DOES BEING ETHICAL MAKE YOU HAPPIER?

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Abstract: This paper proposes a contemporary assessment of Aristotle's discussion of ethics and happiness. We seek to empirically understand the relationship between ethical values and individual behaviors and the level of satisfaction we have with life. Based on the division of cultural regions proposed by Fellmann et al. (1997), we analyze the significance of virtues in 11 large cultural groups. The work uses World Value Survey's subjective well-being and virtues data for 55 countries from 2010 to 2014 and implements a binary response model (probit). We found that, jointly (globally), countries presenting the virtues proposed by Aristotle is positively correlated with happiness, as we assess the significant increase in the likelihood of individuals being satisfied with their lives in the presence of virtues. Additionally, our regional estimates suggest that cultural factors may influence which ethical values and behaviors are relevant to our level of satisfaction.
Keywords: Ethics, Aristotle, happiness, Probit
JEL Classification: I31

Ser ético faz você mais feliz?
Resumo: Este artigo propõe uma avaliação contemporânea da discussão de Aristóteles sobre ética e felicidade. Busca-se entender empiricamente a relação entre valores éticos e comportamentos individuais e o nível de satisfação que tem com a vida. Com base na divisão de regiões culturais proposta por Fellmann et al. (1997), analisa-se o significado das virtudes em 11 grandes grupos culturais. O trabalho usa dados subjetivos de bem-estar e virtudes da Pesquisa de Valor Mundial para 55 países de 2010 a 2014 e implementa um modelo de resposta binária (probit). Como resultado tem-se que, em conjunto (globalmente), os países que apresentam as virtudes propostas por Aristóteles estão positivamente correlacionados com a felicidade, ao avaliar o aumento significativo na probabilidade de indivíduos estarem satisfeitos com suas vidas na presença de virtudes. Além disso, as estimativas regionais sugerem que fatores culturais podem influenciar quais valores e comportamentos éticos são relevantes para o nível de satisfação dos indivíduos.
Palavras-chave: Ética, Aristóteles, felicidade, Probit

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1. INTRODUCTION

How can we live a good life? What influences the level of satisfaction with our lives? This is a complex broad discussion, being the subject of several fields of study, such as philosophy, psychology, sociology, economics, among others. Ancient Greek philosophers as Aristotle have sought to understand the relationship between how we individuals act during our lives and our happiness. For the author, happiness is the supreme good that everyone seeks to achieve during life, and other objects of pleasure – health, beauty, money or power – are valued only because we hope it will make us happy (Csikszentmihalyi & Larson 2014).

The notion of happiness – *eudaimonia* – developed by the Greek philosopher goes beyond the hedonic concept of happiness, viewed in a superficial manner. In the analysis made in the Nicomachean ethics of Aristotle (1954), the author writes that happiness does not consist in the goods we possess; but instead, in the way we live our lives, regardless of the circumstances: *'healthy or not, rich or poor, educated or not, we should think about our lives and try to live them well'* (Annas, 2011 p. 129). Thus, developing his thinking on what would be the path to achieve happiness, Aristotle points to the virtues – identified as ethical and dianoetic – as this medium, where he emphasizes that *'the more a man has virtues, the happier he is'* (Curzer 2012 p. 216). Ethical (moral) virtues would be a habitus, that is, through habit they must be exercised. The dianoetic virtues (intellectual) would be of rational contemplation, requiring time and experience to be learned (Şoşu 2013).

Aristotle's ethics is commonly compared to other ideas of ethics, such as Kantian ethics. Although Kant denies the Aristotelian model - the presence of the final good in itself -, and these two theories are studied as distinct concepts, some similarities can be observed between the two conceptions. Both authors believe that happiness is an individual pursuit, but what differs the authors' analysis is the fact that for Aristotle happiness is the ultimate good, one that finds satisfaction in itself and that all goods lead to him. In turn, for Kant happiness would be something undetermined and difficult to measure, that is, although humans always seek it, they will never know if it was achieved or not, since humans themselves would not know what in fact happiness consists of (Atwell 1986).

