

# Who deserves wellbeing? Interacting effects on the relation between meritocratic beliefs and wellbeing

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Cleven, J.R.L.

Tilburg School of Social & Behavioral Sciences Msc Sociology – Master Seminar 400912-M-12 Supervisor: Nora Waitkus

ANR: 381662

# Abstract

In Western countries, meritocracy is on the rise and increasing income inequalities are attributed to a meritocratic process. While the prospects of meritocracy seems to be bright, the impact of meritocratic beliefs on wellbeing are not well investigated. This study aims to explain the relationship between meritocratic beliefs and wellbeing and how this might differ between social groups and contexts. In order to do this, a multiple regression analysis is performed, using data from the European Values Study 2017. It turns out that meritocratic beliefs and wellbeing are positively related, but the strength of this relationship is not the same for everyone. Especially the wellbeing of people with a high(er) income, immigrants, the employed and people living in egalitarian countries seem to profit from strong meritocratic beliefs. For educational level and gender no significant effects were found, although the results seem to indicate that the relationship is stronger for males and high(er) educated. This study has proved the value of separating socio-economic status into different components. Moreover, it casts doubt on earlier research that stated meritocratic beliefs among immigrants would negatively impact their wellbeing. The results of this study can help policy makers to protect the wellbeing of social groups that are negatively impacted by increasing meritocratic beliefs.

# 1. Introduction

In almost all Western countries, income inequalities between the rich and the poor have been growing during the last couple of decades. A massive increase in wealth has been experienced by a concentrated small elite group, while others experienced a stagnation or even a decline in their wealth (Mijs, 2021). Nevertheless, this rising inequality does not seem to cause much concern among people, both in egalitarian as in highly unequal societies (Mijs, 2018). This low concern can be explained by the belief among the population that the inequalities in wealth and income nowadays are a fair outcome of the meritocratic process, which accounts for distributing wealth and rewards on the basis of merit (Mijs, 2018; Kim & Choi, 2017). In most Western countries, these beliefs have been growing since the late 1980's. In other words, the belief in the existence of a meritocratic society is on the rise (Mijs, 2018; Civil & Himsworth, 2020).

But what exactly is a (income) meritocracy? According to Mijs (2016), meritocracy is a concept which is hard to define. The term meritocracy was first popularised by Michael Young (1958), who described meritocracy as a political system in which (income) inequalities were predicted along the lines of intelligence (Allen, 2011). In other words, knowledge and talent should be economically rewarded. What is remarkable is that Young intended to use the concept of meritocracy in an ironic way, as a use to make clear how meritocracy could lead to an undesirable society. In his early work, the focus was primarily on how rewards would more and more be precisely matched to an individual's ability. He describes for instance how, in a meritocratic world, talented students were urged to stay in education while less able pupils were encouraged to leave, without any room for individual desires (Allen, 2011). With this strict focus on human potential and no attention for individual preferences, the more positive idea behind meritocracy, that of equal and fair opportunity for everyone to achieve things in life without forms of discrimination or nepotism, is largely neglected.

However, during the 62 years that have passed since Young first coined the term meritocracy, this focus has shifted away from the more negative focus of allocating people based on talent, to a more optimistic view of creating room and opportunities for individuals to pursue their ambition (Allen, 2011). In contemporary times, meritocracy is defined as a system that distributed rewards based on just and fair reasons (Kim & Choi, 2017). Especially in Western capitalist societies, the concept of meritocracy is seen by people as a more positive ideology

which in economic sense lays at the very heart of the capitalist market system; it rewards people according to economic contribution and it acknowledges the possibility for individuals with a lower socio-economic status to climb up the social ladder and pursue their life goals (Kim & Choi, 2017).

So, the prospects of a meritocratic society seem to be bright. It appears to promote equality of opportunity as well as fair distribution of rewards. Therefore the concept of meritocracy can be seen as an ideology that is widely supported by people from all different social strata within society. People from the lower socio-economic groups are likely to be supportive towards a meritocracy, because it gives them – at least theoretically – the chances to improve in life (Jost & Hunyady, 2003; Newman, Johnston & Lown, 2015). The aspect of equal opportunity may appear to them as a possibility to climb on the social ladder, since hard work is ought to be rewarded. On the other hand, people from higher socio-economic positions tend be in favour of a meritocratic society as well, since meritocratic values imply that they have 'deserved' their wealth, income or privileged position (Mijs, 2021). These people tend to embrace the thought that their social position is not a given thing, but something that is achieved in a fair manner (Mijs, Daenekindt, De Koster & Van der Waal, 2022).

