this theory, through this social comparison individuals and groups collectively, highlight and maximize the differences between the group and the out-groups, while minimizing differences within the group. The outcome is a self-esteem increase for the group members, who tend to back their group against the out-groups.

3.2 Hypotheses

Considering the theoretical framework above, the following hypotheses are formulated. Given the fact that according to the theoretical framework perceived threats are crucial in the creation of attitudes towards migrants, this causal mechanism is used in the formulation of a hypothesis for each of the sociodemographic factors under investigation. Essentially each factor is associated with either realistic or symbolic threats, while relevant existing literature is being associated with these factors as well.

H1. Individuals with high education will have less misperceptions on the magnitude of migrants than individuals with low education.

Regarding education, this trait can be associated to the realistic threat cluster of explanations. In other words, individuals with high qualifications through education will feel less threatened by immigrants. Since highly educated individuals have a competitive advantage over the immigrants it can be argued that there will not be a direct clash of interests between highly educated natives and migrants. Moreover, even when highly educated natives face competition from migrants, they are in a commanding position. Higher education is a privilege, that prevents migrants from competing as equals with them. (Strabac et al. ,2014) The realistic threat will be

reduced, thus minimized perceptions may be expected, namely the overestimation of the migrants' numbers.

H2. Individuals of younger age will have lower estimations on the magnitude of migrants.

When it comes to age of the respondents as a possible factor that could affect the misperceptions on the migrants' magnitude, age can be one of the possible explanations. The mechanism behind this possible could go as follows: Individuals of younger age do not feel as threatened, since the protection of social and cultural identity seems to be a priority for older age groups. "Older respondents are thought to be more nativist and, therefore, more anti-immigrant" (Goldstein, Peters 2014, p.388). In such way symbolic threat perceptions as described above may lead older individuals to overestimate the size of migrants. Once more, being anti-immigrant appears to relate to a feeling of being threatened by immigrants, on a symbolic, cultural level. On that account, due to this perceived threat individuals can overestimate the numbers of the migrants in the country.

H3. Individuals with low income or unemployed tend to have higher estimations on the number of migrants.

The reasoning behind this hypothesis is based on the idea of realistic threat as well. Individuals that are either unemployed or have low income, may perceive migrants as a realistic threat. From their point of view, migrants pose a threat for their well-being, as they can be competitors in the job market or other benefits. Individuals that are in a vulnerable economic position tend to adopt negative stance towards migrants. (Ceobanu and Escandell 2010) Evidently, low income and unemployed status are clear signs of economic vulnerability for individuals. Hence, after conducting a personalized cost-benefit analysis, respondents may overestimate the numbers of migrants, because of the perceived threat the latter group may be conceived as.

H4. Women are more likely to have high estimations on the magnitude of migrants.

Regarding gender as one of the possible determining factors, a connection may be formulated based on the symbolic threat approach. Perceived symbolic threat may be an explanation, as women appear to be more supportive of in-group social identity and cultural sub-groups segregation in general. Migrants represent an out-group; therefore, females will probably be prejudiced against them. (Burns and Gimpel 2000) Presumably it follows that women will have negative attitudes towards migrants. (Espenshade and Calhoun 1993) and thus will have higher estimations, as a result of this perceived threat.

H5. Individuals who live in rural areas tend to have a higher perception on the numbers of migrants than individuals that live in urban areas.

The notion that individuals who live in rural areas tend to overestimate the magnitude of migrants derives from the symbolic threat theoretical approach. Rural societies are quite tradition-oriented, while holding in high regard cultural identity. Ergo, protection and preservation in-group social and cultural identity are often considered a high priority within rural communities. Symbolic threat as a social juxtaposition between locals and migrants may increase the perception of the number of migrants among local rural populations. Consequently, anti-immigrant attitudes are developed in rural areas (Paas and Halapuu 2012), emanating from this perspective. On the contrary in urban localities, individuals tend to be more amenable to overlook existing cultural differences between them and migrants. In other words, diversity is palatable in urban communities (Burns and Gimpel 2000).

4.RESEARCH DESIGN

This thesis attempts to identify the sociodemographic factors that make Greek citizens miscalculate the magnitude of migrants in Greece. The latter is measured as a percentage of the total population. In that way, respondents are asked to estimate the percentage of migrants as a part of the total population of the country. Greece was chosen as a case, due to the fact that the vast majority of these migration flows entered European territory from Greece. In 2015 when the migration flows reached a peak, more than 800,000 entered the country, out of the 1 million total arrivals in European Union territory. (Migration to Europe in charts, 2018) These people had to reside in Greece for some time, regardless if they eventually stayed in the country or not. Hence, attitudes and perceptions of the locals on this group are crucial and affect possible integration procedures.