From the perspective of economic studies, Corbi & Menezes-Filho (2006) point out that for the term happiness be associated with various concepts and notions, specifying it consistently and comprehensively can become a laborious exercise. It has been observed for a long time that this line of research has been reticent regarding the adoption of the subjectivist approach to welfare –mainly derived from surveys – being limited only to the objectivist analysis, where individual utility depended on goods, leisure and tangible services (Frey & Stutzer, 2002). Thus, simple economic indicators such as income level were widely employed as a central measure in studies of social welfare – or satisfaction (Diener; Seligman, 2004).

However, subjective measurement of happiness has proven to be a valuable complementary approach in social studies, by showing that subjective well-being is a broader concept than the mere level of utility involved in individual decisions[1] (Frey & Stutzer 2002). Since this vision was established, we have observed a diverse range of studies that seek to understand which factors influence our state of happiness. Di Tella et

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[1] Frey (2008, p.6) describes the state of well-being reported by individuals as being *'the scientific term used in psychology for an individual's evaluation of the extent to which he or she experiences positive and negative affect, happiness, or satisfaction with life'*.

al. (2001) and Caleiro (2012) investigate the relationship between unemployment and satisfaction, Hagerty (2000) and Alesina et al. (2004) the effect on happiness of the income gap, and Easterlin (1974), Diener et al. (2012), Layard (2005), the relation of GDP and happiness. Behavioral characteristics are also under study, as in Putnam (2000), who suggests that individuals living in neighborhoods – or societies – where social capital is high – that is, where people establish a strong sense of trust and mutual cooperation –, have a higher level of satisfaction; Helliwell (2003 p.355) shows that the people with the highest level of well-being would not be those *'living in the richest countries, but those who live where social and political institutions are effective, where mutual trust is high and corruption is low'*.

According to OECD (2013), measuring subjective well-being is essential for a broader understanding of individuals' quality of life, alongside other social and economic dimensions. Naturally, the empirical effort that entities, especially those linked to governments, devote to assessing the level of satisfaction of populations – carried out largely through surveys – has intensified. We found measures such as the Canadian Welfare Index (CIW) – which assesses aspects related to the quality of life of the population, including: community vitality, democratic engagement, education, environment, leisure and culture, use of time, among others –; the European Social Survey, which produces information on the attitudes, beliefs and behavior of 30 European countries, and the Well-being in the UK, produced by the British government - to name a few[2].

Importantly, in studies that analyze moral values or behaviors taken as models, recognizing the possible influence of cultural factors becomes critical. In his work, Morality and Cultural Differences (2003), Cook points out that studies of 'cultural relativity' – a philosophical doctrine – show that morality is relative in every culture and therefore actions could only be judged as moral or not, according to the standards of morality established within the referred culture. Already Fu et al. (2001) and Jackson et al. (2008), based on experiments, evaluate and verify the disparities that exist in the judgment of individuals from different countries in relation to moral values, and compare behaviors that outside the experiment, in the real world, would or would not be accepted.

Within this context, we seek to empirically understand some of the determinants of happiness proposed in Aristotle's theoretical discussion that would otherwise be difficult to prove. To this end, we conduct two distinct approaches: first, we investigate the correlation established between the Aristotelian set of virtues and the probability of happiness of the total number of individuals in our sample (i.e. all the regions of the world as a whole). Then, following the division of macro regions – based on cultural composition – established by Fellmann et al. (1997), we analyze which virtues are relevant to happiness in culturally more homogeneous regions. In this way, besides investigating if being ethical makes us happier, we aim to understand if the place where we live can influence the behaviors that make us happy.