The findings described above depict how meritocratic beliefs seem to be embraced by people from both the lower as the higher socio-economic status groups. In that sense, meritocratic beliefs may result in an increased wellbeing because it gives people more self-esteem and feelings of control over their life, which are both determinants of a high wellbeing (Ruggeri, Garcia-Garzon, Maguire, Matz & Huppert, 2020). Nevertheless, there also exist negative aspects about meritocratic beliefs. In more recent reflections on the work of Young, Allen (2011) as well as Mijs & Savage (2020) describe how this renewed perception of a meritocratic society, popularised in quotes as "hard work pays off" (Kooijmans, 2019) or in terms such as the "American Dream" (Kwate & Meyer, 2010) can have negative effects on people. For instance, the premises of a society in which everyone can achieve everything results into pressure that is put on people when their achievements in life are seen as individual responsibility, which also means that failure is interpreted as one's own fault (Allen, 2011; Mijs & Savage, 2020). These trains of thoughts can cause individuals to experience stress and anxiety: "if you don't use your talent, you are destined to fail in life (Kooijmans, 2019, p. 25). Especially the wellbeing of people from lower socio-economic strata can be expected to decrease once their status is interpreted as individual failure (Foster & Tsarfari, 2005).

This leaves us with a paradox. On the one hand meritocratic beliefs seem to positively influence one's wellbeing because it gives people the idea that they can improve their social position (Newman, Johnston & Lown, 2015), leading to feelings of self-control which in turn raises one's wellbeing (Lachman & Weaver, 1998). On the other hand, meritocratic beliefs seem to negatively influence one's wellbeing because it ascribes a lower social position to one's own responsibility (Mijs, 2016), leading to victimizing and self-blaming. So, meritocratic beliefs can either be embraced or rejected by many different people for many different reasons. What remains as a question is how these beliefs influence the wellbeing of individuals from different socio-economic status.

To summarize, from the already existing literature on the topic of meritocracy and wellbeing, it can be argued that the extent to which an individual believes in meritocracy has a certain impact on his or her wellbeing. But there are different and contradicting scientific arguments with regard to this relationship. The direction and strength of the relationship between meritocratic values and mental wellbeing is not always clearly defined and can differ between social groups and contexts (Foster & Tsarfati, 2005; Foster, Sloto & Ruby, 2006; McCoy et al, 2013). Mechanisms that aim to explain this relationship for specific social groups are to a large extend contradicting and in need of more scientific confirmation. The absence of a scientific consensus on the direction of this relationship and its strength for different social groups leads us to the following research question:

# "How are meritocratic beliefs related to mental wellbeing, and to what extend does this relationship differ across social groups and contexts?"

This research question adds to the scientific field in multiple ways. As described above, there is a lack of evidence about both the nature of the relationship (positive or negative), as well as how the nature and strength may be different for various social groups. In addition to that, there exist different theories or mechanisms that aim to account for the relationship between meritocratic beliefs and mental wellbeing. These different studies will be discussed and analysed in this paper. Moreover, in this paper the impact of societal context is included by looking at country differences, more specifically how the relationship between meritocratic beliefs and wellbeing

differs in the light of within-country economic inequality. In addition to clarifying the direction and strength of the relationship, this study is also the only one which compares both between different characteristics (gender, ethnicity, socio-economic status and employment status) and include country-level differences, based on previous literature. This can help identify which of these factors is most important in predicting how meritocratic beliefs translates into wellbeing. Lastly, it can be argued that due to the rapidly growing inequality in society (Mijs, 2018), the way in which meritocratic beliefs are translated into (mental) well-being may also have changed. Therefore it is of scientific importance to perform a comparative analysis on this topic.

In order to investigate this research question, data from the European Values Study 2017 is used (EVS, 2017). This dataset contains information on the values of 59.438 respondents across 36 European countries, aged between 18 and 82. The European Values Study 2017 dataset contains questions that can be used to measure belief in meritocracy as well as mental wellbeing. Furthermore, individual characteristics are taken into account which makes it possible to compare between social groups. Hence, this dataset is very well suited for investigating our research question.

# 2. Theoretical framework and hypotheses

To be able to give an answer to the research question, there are two different kind of relationships which need theoretical explaining: the direct relation between meritocratic beliefs and wellbeing, and whether the strength and direction of aforementioned relationship differs for different social groups and between countries. This section will explore theoretical mechanisms that describe all these relationships. First of all, the direct relationship between meritocratic beliefs and wellbeing will be discussed, while the second part focusses on how this relationship differs between social groups. More specifically, the impact of social position and (labour market) discrimination will be discussed. In the last part of this theoretical section, country differences will be discussed, especially with regard to *within-country* inequality.