The goal of this thesis is to examine whether individual sociodemographic factors, namely gender, age, employment status, income, type of community and level of education can result in certain perceptions regarding the number of migrants and refugees in the specific country. For instance, the possibility that respondents of different age groups tend to estimate the number of migrants differently is being examined in this thesis.

This thesis is based on a Large-N quantitative research design, since the Large-N strategy is to connect quantitative data from many cases, but with less variables. (Toshkov, 2016 p.201). Moreover, quantitative approach is the most advisable research method on account of the expected outcomes. A statistical analysis can provide "detailed assessment of patterns of responses" (Mccusker & Gunaydin, 2014 p.542). The type of research is retrospective, since the focal point is the causes of effects. In essence, the possible relation between the dependent variable and the independent variables are investigated.

The added value of this research lies in the particularization of the overused researches that correlate respondents' sociodemographic factors with attitudes towards migrants. Furthermore, existing scholarship appears to be more impact oriented, in respect of perceptions on migrants. As a result, perceptions on the number of migrants have not been analyzed thoroughly. Nevertheless, as reported by the Eurobarometer "In Greece, on average respondents estimated the proportion of immigrants at 20% whereas

the actual figure in 2017 according to Eurostat was 8.4%." (European Commission, 2018).

4.1. Concept Definition

The term "migrants" in this thesis refers to the concepts of migrants and refugees and thus consists of both. The independent dummy variable "Gender" concept refers to the respondents' gender and includes two possible values, "Men" and "Women". The Income concept is operationalized as a Social Class Self-assessment which includes working class, lower middle class, middle class, upper middle class and high class. The respondents' employment variable comprises two values, employed and non-employed. The former category, however, may refer to self-employed or employed. Education level is measured in years of education; up to 15 years,16-19 years, 20 years or more, still studying and no full-time education are the possible answers. Likewise, age is divided in groups, namely 15-24 years old, 25-39, 40-54 and 55 or more. The type of community variable concerns respondents' size of community, expressly rural area/ village, small/medium town or large town.

Additionally, an extra variable is utilized in the alternative Generalized Linear Model. Political self-placement is included as a further categorization of respondents in the alternative Generalized Linear Model, in order to investigate whether political orientation, even if it may not be strictly classified as a sociodemographic factor such as the aforementioned 6 factors (Age, Gender, Education, Employment status, Income and Type of Community) has an impact on the respondents' estimations. The Political self- placement variable consists of 5 possible answers; Left, Centre-Left, Centre, Centre Right, and Right.

4.2. Data collection- Methodology

Regarding data collection, the dataset used is the Standard Eurobarometer 88.2 dataset. (European Commission, 2018) and is analyzed through SPSS. The relevant question asked in the Eurobarometer 88.2 survey was phrased as: "To your knowledge, what is

the proportion of migrants in Greece?". As every typical Eurobarometer survey, this survey consists of approximately 1000 face-to-face interviews per country (Public Opinion n.d.) Certain values, referring to "Do not know" or "Refuse to answer" have been excluded from certain independent variables, namely, Education, community and income.

The statistical model applied is the Generalized Linear Model, in order to test potential dependence of the dependent variable on multiple independent variables simultaneously, as the independent variables, the sociodemographic factors coexist in each case, namely each respondent.

Responses with refusal to answer have also been excluded from the extra Independent variable, Political self-placement that is used in an alternative Generalized Model. The reason behind this is that they do not present theoretical interest in the analysis. Likewise, the answer 999 from the dependent variable has been ruled out as it refers to "Do not know" answers and exceeds by far the spectrum of possible responses to the questions, namely 0-100%.

As presented in the following Tables 1 and 2, several cases have been excluded from the analysis because of the non-responses or "do not know" responses. Likewise, in Tables 3 and 4 the exclusion of cases is portrayed, including this time political self-assessment. It is clear that more cases, almost half of the total cases have been excluded from the alternative model that includes political self-assessment. The difference lies in refusal to reveal political self-assessment.