As proposed by Aristotle over 2000 years ago, the present paper demonstrates how individuals who exhibit more ethical behavior, that is, those who practice moral and intellectual virtues, in fact, are more likely to consider themselves happy. In turn, when we observe the influence of the same virtues on happiness in the multiple cultural regions of the world, it is possible to identify how heterogeneous this relation becomes. Different virtues are significant in the regions studied; however, it is still possible to notice some

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[2] Other reviews are Gallup (US), Istat (Italy), Health Utilities Inc. (Canada) and INSEE (France).

of them being shared among almost all regions, which highlights the cultural conditionality in understanding what is beneficial and, therefore, makes us happier.

The study proceeds as follows. In section 2 we present the Aristotelian theoretical discussion on ethics and happiness. Section 3 discusses the empirical model and the database used. Then, in section 4, the results of the empirical application are displayed. And finally, section 5 concludes the work.

2. ARISTOTLE'S ETHICS AND THE SEARCH FOR HAPPINESS

Aristotle's work (384 BC – 322 BC) is broad and directed to various fields within philosophy. For Aristotle, the natural purpose of the human being is to have a good, just and happy life. In this respect, ethics is the fundamental basis that humans use to live and organize themselves in society, creating their principles, traditions and laws. Living in society, humans are born ethical, that is, to be ethical is a rational and natural virtue inherent to human beings. Thus, the tendency is to have individuals respecting one another and using ethical principles to evolve within the polis. However, what defines whether this individual will become an ethical being in the future are its good or bad choices throughout its life (Amaral 2012). The Aristotelian idea of ethics refers to the virtuous principles of the human being, founded on his well-being, common sense, and basic moral judgments so that the human being can become a good and virtuous being.

Every individual action aims at some ultimate good. This good has a hierarchy and within it there are the relative and intrinsic goods of man. Relative goods change over a lifetime, as human beings always want more over time – material goods, for example. On the other hand, goods intrinsic to man are those that do not need other goods, that is, they are self-sufficient by themselves. Aristotle observes the means, ends of these goods, and human actions, proposing that the ends of all possible actions should lead to a final good. However, there is an infinite variety of actions and goods that lead to a supreme good, which is self-sufficient in itself, not a means to other goods but the good of all goods (Malinoski 2011). There is thus one of these intrinsic goods which is one and greater well enough to make human life worthy and valuable. Without it, no human effort would be made and compensated. One tries then to find this good which makes all human life real and valuable, which without it the human being would be like irrational animals and would not perform the characteristic human activity. Aristotle believes that this ultimate good is happiness. In this way, happiness is the only final good, which is desired by itself and is the good of all goods. Thus, the focus of the study of Aristotelian ethics turns to the pursuit of the ultimate good that the individual seeks throughout his life which is happiness (Tugendhat 2008). According to Aristotle (1954 p.14):

> Now such a thing happiness, above all else, is held to be; for this we choose always for self and never for the sake of something else, but honor, pleasure, reason, and every virtue we choose indeed for themselves (for if nothing resulted from them we should still choose each of them), but we choose them also for the sake of happiness, judging that by means of them we shall be happy. Happiness, on the other hand, no one chooses for the sake of these, nor, in general, for anything other than itself.

Understanding that the ultimate good is the goal of each individual, Aristotle then argues about human nature and its attributes that should be involved in such pursuit for happiness. As the author compares the human being to other animals of nature, he

highlights the three portions that make up the soul of living beings: nourishing, sensitive and intellectual. The difference between human beings and other beings is to possess the latter, the intellective soul, which is of rational response, thus composing human excellence. The irrational portions of the soul — nourishing and sensitive — must be subject to its rational portion. From these two natures of the soul, Aristotle derives two types of virtues that correspond to the rational and the irrational soul: the intellectual (dianoetic) virtues and the ethical virtues, respectively (Nodari 1997).