# 2.1 Direct relationship

Mijs (2016) defines meritocracy as a system in which progress and rewards are based on talent

and ability, leading to forms of inequality. With this definition, Mijs (2016), as well as Kim and Choi (2017) specifically point to two different aspects of the concept of meritocracy. The first aspect is justifying *inequality of outcome*. What is meant with this is that the inequalities that arise in society are accepted by people since they are fair in nature. The second aspect of the definition is defending equality of opportunity. What is meant with this is that within a "perfect" meritocratic society (a society where inequality is fully based upon fair reasons) rewards are based on merit and therefore every individual has an equal opportunity to achieve things in life (Mijs, 2016; Kim & Choi, 2017). This view of equal opportunities automatically indicates that the inequalities in outcome are justified since they are based on fair chances for everyone. Therefore, it can be concluded that the central premise of meritocracy defends equality regarding opportunities, hence inherently also justifies the fairness of inequalities in outcomes. In this sense, meritocratic beliefs can be satisfying for those who have achieved much in life because it acknowledges these achievements. Khan & Jerolmack (2013) describe this feeling of justification that elites can have about how they have fairly deserved the status that they possess. These two scholars each wrote a book in which they aimed to address the fact that "what people say is often different then what they do", meaning that the thoughts of privileged students did not necessarily cope with their ideas (Khan & Jerolmack, 2013, p. 9): while students construct a narrative in which they argue to have fairly deserved their position by hard work, observations and empirical data showed that in practice this was not always the case. This discrepancy is caused by the fact that within a world where large inequalities in opportunities still prevail, the importance of rhetorically accepting meritocracy is necessary for these students to justify their privileged position (Khan & Jerolmack, 2013). So, people from higher social status tend to envision a meritocratic society in order to make their success feel like deserved, which boosts their mental wellbeing.

On the other hand, the fact that meritocratic values justify equality of opportunity can also be comforting for those from lower social status who have less (societal legitimized) success in life, since they experience the believe that they at least have had a fair chance of success (Mijs, 2016). In other words, the thought that everyone had an equal chance implies that inequalities are in fact justified. In this sense, people who position themselves at the lower income strata in society may still be likely to accept the income differences that are at place. This argument has also been put forward by Van Oorschot (2006) who argues that the desire to eliminate income

inequalities are lower among those with high meritocratic values, because they perceive these income inequalities as just and deserved. So, those with high meritocratic values perceive income differences as fair, and therefore are more likely to accept these without feelings of deprivation, because they are seen as deserving (Van Oorschot, 2006). Moreover, the effect that meritocratic beliefs have on subjective upwards mobility has been investigated (Mijs et al, 2022). In this article, it is investigated how meritocratic beliefs relate to subjective upward mobility, a topic that has gained relevance in contemporary society due to the seemingly declining intergenerational mobility, accompanied by rising income inequalities (Mijs et al, 2022). Their study focussed on the Netherlands, and what they found out is that meritocratic beliefs are positively related to subjective upward mobility. This indicates that people who belief that the society they live in is meritocratic, are convinced that upward mobility is possible, and thus that they themselves are responsible for their destination with regard to social success.

How does this then relate to mental wellbeing? First of all, it is explained how individuals from higher social strata use meritocratic beliefs to justify their social position and interpret their success as individually deserved. Next to that, existing research that has been discussed relate to the effect that meritocratic beliefs can have on how people experience the possibilities to determine their own destiny, for people from both the lower as the higher socio-economic positions. And all these studies have in common that they find out that there is a positive relationship between meritocratic beliefs and the authority or opportunity to make a success out of one's own life. In other words, people with meritocratic beliefs do feel that they have control over their lives, which for a large part determines mental health and wellbeing (Lachman & Weaver, 1998). This positive effect of meritocratic beliefs on wellbeing has also been found in an earlier study (Napier & Jost, 2008). So, with regard to the effects that meritocracy can have on wellbeing, individual feelings of control play an important part, whether it is used for justifying once own (privileged) social position or as a mean to envision possibilities to improve their own.

The theoretical mechanisms described above lead to the first (direct) hypothesis of this paper. It appears that meritocratic beliefs cause individuals to see their lives as "full of chances", in which they themselves can determine the destiny of their lifetime. This means that individuals with strong(er) meritocratic beliefs perceive that they are able to climb up the social ladder, which is positively associated with their wellbeing. Hence, the following hypothesis can be formulated:

"Hypothesis 1: People with stronger meritocratic beliefs have a higher level of wellbeing."

#### 2.2 Group differences: social position

As explained above, it appears to be a logical thought why for the higher socio-economic positions meritocratic values lead to high wellbeing: believing that one's own success is based on individual merit promotes the thought that individuals have control over their destination, hence justifying the social position of elites (Foster & Tsarfati. 2005). But also for less advantaged socio-economic groups, subjective feelings of control are the main drivers that translate meritocratic values into wellbeing (McCoy, Wellman, Cosley, Saslow & Epel, 2013). But while some scholars argue that for those groups the same mechanisms that are in place as for elite groups (as described above), others claim a more complex interaction for lower status individuals and argue that these experienced feelings of control may lead to feelings of guilt and self-blaming (Foster, Sloto & Ruby, 2006; Foster & Tsarfati, 2005; Jost & Hunyady, 2003).