Table 1. Original Case Processing Summary

	N	Percent
Included	645	64,3%
Excluded	358	35,7%
Total	1003	100,0%

Table 2 Original Model Categorical Variable Information

Factors		Number of respondents	Percentage
Gender	Men	352	54,6%
	Women	293	45,4%
	Total	645	100,0%
Age	15 - 24 years	49	7,6%
	25 - 39 years	156	24,2%
	40 - 54 years	192	29,8%
	55 years and older	248	38,4%
	Total	645	100,0%
Education	Up to 15 years	149	23,1%
	16-19	225	34,9%
	20 years and older	231	35,8%
	Still Studying	38	5,9%
	No full-time education	2	0,3%
	Total	645	100,0%
Employment status	Employed	350	54,3%
	Unemployed	295	45,7%
	Total	645	100,0%
Income	The working class of society	175	27,1%
	The lower middle class of society	128	19,8%
	The middle class of society	329	51,0%
	The upper middle class of society	10	1,6%
	The higher class of society	3	0,5%

	Total	645	100,0%
Community	Rural area or village	189	29,3%
	Small/middle town	97	15,0%
	Large town	359	55,7%
	Total	645	100,0%

Table 3. Alternative Case Processing Summary with political self-placement variable

	N	Percent
Included	524	52,2%
Excluded	479	47,8%
Total	1003	100,0%

Table 4. Alternative Categorical Variable Information with political self-assessment variable

Factors		Number of respondents	Percentage
Gender	Men	288	55,0%
	Women	236	45,0%
	Total	524	100,0%
Age	15 - 24 years	37	7,1%
	25 - 39 years	120	22,9%
	40 - 54 years	162	30,9%
	55 years and older	205	39,1%
	Total	524	100,0%
Education	Up to 15 years	123	23,5%
	16-19	176	33,6%

	20 years and older	197	37,6%
	Still Studying	26	5,0%
	No full-time education	2	0,4%
	Total	524	100,0%
Employment status	Employed	290	55,3%
	Unemployed	234	44,7%
	Total	524	100,0%
Income	The working class of society	129	24,6%
	The lower middle class of society	115	21,9%
	The middle class of society	272	51,9%
	The upper middle class of society	7	1,3%
	The higher class of society	1	0,2%
	Total	524	100,0%
Community	Rural area or village	161	30,7%
	Small/middle town	78	14,9%
	Large town	285	54,4%
	Total	524	100,0%
Political self-assessment	Left	53	10,1%
	Centre-Left	102	19,5%
	Centre	198	37,8%
	Centre-Right	121	23,1%
	Right	50	9,5%
	Total	524	100,0%

5.DATA ANALYSIS

In this chapter statistical models that analyze the Eurobarometer 88.2 data are presented. The first and main statistical model is a Generalized Linear Model that includes the independent variables age, gender, education, income, type of community and employment status in order to investigate the possibility these factors qualify as predictors of the dependent variable, the estimations of the percentage of migrant as part of the total population. Therefore, Table 5 provides rates of significance for the aforementioned independent variables. The significance rate level is 0,05, which means that variables with significance rate lower than this limit can be considered as reliable predictors of the dependent variable.

In Table 6, Parameter estimates that describe how the dependent variable changes for each category of the independent variables. In our case, parameter estimates tell us how different estimations for each category of the dependent variable are, for instance how individuals with different education level estimate the percentage of migrants. The first column in the parameter estimates table 6, column B, indicates how much the mean of the independent variable changes, when the dependent variable is increased by one unit. In other words, this table answers the question whether the dependent and independent variable have a positive or a negative association. Both tables 5 and 6 as models of the main analysis do not include the political self-assessment variable.

5.1 Main Model

Table 5. Test of Model Effects

	Significance
(Intercept)	,000
Gender	,019
Age	,039
Education	,000
Employment status	,112
Income	,711

Dependent Variable: Percentage Estimations
Model: (Intercept), Gender, Age, Education, Employment Status, Income, Community

Table 6. Parameter Estimates

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test		
			Lower	Upper	Wald Chi-Square	df	Sig.
(Intercept)	9,574	10,3274	-10,668	29,815	,859	1	,354
[Gender =Men]	-2,175	,9293	-3,997	-,354	5,479	1	,019
[Gender= Women]	0[a]	.	.	.	.	.	.
[Age=15-24]	7,296	2,9045	1,604	12,989	6,310	1	,012
[Age =25-39]	2,846	1,4254	,052	5,639	3,985	1	,046
[Age =40-54]	2,297	1,3029	-,256	4,851	3,109	1	,078
[Age =55 and older]	0[a]	.	.	.	.	.	.
[Education =Up to 15 years]	15,722	8,0385	-,033	31,477	3,825	1	,050
[Education =16-19 years]	13,624	8,0109	-2,077	29,325	2,892	1	,089
[Education =20 and more]	10,529	8,0248	-5,199	26,258	1,722	1	,189
[Education =Still studying]	4,534	8,6037	-12,329	21,397	,278	1	,598
[Education =No full-time education]	0[a]	.	.	.	.	.	.
[Employment status =Employed]	-1,902	1,1968	-4,248	,443	2,526	1	,112