A fundamental concept for understanding the Aristotelian work is the concept of virtue – excellence. Thus, like the Greek philosophers prior to Aristotle, the latter believes in virtues as being the average action of the individual during his life, that is, man must follow all that was instructed as right. To be good one must have knowledge of the virtues, to be an evil individual it only takes not to know them. Aristotelian happiness, then, derives from two genres of human virtues called cardinal virtues, since they group all the other virtues themselves (Silva, 2008). Among these cardinal virtues, the intellectual (dianoetic) virtues are those linked to elements such as art, wisdom, science among others; and moral (ethical) virtues, are linked to the implicit character of humans. The intellectual virtues, however, are only fully realized in the heyday of human life, since the individual must pass through some "faculties" – a term used by Aristotle to refer to the teaching of the individual – which will give it the ability to acquire these virtues over time.

On the other hand, moral virtues are intrinsic to the behavior and habits of the individual and for this to achieve a high level of happiness, it must maintain on the average these virtues over time. This is due to the fact that the individual is subject to sufferings and pleasures throughout its existence, which, when they surpass the average intellectual virtue, can destroy it (Nodari 1997). Thus, according to Aristotle (1954 p. 28 - 29):

> Virtue too is distinguished into kinds in accordance with this difference; for we say that some of the virtues are intellectual and others moral, philosophic wisdom and understanding and practical wisdom being intellectual, liberality and temperance moral. For in speaking about a man's character we do not say that he is wise or has understanding but that he is good-tempered or temperate; yet we praise the wise man also with respect to his state of mind; and of states of mind we call those which merit praise virtues.

Ethical virtue is then derived from humans' habits and expresses its tendency to act, but in no way determines it. Ethical virtue is due to practice, that is, those who perform good deeds will be considered a good individual and become just by doing righteous deeds in this way. However, it is not a virtue natural of humans, since if it was natural it could not be altered by habits. Therefore, an individual is not born endowed with any moral virtue. Only through the practice of such virtue are individuals able to develop their potentiality in a certain ethical aspect. Aristotle cites various kinds of virtues, such as courage, temperance, liberality, magnificence, magnanimity, gentleness, truth and justice. Those individuals who seek happiness must then perform acts that follow the mean between two vices, not incurring in excesses or deficiencies of these virtues (Nodari 1997).

Intellectual virtues, in turn, represent the rational thinking of individuals. The scientific knowledge plays a fundamental role in the pursuit of happiness for Aristotle,

since it is something learned by the individual during his 'faculties' with universal proportion and conclusions that can be demonstrated. In this respect the intellectual rationality of human beings is divided into two segments: speculative wisdom and practical wisdom. The former relates to sciences and its contemplation of unchanging things, the latter, to the contingent and things subject to change over time (Aristotle, 1954). Aristotle then exemplifies the distinction between these two rationalities, having the virtue of speculative reason as wisdom (*sophia*) and practical virtue as prudence (*phronesis*).

In order to humans attain full knowledge he must lay hold of five main intellectual ethics: science, philosophical wisdom, intelligence, art, and discernment. Of these, science, philosophical wisdom and intelligence are classified exclusively in the speculative field. Art and discernment, although composing the intellectual cardinal virtue, are considered relatively a practical virtue, since art, for example, is linked to human's production in a concrete way, i.e. their sculptures, constructions, objects, among others. On the other hand, discernment refers to the human conduct, whether the act performed is legal or illegal and whether it reveals its ethical and/or political values.

Prudence, or *phronesis*, although considered an intellectual virtue, is highlighted in the analysis of the actions of the individual, since it is prudence the virtue that determines the actions of the individual, which, in turn, are based on a moral standard and executed according to the intellectual virtues. Prudence determines the means necessary for the individual to achieve the ends desired and which action should be initiated; in other words, to initiate an action, humans start thinking about the uncertainties of the future and the past experiences to achieve the desired good. According to Aristotle, thinking itself does not change the scope of the desired good in any way, what determines the search are the actions (Silva 2008). According to Aristotle (1954 p. 125):

> The origin of action-its efficient, not its final cause-is choice, and that of choice is desire and reasoning with a view to an end. This is why choice cannot exist either without reason and intellect or without a moral state; for good action and its opposite cannot exist without a combination of intellect and character. Intellect itself, however, moves nothing, but only the intellect which aims at an end and is practical.