[Employment status =Unemployed]	0[a]	.	.	.	.	.	.
[Income _use= The working class of society]	-1,524	6,5948	-14,450	11,402	,053	1	,817
[Income = The lower middle class of society]	-1,596	6,5931	-14,518	11,326	,059	1	,809
[Income = The middle class of society]	-,190	6,5256	-12,980	12,600	,001	1	,977
[Income= The upper middle class of society]	,191	7,3806	-14,275	14,656	,001	1	,979
[Income = The higher class of society]	0[a]	.	.	.	.	.	.
[Community= Rural area or village]	-3,846	1,0293	-5,864	-1,829	13,965	1	,000
[Community= Small/middle town]	-2,383	1,3075	-4,946	,180	3,321	1	,068
[Community= Large town]	0[a]	.	.	.	.	.	.
(Scale)	124,813[b]	6,9502	111,908	139,206			

5.2. Findings Interpretation for the Main Model

AGE

With a significance value of 0.039 as it shown in the Table 5 the independent variable appears to be a statistically significant predictor of the dependent variable. In other words, this can be interpreted as evidence that the connection between the two variables is not caused by chance. Respondents of different age groups tend to have different perceptions about the percentage of migrants in Greece. Regarding age groups, the Parameter Estimates table 6 provides with deeper cohort analysis on how various age groups share different perceptions on the percentage of migrants within the Greek population. The youngest age group, consisting of individuals aged 15 to 24 years old gave by far a higher estimate than any other age group, have a significantly higher estimate than the other age groups and especially the 55 years old and above age group. The difference in estimations among the three other age groups, 25-39, 40-54 and 55 or above exhibit less variation, with the oldest age group being the one with the lowest estimations whereas the two middle age groups share practically similar perceptions with regards to the percentage of migrants. It can be argued that the perceptions of younger respondents exceed perceptions of older respondents, which leads us to the conclusion that high estimation is inversely proportional to the respondent's age in this Eurobarometer research. Therefore, the Hypothesis concerning age, according to which individuals of younger age would have lower estimations on the number of migrants in Greece is rejected by the empirical data in this Eurobarometer survey.

GENDER

The Gender variable holds a 0.019 significance value in the Generalized Linear Model shown on Table 5 that is utilized in this analysis. This signifies that the relationship between Gender and Percentage estimation is closer than the Age-Percentage estimation relationship. Gender expressly has a deeper impact on the dependent variable than Age and is an even more direct predictor of the percentage estimate dependent variable. On the question of whether men tend to have higher estimates that

women or not, the Parameter estimates table 6 is indicative of a clear tendency. According to the model, women have clearly higher estimates than men, regarding the magnitude of migrants in the country. Thus, our hypothesis on the effect Gender as an independent variable may have on the perceptions on migrants' number is confirmed. Women in fact have higher estimations than men on this topic.

COMMUNITY

Community is an extremely significant predictor of the dependent variable. With a significance value of 0.001 in Table 5, the type of community to have an immense impact on the respondents' estimations. Thus, it can be argued that the type of community leads to different levels of estimations on the percentage of migrants in the total population of Greece. In detail, respondents from big cities tend to have higher estimations than respondents from rural areas, as it is evident from the Parameter estimates table. Individuals who live in villages and individuals who live in small or middle towns both have lower estimations than individuals in urban residents, and between these two categories, rural residents tend to have even lower estimations. Hence, it is safe to say that smaller communities are correlated with lower perceptions, as far as this research is concerned. The findings consequently are against the hypothesis that rural residents would have higher estimations that individuals living in big cities.

EDUCATION

Out of all the tested possible factors education has the highest level of connection to the Percentage Estimate dependent variable shown in Table 5. The significance value of 0.000 proves the direct causal relationship between education and percentage estimate. However, according to the parameter estimates Table 6, the variation between the highest and the lowest level of education is the decisive factor in determining the effect of this variable. By way of explanation higher education means not as high estimations as lower education or no education. Apparently, the level of education is inversely proportional to the level of estimates on migrants' percentage. The education hypothesis is consequently confirmed by the statistical model utilized in this research.

EMPLOYMENT

The significance indicator in Table 5 for the employment variable (0.112) does not allow general associations between the employment status of the respondents and their estimations. Howbeit, the Parameter Estimates table 6, provides the relevant data-based information on how differently employed and unemployed respondents appraise the migrant percentage. Clearly employed individuals have lower estimates, compared to unemployed individuals that participated in this Eurobarometer survey. All in all, even though employment status variable does not fulfill the criteria to be considered as statistically significant predictive factor for the dependent variable, the tendency of unemployed respondents to have higher estimations should be considered.

INCOME

Income, as a respondents' social class self-assessment has a significance value of 0.711 which apart from being statistically insignificant, is the factor with the less predictive capacity on the dependent variable. There are not significant differences between the different income categories as social class self-assessment groups. Nonetheless, the Parameter estimates table indicates that lower social class self-assessment is linked with lower estimations on the migrant percentage. Anyhow, there are no excessive variations between the different income categories. The hypothesis with regard to employment status and income, namely that these factors would affect respondents' estimations is consequently rejected, since neither of these sociodemographic factors proved to be a statistically significant predictor of estimations on migrant numbers.

Table 7. HYPOTHESES CONFIRMATION OR REJECTION TABLE

Hypothesis 1	High Education leads to lower estimations	Confirmed
Hypothesis 2	Young age leads to lower estimations	Rejected
Hypothesis 3	Low income and unemployment lead to higher estimations	Rejected
Hypothesis 4	Women have higher estimations	Confirmed
Hypothesis 5	Rural residence leads to higher estimations	Rejected

5.3 Alternative Generalized Linear Model-Data Analysis with Political Self - Assessment

Alternatively, a Generalized Linear Model is once more utilized to provide Significance rates (Table 8) and Parameter estimates (Table 9). The clinical feature that differentiates the alternative model from the main model (Tables 5 and 6) is the presence of political self-assessment variable in the alternative model. In other words, in the alternative model the effect of the sociodemographic factors is tested, provided that the political orientation of the respondent is known. Once again, the significance limit is 0,05.

Table 8 Test of Model Effects including political self-assessment

	Significance
(Intercept)	,000
Gender	,089
Age	,131
Education	,009
Employment Status	,786
Income	,975
Community	,000
Political self-assessment	,493

Dependent Variable: Percentage Estimations
Model: (Intercept), Gender, Age, Education, Employment Status, Income, Community, Political self-assessment

Table 9. Parameter Estimates with Political self-assessment

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test		
			Lower	Upper	Wald Chi-Square	df	Sig.
(Intercept)	9,574	10,3274	-10,668	29,815	,859	1	,354
[Gender =Men]	-2,175	,9293	-3,997	-,354	5,479	1	,019
[Gender= Women]	0[a]	.	.	.	.	.	.
[Age=15-24]	7,296	2,9045	1,604	12,989	6,310	1	,012
[Age =25-39]	2,846	1,4254	,052	5,639	3,985	1	,046
[Age =40-54]	2,297	1,3029	-,256	4,851	3,109	1	,078
[Age =55 and older]	0[a]	.	.	.	.	.	.
[Education =Up to 15 years]	15,722	8,0385	-,033	31,477	3,825	1	,050
[Education =16-19 years]	13,624	8,0109	-2,077	29,325	2,892	1	,089
[Education =20 and more]	10,529	8,0248	-5,199	26,258	1,722	1	,189
[Education =Still studying]	4,534	8,6037	-12,329	21,397	,278	1	,598

[Education =No full-time education]	0[a]	.	.	.	.	.	.
[Employment status =Employed]	-1,902	1,1968	-4,248	,443	2,526	1	,112
[[Employment status =Unemployed]	0[a]	.	.	.	.	.	.
[Income _use= The working class of society]	-1,524	6,5948	-14,450	11,402	,053	1	,817
[Income = The lower middle class of society]	-1,596	6,5931	-14,518	11,326	,059	1	,809
[Income = The middle class of society]	-,190	6,5256	-12,980	12,600	,001	1	,977
[Income= The upper middle class of society]	,191	7,3806	-14,275	14,656	,001	1	,979
[Income = The higher class of society]	0[a]	.	.	.	.	.	.
[Community= Rural area or village]	-3,846	1,0293	-5,864	-1,829	13,965	1	,000

[Community= Small/middle town]	-2,383	1,3075	-4,946	,180	3,321	1	,068
[Community= Large town]	0[a]	.	.	.	.	.	.
[Political Self-assessment =Left]	-1,426	2,0977	-5,538	2,685	,462	1	,497
[Political Self-assessment =Centre- Left]	-3,313	1,8718	-6,982	,356	3,133	1	,077
[Political Self-assessment =Centre]	-2,118	1,7039	-5,458	1,222	1,545	1	,214
[Political Self-assessment =Centre-Right]	-2,277	1,7812	-5,768	1,214	1,634	1	,201
[Political Self-assessment =Right]	0[a]	.	.	.	.	.	.
(Scale)	108,338[b]	6,6931	95,983	122,283			

Dependent Variable: Percentage Estimations
Model: (Intercept), Gender, Age, Education, Employment Status, Income, Community, Political self-assessment