Therefore, we can observe that intellectual virtue and moral virtue are directly linked. Intellectual virtue occurs mainly in the practical aspect and moral virtue in the ethical context, that is, when individuals desire something, they first reflect evaluating their moral virtues and then come to a judgment of what attitude they must have to achieve the goal. Faculties deliberate the best means, following the moral virtues to reach the desired end. With the constant practice of these cardinal virtues, humans can increasingly perfect themselves in their excellences. Attitudes and the pursuit for goods help individuals to pursue the heyday of human life, which would be the achievement of the ultimate good, the one Aristotle defines as happiness (Silva 2008).

3. METHODOLOGY AND DATABASE

Our analysis investigates correlation. As a measurement tool, we will use the probit regression method, where the interest of the analysis consists of the probability of response of the dependent variable (Y) to assume value 0 or 1 (Wooldridge 2016). That is, it is a binary response model that seeks to predict, through its explanatory variables,

the occurrence or not of a certain event – to be happy or not. It is the coefficients of the explanatory variables – virtues – that quantitatively report the increase – or decrease – in the odds ratio of the investigated event to occur. Thus, by analyzing the marginal effects derived from probit regression, we can see if increasing one unit in an explanatory variable result in a percentage increase – or reduction – of the probability of the dependent variable assuming the value 1.

The macroregional division follows the classification of cultural kingdoms of Fellmann et al. (1997), in which geographic, cultural, economic, political and physical aspects are evaluated for the world delimitation in 11 major groups: North American, Latin American, European, Slavic, Islamic, Sub-Saharan, Indian, Sino-Japanese, Southeast Asian, and Oceania[3].

Advancing to the approximation of virtues and treatment of variables, we use data from the World Value Survey (WVS) – which is applied in waves, or intervals, for different countries and periods. In this study, wave data 6 is used, applied from 2010 to 2014 – totaling more than 60,000 individuals interviewed in 55 countries.

The measure of happiness is *satisfaction with life*. This indicator is commonly used in studies aimed at identifying the individual utility of a sample – Corby & Menezes-Filho (2006). Based on respondents' answers (on a numerical 10-point scale) to the question, *'How satisfied are you with your life as a whole these days?'* greater than 5 and 0 otherwise – following a categorization such as that adopted in Camoante & Yanafizawa-Drott (2015).

In order to assess the ethical virtues, we selected a set of proxy questions. Liberality has as proxy question: '*Active/inactive member: humanitarian or charitable organization*', which takes the value 1 if the answer is '*active member*' and 0 for the other options. The virtue of friendship has as proxy question: *'Would not like to have as neighbors: People of a different race'*, which takes the value 1 if the answer is '*not mentioned*' and 0 if '*mentioned*'. Gentleness is measured by the question: '*The only acceptable religion is mine*', which takes the value 1 if answered '*disagree*' or '*strongly disagree*' and value 0 if '*strongly agree*' or '*agree*'. Justice which uses the question: "*Justifiable: cheating on taxes if you have a chance*" (on a scale from 0 to 10), takes the value 1 if the answer is '*never justifiable*" and 0 for the others.

The second group of proxy variables aims to capture the intellectual virtues, which are associated with the speculative and practical wisdom of individuals. Regarding intellectual virtues in their practical spectrum, a proxy question that relates to the exercise of art is '*Active/inactive member: art, music or educational organization*' – which takes the value 1 if the answer is '*active member*' and 0 for the other options. Regarding to sciences and the commitment of individuals to promote their scientific knowledge, the question: '*Highest educational attainment*' was used. In this question, firstly, we account for the female and male averages of years of study of individuals aged 25 and over – data produced by Unesco (2019) – from each country. Thus, where respondents report having