5.4. Alternative Model Findings Interpretation

However, as shown in table 9, in case political self-placement is included as an additional factor, slight variations of the findings are observed. Two of the variables that were found to have statistical significance; age and gender, may not be considered reliable predictors, with significance indicator of 0.089 and 0.131 respectively, when political self-placement is taken into consideration. Both these independent variables

were significant in the original Generalized Linear Model. Thus, it can be argued that provided that political self-placement is known and included in the analysis, age and gender cease to be associated with the dependent variable, the estimations on the percentage of migrants in Greece. In other words, political self-placement cancels out the effect of age and gender. Nevertheless, there is a broad refusal to state their political affiliations hence, this variable is used in the alternative model. Moreover, the variable itself with a significance rate of 0.493 is far from being considered a reliable predictor of estimates. Income and employment status are still statistically insignificant in this case these sociodemographic factors are further away from being considered as predictors of estimations, with significance rate of 0.975 and 0.786. With left-right assessment only education and community remain statistically significant, with significance rate of 0.009 and 0.000 respectively. Overall, the inclusion of political-self placement can be considered as an additional test for the 6 sociodemographic factors, through which the foundations of association between each one of them and the dependent variable is challenged. Under this scope, education and type of community pass this test, which provides us with supplementary evidence of their deep effect on the dependent variable, the estimations of respondents on the percentage of migrants.

Despite the fact that left-right self-assessment is not statistically significant as stated before, certain tendencies can be identified between different political self-placement responses. To be more specific table 9 shows that extreme right and extreme left have the higher estimations than the other categories of this variable. As expected, individuals with a far-right political placement have in general higher estimations than individuals that claim to belong in the political left. Right wing individuals tend to have negative attitudes towards migrants (Gorodzeisky & Semyonov, 2009) The mechanism behind this observation is directly associated with perceived cultural threat, since migrants represent a typical out-group, therefore interactions include clash of identities, and individuals that perceive migrants as a cultural threat , would avoid this clash. Right-wing parties focus more on cultural differences, while the effect of cultural racism is more significant than classical racism (Wilkes, Guppy, & Faris 2008) than classical racism, and is associated by the perceived cultural threat and prejudice obviously.

6.DISCUSSION

The previous analysis of the dataset provides readers with not only an insight on which factors may be considered as reliable predictors of the estimations on the perceptions of migrants. The tested factors may be divided in three categories, based on their effect on the dependent variable. First, Education and Community are remarkably significant factors, that can determine perceptions on migrant percentage of the total population in Greece. Secondly Age and Gender can may also be considered determinants, even without the close statistical association of the first category. Thirdly, Employment and Education rather unexpectedly do not qualify as predictor of estimations in this particular survey for Greece.

With relation to the first category and the Education factor in particular, the two-fold contribution of high level of education in estimations and perceptions on migrants in general should be taken into account., Higher education promises and usually results in high qualifications, which in turn provides individuals with better job opportunities. In this manner, individuals with high education do not feel threatened by migrants, as stated in the respective hypothesis. This cost-benefit analysis that prevents highly educated, high skilled individuals from competing with migrants for the same work opportunities or benefits, is not the only way education level is involved as a socio-demographic factor. Chandler and Tsai (2001) draw attention to the positive connection between education and tolerance. High education indicates broader tolerance, in the sense of reduced perception of cultural threat. In fact, most European educational systems are tolerance oriented. (Gang et al., 2002) Through this process, critical thinking is developed, (Case et al. 1989) which is an essential element of tolerance. Education is a factor that can contribute in socializing procedures, which results in preventing the development of prejudice. (Hello et al., 2002) Realistic and symbolic threat, namely economic and cultural threat respectively can fuel prejudice (Sniderman et al ,2004) Hence, the cultural aspect of education as a determinant should not be ignored since it is substantial in forming perceptions. In this way perceptions on the number of migrants can be associated with prejudice, emanating from perceived threat, symbolic or realistic. Arguably the deep effect of education as a predictive factor for estimations is justified by the fact that has an impact that can be traced back to both realistic and symbolic perceived threat.