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[3] According to Aněl et al. (2018), a cultural realm can be understood as large and complex territorial units, defined based on the similarity of cultural traditions. Thus, through the classification of Fellmann et al. (1997), we established the following 11 macro regions in our sample: North American (United States), Latin American (Argentina, Brazil, Colombia, Chile, Ecuador, Haiti, Mexico, Peru, and Uruguay), European (Netherlands, Sweden, Spain, Estonia, Romania, Poland, and Slovenia), Slavic (Russia, Belarus, Ukraine, Georgia, and Armenia), Islamic Republic (Azerbaijan, Kyrgyzstan, Kazakhstan, Uzbekistan, Iraq, Jordan, Lebanon, Palestine, Turkey, Yemen, Kuwait, Algeria, Libya Tunisia, Morocco and Pakistan), Sub-Saharan Africa (Rwanda, South Africa, Zimbabwe, Ghana and Nigeria), Indiana (India), Sino-Japanese (China, Hong Kong, Japan and South Korea), Southeast Asia (Thailand, Malaysia, Singapore and the Philippines), Australia-Oceania (Australia and New Zealand).

more years of schooling than the average years of schooling - men and women - in their respective countries, they were treated as virtuous and, if not equal to or below to the average, they did not bear the investigated virtue.

As we evaluate regional virtue patterns on the likelihood of being happy in different macro regions, we seek to understand where nationalism would be meaningful and how it would impact happiness. Nationalism, which can be understood as a sense of identification with a group of people who share a number of characteristics, such as history, language, culture, or territory (Searle-White 2001), is approximated by the question '*How proud of your nationality*', assuming a value of 1 if the answer is '*really proud*' or '*very proud*', and 0 if '*not very proud*', '*not proud*' or '*I am not [nationality]*'. Although we do not assume that hostility and /or prejudice is an intrinsic behavior of nationalistic individuals, however, when comparing the results of cultural control with the other explanatory variables, it is possible to find some indications if intolerance against those "non-member" individuals - that is, not seen as individuals within the cultural ethos of the region - is established or not.

4. RESULTS

Table 1 reports the extent of partial effects on response probabilities, without distinguishing between regions. Despite the small magnitude of the marginal response, the central hypothesis holds, since all proxy variables for the set of ethical and dianoetic virtues perform the expected positive correlation, and with significance at 1%. The ethical virtues point out that those individuals who present them are between 2% and 3.8% more likely to be happy compared to those who are not virtuous. Regarding the dianoetic virtues, which evaluate the human practical and speculative wisdom, there is an increase of about 3% and 3.6%, respectively, in the probability of the holders of such virtues to be happy. Regarding the coefficient for cultural control, it is noted that nationalism has a considerable effect on the chances of the global sample reporting itself happy, with an increase of about 10%.

Table 1 – Assessing the marginal effect of virtues globally

Life satisfaction						
ethic virtues				**dianoetic virtues**		**cultural control**
liberality	*friendship*	*gentleness*	*justice*	*art*	*scientific knowledge*	*nationalism*
0.038 ***	0.027 ***	0.032 ***	0.02 ***	0.031 ***	0.041 ***	0.10 ***
(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

Source: Elaborated by the authors based on World Value Survey data.
Note: Explanatory variables: Active / Inactive membership: Humanitarian or charitable organization (liberality); Would not like to have as neighbors: People of a different race (friendship); The only acceptable religion is my religion (gentleness); Justifiable: Cheating on taxes if you have a chance (justice); Active / Inactive membership: Art, music or educational organization (art); Highest educational level attained (scientific knowledge). Cultural control: Nationalism: How proud of nationality. *** $p <.01$, ** $p <.05$, * $p <.1$.

Table 2 Assessing the marginal effect of virtues regionally

Life Satisfaction

	North American	Latin American	European	Slavic	Islamic	Sub-Saharan African	Sino-Japanese	Indian	South-Eastern Asian	Australian-Oceanic
liberality	0.018 (0.216)	0.046 *** (0.000)	0.018 (0.214)	0.037 (0.559)	0.008 (0.526)	0.026 (0.104)	0.027 (0.302)	0.057 *** (0.030)	- 0.0002 (0.912)	0.012 (0.498)
friendship	0.040 (0.193)	0.009 (0.321)	0.025 (0.244)	0.035 *** (0.015)	0.012 (0.044)	-0.006 (0.749)	0.047 *** (0.005)	0.003 (0.21)	0.016 ** (0.067)	0.17 *** (0.006)
gentleness	-0.026 *** (0.048)	-0.013 *** (0.026)	0.004 (0.760)	0.073 *** (0.000)	0.017 *** (0.009)	0.036 *** (0.000)	-0.010 (0.447)	0.072 *** (0.000)	0.006 (0.391)	0.045 (0.104)
justice	0.04 *** (0.005)	0.061 *** (0.000)	-0.003 (0.683)	-0.029 *** (0.016)	0.035 *** (0.000)	-0.041 *** (0.000)	-0.006 (0.558)	-0.003 (0.841)	0.008 (0.302)	0.043 *** (0.009)
art	0.012 (0.452)	0.040 *** (0.000)	0.023 *** (0.035)	0.075 *** (0.042)	-0.024 (0.072)	0.018 (0.140)	0.015 (0.474)	-0.005 (0.860)	-0.002 (0.897)	0.031 (0.058)
scientific knowledge	-0.005 (0.889)	-0.013 *** (0.033)	0.026 *** (0.009)	0.027 *** (0.027)	0.07 *** (0.000)	0.10 *** (0.000)	0.021 (0.157)	0.086 *** (0.000)	0.017 *** (0.032)	-0.014 (0.409)
nationalism	0.11 *** (0.000)	0.023 ** (0.041)	0.042 *** (0.003)	0.098 *** (0.000)	0.14 *** (0.000)	0.12 *** (0.000)	0.091 *** (0.000)	0.174 *** (0.004)	0.137 *** (0.000)	-0.003 (0.911)

Source: Elaborated by the authors based on World Value Survey data.
Note: Explanatory variables: Active / Inactive membership: Humanitarian or charitable organization (liberality); Would not like to have as neighbors: People of a different race (friendship); The only acceptable religion is my religion (gentleness); Justifiable: Cheating on taxes if you have a chance (justice); Active / Inactive membership: Art, music or educational organization (art); Highest educational level attained (scientific knowledge). Cultural control: Nationalism: How proud of nationality. *** p <.01, ** p <.05, * p <.1.

Analyzing Table 2, we observe that justice has more frequently significance in different regions of the world. In places as Latin America (6%), North America (4%) and Oceania (4%) the virtue is positively significant for happiness; i.e. individuals who do not cheat on taxes are more likely to be happy. However, in sub-Saharan Africa and the Slav countries, the coefficient has significance and a negative sign, indicating an inverse relationship between tax cheating and the likelihood of happiness. On the other hand, virtue liberality – approximated by participation in humanitarian organization – although not assuming negative values in any region, has significance only in Latin America (4.6%) and India (5.7%), which indicates how restricted It is the correlation established between practicing this virtue and the increase in the likelihood of happiness when geographically analyzed.

When we look at religious tolerance – gentleness – in Slavic, Islamic, sub-Saharan Africa and India regions, this behavior positively affects the happiness of individuals. However, in the United States and Latin America, the sign of the coefficients – 2.6% and 1%, respectively - indicate that this virtue does not contribute to happiness. On the contrary, it does decrease the likelihood of individuals being happy. In this case, it is worth noting that although they are statistically significant, some correlations may not exist due to the low value of the coefficient[4]. In turn, when dealing with other virtue that is also approximated by tolerance – racial, in this case – friendship, we note that no region establishes a relationship of diminishing this virtue with increasing in happiness, which indicates more individuals racially tolerant people as being more likely to be happy.