These perceived threats, whether they are realistic or symbolic, are reliable predictors of prejudicial attitudes (Murray & Marx ,2013). Regarding the other exceptionally significant determinant, Community, the explanation is based mainly on symbolic threat as perceived cultural threat. Individuals living in big cities would be expected to show more cultural tolerance towards migrants and thus be less affected by the symbolic threat the outgroup may appear to pose for them. Palpably tolerance can be considered as a prerequisite for low perceptions of cultural threat and urban residents would be supposed to be familiar with cultural diversity. Thus, the multicultural background in large cities could be the optimal setting for minimized threat perceptions and by extension lower estimates on the number of migrants. However, this is not the case in Greece, based on what this Eurobarometer survey has showed. The findings of this survey are relatable with the conclusions made by Brenner and Fertig (2006), regarding the Greek case peculiarity. According to this survey Greeks living in both urban and rural communities have negative attitudes towards migrants. Nevertheless, attitudes towards migrants are closely connected to perceived numbers rather than actual number of migrant populations. (Ceobanu & Escandell, 2010)

The Greek case distinctiveness is not limited only to the effect of community as a predictor of estimates on migrants' percentage within the population of the country. Women have higher estimations than men, confirming the relevant hypothesis. Additionally, the gender variable itself has the required statistical significance to be acknowledged as a predictor of estimations. A possible explanation may be once more located in the cultural threat perception that women may feel. As noted by Hardarson (2006) women are much more likely to assume family responsibility, which quite comprehensibly leads them to be more concerned about security issues regarding their families. (Valentova & Alieva, 2013). Furthermore, women have been found to be prone to innumeracy, when it comes to estimating the number of migrants. (Herda, 2010) It appears that cultural threats have a distinct influence on the perceptions on migrants and estimations regarding their numbers.

Regarding age, as the Generalized Linear Model has shown, this variable may be considered as a significant determinant of estimates on migrant numbers. Nonetheless, the connection is not as close as other sociodemographic factors, such as education and type of community. Gorodzeisky and Semyonov (2019) reached to the conclusion that "The data reveal that perceived size (and consequently inflated

misperception) tends to decrease with age and education". These outcomes are compatible with the findings from our research, apparently.

Two of the examined possible determinants that are incident to realistic threat perceptions, factors that ultimately appertain to a cost-benefit analysis are employment status and income. These factors share a common characteristic, as far as this survey can show, which is the lack of statistical significance as a variable. There are undoubtedly different levels of estimations for each value of both the aforementioned variables, with unemployed respondents having higher estimations than employed ones and high class respondents having higher estimations than the low class ones. Employment status has been found to not play a decisive role in attitudes towards migrants in general, (Paas & Halapuu 2012; Facchini et al. ,2011) thus it follows that it is quite possible that employment status has no crucial effect on estimations on migrants either. This assumption is confirmed by the findings of this research, while evidently unemployed respondents tend to have higher estimations on the percentage of migrants, which emphasizes the causal mechanism of competition between locals and migrants for wages and benefits. Unemployed individuals perceive migrants as a financial threat for their well-being, as stated in Hypothesis 3 of this thesis. Nonetheless, this threat is not perceived broadly or intensively enough, which renders employments status a non-significant statistically predictor of perceptions on migrant magnitude.

With regards to income, even though measuring income may turn out to be a challenging procedure, social class self-assessment provides a quite reliable insight of the actual income of a respondent. However, in certain cases self-assessment may not be completely accurate. The Greek case specifically is characterized by the deep economic crisis, that amongst other effects, has altered the attributes of middle class in the country. According to OECD, median incomes in the mid-2010s are noticeably lower than the respective incomes of 2008. (Chapter 2. A declining middle-income class? 2019) That is to say income can be a considerably more dynamic socioeconomic variable than social class self-assessment which can be described as a rather static variable. This gap between actual and perceived economic situation may be a sufficient explanation on why income does not qualify as a predictor of estimations on migrants in this survey. This presumed delay in adjustment to the new circumstances could justify the findings from this survey, according to which, lower classes have lower

estimations on the percentage of migrant population as a part of the total population in Greece. Moreover, the current status of the Greek economy aligns with the theoretical approach that "in countries with poor economic conditions, social structural position does not differentiate individuals in their levels of prejudice." (Kunovich 2004, p.39). Clearly this assertion supports our findings, according to which income is not a sufficient statistical predictor of estimations on migrant numbers.

An additional difference between symbolic and realistic threats, that explains the predominance of the former over the latter, is that symbolic threats are characterized by permanence. More specifically, economic competition is subject to the financial circumstances and may be minimized or altered, when the migrant group do not contend with certain local groups for the same resources. Apparently, this can be accomplished when the locals experience an upgrade in their income levels and in their well-being in a broader sense. As a result, perceptions of realistic threats are more susceptible to change. Conversely, cultural concerns and threat perceptions are by nature more robust and last as much as cultural differences exist.