Analyzing our cultural control – nationalism – we visualize some specific traits of the studied regions. Except for Oceania, nationalism demonstrates statistical significance in the different macro regions, pointing to a greater likelihood of happiness for those individuals who place a high value on their cultural identity (i.e. being nationalist increases the chances of being happy). In front of such results, the Theory of Social Identity (Tajfel & Turner 1979) indicates two forming components of our identity: an individual component and a social component, where individuals affiliate with groups in order to raise their self-esteem. Through an intergroup bias (such as nationalism), a positive sense of self-esteem is built and strengthened through the act of comparing and defaming individuals perceived as inferior – not considered members of the social group. However, the work developed by Crocker and Schwartz (1985) shows that the search for individual self-esteem may also lead to the establishment of strong identification with disadvantaged and lower status groups.

That being said, in the United States and Latin America, we find that being tolerant of people from different religious backgrounds does not increase the likelihood of happiness. In fact, there is a positive correlation between religious intolerance (gentleness) and happiness in these places. The United States of America is one of the countries with the highest increase in happiness in the face of nationalism (11%). However, we have not observed in any of the remaining macro regions the correlation coefficients of nationalism and racial intolerance – the absence of friendship – coexisting for the increase in the likelihood of happiness. Thus, we can understand that certain intolerances may stand out in nationalist regions, and it is possible that in those areas where being nationalistic is unrelated to religious intolerance and/or racial intolerance, this is due to the sense of cultural identity of these places not being biased in bias towards individuals who are not seen as members of national identity.

Finally, regarding the dianoetic virtues results, we observe that the practical wisdom (art), linked to activities that stimulate the creativity of individuals, such as music and the arts, does not impact many regions. The increase is observed only in Latin America (4%), Europe (2.3%) and the Slavic countries (7.5%). In turn, the exercise of practical wisdom — average years of study — has a notorious correlation on specific regions —, being significant in most areas, however, again, despite the coefficient being statistically significant, it has a low correlation. In this case, it is possible that

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[4] The significance level we note may be derived from the problem of large samples, where variables with a small correlation still have significant coefficients.

scientific knowledge and happiness are not correlated. In India and Islamic countries, the virtue increases the likelihood of individuals being happy by 8.6 per cent and 10 per cent, respectively. The European and the Slavic region correlates only 2.6% to higher level of happiness. In Latin America, however, we observe a negative correlation, which indicates an inverse relationship between higher levels of study and the increase in the likelihood of being happy. This result, in the light of the ethical concept of education, indicates that education as an instrument of social formation, which aims at critical thinking, community spirit, and the promotion of reflection and attitudes aligned to awareness and actions that generate results for the world (Neto & La Fare 2019), may not be assimilated equally with such purpose in different regions of the world.

5. CONCLUDING REMARKS

Using a marginal response propensity model, we compare the increase in the likelihood of individuals considering themselves happy as they did or did not present different types of virtuous behavior. Our empirical analysis was inspired by the Aristotelian discussion of virtues – ethical and dianoetic virtues– in which the author proposes that being a virtuous individual can lead us to happiness. As one of our main results, we were able to identify that all proxy variables for the Aristotelian set of ethical and dianoetic virtues have the expected positive correlation, with statistical significance in all of the 55 countries analyzed.

We could also clarify how cultural differences can influence the impact of different virtues on happiness. The disparities we observed among different regions can be understood according to the analysis brought by Cook (2003), which highlights the concept of 'cultural relativity', where morality becomes something relative in each culture and, therefore, actions can only be judged moral or otherwise, according to the standards of morality established within each culture. In addition, as we control our estimations for nationalism, we could note how the cultural identity of each area can influence the – or absence of – relevance of virtues related to the racial and religious tolerance.

The present study brings new empirical results regarding the ethical relationship and Aristotelian happiness concept which, until now, has been mainly focused on the theoretical field of philosophy. As a suggestion for future contributions, we advise that the authors seek to understand how other cultural factors that have become of great relevance today – such as political factors or related to the advancement of technology – can influence how we experience our perception of happiness.

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