7.CONCLUSION

To sum up, the aim of this thesis was to identify the sociodemographic factors that determine individual estimations on the magnitude of migrants as a percentage of the total population in Greece. As previous research has shown, miscalculating the number of migrants is a common phenomenon. Overestimation is the most frequent miscalculation and Greeks in particular have estimations that exceed the actual number of migrants in the country by fa. By employing Multiple Linear Statistical analysis on the dataset available by the 2017 Eurobarometer 88.2 survey, it became possible not only to identify these predictors that result in certain estimations, but to determine the effect of these factors in respondents' estimations. Various education, income and employment statuses result in different answers to the question. Meanwhile gender, age and type of community also affect perceptions on migrants' numbers, according to the findings of this thesis. On the one hand, education and type of community have a profound impact with a statistical significance that confirm their influence as estimation determinants. Likewise, gender and age are also significant, although their effect in shaping estimations is not as deep as the aforementioned two factors. On the other hand, employment status and income, with the latter being measured as self-social assessment appear to lack the statistical significance of the rest factors. By way of explanation, there is no statistical association between these independent variables and the dependent variable, the response to the question as it was formulated by the Eurobarometer survey. Nevertheless, as the statistical analysis has shown there are certain socio-demographic categories that are associated with higher estimations, regardless whether the respective factor is statistically significant or not. In detail, lower educated individuals, urban residents, women, younger respondents, unemployed and higher-class individuals tend to have higher estimations than higher educated, rural residents, men, older respondents, employed and lower-class individuals respectively.

The misestimations are instrumental in the creation of negative attitudes towards migrants. (Pottie-Sherman & Wilkes 2017) At the same time, misperceptions derive from perceived realistic or symbolic threat. Therefore, there is an indirect connection between attitudes towards migrants and the perceived threat for the locals, with the latter contributing notably to the former. Practically, migrants often appear as a threat for locals' cultural identity and work opportunities. Based on these perceptions the locals tend to overestimate the number of migrants because they feel threatened by

the presence of migrants, on two levels, economic and cultural. These overestimations result in further anti-immigrant by enhancing prejudice towards migrants. Thus, initial perceived threat creates a vicious circle, that surprisingly is based on perceptions rather than the actual numbers of migrants.

Among the factors that contribute to overestimations or misperceptions, education holds a key role, as a predictor due to the fact that it is relevant to both realistic and symbolic threat perceptions. High education as a trait offers individuals both high qualifications and prejudice minimization. In this fashion, education offers an antidote to prejudice on two levels, on an economic cost benefit-analysis and on a cultural threat respectively. Education influences both types of perceived threats, and apparently on the attitudes towards migrants. The respondents' type of community also has considerable statistical significance in this research. As mentioned before, this factor is associated with perceived symbolic threats, under the scope of a clash of cultures, between the in-group and the out-groups.

Considering the symbolic threat dimension of education as well, it can be argued that the symbolic threats perceptions prevail over realistic ones and form perceptions on numbers, and attitudes. This assumption is supported by the other two statistically significant variables, namely age and gender. Both have a cultural theoretical justification regarding their effect on perceptions. Contrarily, employment status and income, that apparently concern more economic competition, are far from being considered reliable predictors, at least in this survey for the particular country, Greece. These conclusions align with findings by Hainmuller and Hiscox claiming that perceptions and attitudes on migrants are more a cultural concern than economic competition (Hainmuller & Hiscox, 2007). Moreover, overestimations, as the most frequent case of innumeracy and misestimations in particular, are divided in cognitive and emotional misestimations. Emotional innumeracy is identified as symbolic threat perceptions and emanating from cultural differences. All in all, it is safe to argue that innumeracy and overestimations specifically are results of cultural threat perception and draw negative attitudes towards migrants in general. Cultural differences can fuel up anti-immigrant attitudes, more than economic competition can though.

Regarding the limitations of this thesis, the amount of non-responses hindered even deeper association between sociodemographic factors and respondents' estimates. However, this refusal to answer functions as a further evidence of the

innumeracy of individuals. Although the percentage of respondents who avoided to give an estimate on the percentage of migrants is considerable, certain connections have been established between factors and estimations. A further limitation concerns the income variable. More specifically, among all examined variables in this thesis, income is the most difficult to define. Social status self-assessment is used which reflects quite reliably the economic status of an individual, however income may be a more complicated indicator.

Further research can confirm or reject findings and conclusions, however the influence of education and symbolic threats in estimations of migrant numbers appears to be widely confirmed, as a point of reference in misperceptions and attitudes in general. Additionally, future research on the topic should examine possible correlation between political self-assessment and estimations on migrants' number, with the former being the main independent variable. Even though this relation is investigated in this thesis as well, a deeper and targeted research concerning the two variables exclusively should be beneficial. Moreover, future research could analyze the effect of more sociodemographic factors, to expand knowledge in causal mechanisms that affect estimations on migrants' numbers. Finally, a distinction between refugees and migrants needs to be done on the estimations topic, in an attempt to examine whether estimations differ for the two groups.

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