In multiple scientific articles, it is mentioned how meritocratic beliefs can negatively impact members of lower-status groups. As earlier explained in this paper, a meritocratic society implies that every individual is responsible for his or her societal success (Mijs, 2016). This inherently also means that when an individual does not achieve a high social position this is seen as one's own failure (Mijs & Savage, 2020). When people believe that society is to a large extend based on meritocratic principles, those who are in unfavourable conditions (i.e. low status groups) will more easily be victimised and stereotyped (Costa-Lopes, Madeira, Miranda & Moreira, 2018), hence affecting their wellbeing. Other research found out that meritocratic perceptions among lower status groups imposes threats to their group-esteem (Roex, Huijts & Sieben, 2019) and may even result in the justification of discrimination of lower-status individuals (Madeira et al, 2019). This latter finding has also been found by McCoy & Major (2006) whose findings showed that when meritocratic beliefs are activated among low status groups, perceptions of discrimination decline and are replaced by stereotyping themselves and their group. This seems to imply that when only looking at lower-status individuals, meritocratic beliefs affect wellbeing in a negative way.

Mccoy et al (2013) did a study in the United States however which yielded opposite results. Starting point for their study was the thought that indeed the wellbeing of high status groups is fuelled by meritocratic beliefs, which legitimise their advantaged position and picture success as individual responsibility (O'Brien & Major, 2005; Wakslak, Jost, Tyler, & Chen, 2007), a conclusion that has also been elaborated on earlier in this paper (see Khan & Jerolmack, 2013) and which is included in the first hypothesis. The authors also stress in this article that (also in line with earlier research) many costs are involved for lower status groups when endorsing meritocratic views: for them, system justification may lead to lower self-esteem (Jost & Hunyady, 2003) by justifying the system at place (and thus its inequalities regarding to its outcomes). So, the article by McCoy et al (2013) clearly agrees with earlier research on some points, but nevertheless there exists agreement when it comes down to one thing: the importance of feelings of control. According to Mccoy et al (2013), even though that lower status groups have the feeling that their social position is justified by the meritocratic system, they still value the fact that the same system gives them the opportunity to escape from the lower status strata of society.

Taking the above discussed articles together, it can still be expected that among low-status group members the effect of meritocratic beliefs on wellbeing is positive. Nevertheless, the arguments put forward suggest that this relationship will be less strong than among elite groups. Therefore, the next hypothesis is formulated:

"Hypothesis 2: People with stronger meritocratic beliefs have a higher wellbeing, but the association will be weaker for those with a lower socio-economic position."

## 2.3 Group differences: experienced discrimination

While in general it is expected that meritocratic beliefs relate positively to mental wellbeing, this proposed mechanism may work in different ways for some social groups. One of the reasons for this difference is the experienced discrimination that cause some social groups to lose belief in the fact that they have substantial control over their life achievements, thereby affecting their mental wellbeing. Examples of social groups for which research has found evidence that discrimination might affect their wellbeing are women and ethnic minorities. These studies will now be discussed.

One of the studies that investigated how meritocratic beliefs affected wellbeing among discriminated groups is a study by Foster & Tsarfati (2005). In this study, they focussed on experienced discrimination among women. Foster & Tsarfati (2005) compared in their study two distinct groups of women; one group consisted out of women who reported that they had experienced discrimination in the past, and another group formed by women who had not experienced discrimination. For both groups, the effect that meritocratic beliefs have on their wellbeing was tested. The results differed significantly for the two different groups: among the group that experienced discrimination in the past, a negative effect of meritocratic beliefs on wellbeing was found, while for the group that did not experience discrimination the opposite (thus a positive effect) was the case (Foster & Tsarfati, 2005). So, what can be concluded from this research is that the effect that meritocratic beliefs can have on wellbeing is (almost fully) dependent on whether an individual has experienced feelings of discrimination or not. According to the authors, the reason for these differences in results can be found in group consciousness theories: when an individual personally experiences discrimination while at the same time strongly believes in meritocracy, the premises of a meritocratic society (those who work hard will achieve things) seem unlikely to be realized. This will lead the individual to blame failure upon him- or herself (Foster & Tsarfati, 2005). Prior research for instance found that the acceptance of justifying system beliefs is negatively related to the self-esteem for women (Hafer & Olson, 1993) and ethnic minorities such as African-Americans and Latino's (Jost & Thompson, 2000). When discrimination is not seen as issue, individuals are more likely to see meritocracy as a positive thing or as a landscape full of opportunities, thereby boosting the selfesteem (Foster & Tsarfati, 2005). Another study conducted by one of the same authors a year later, analysed the same effect, but this time focussing on ethnic disadvantaged groups (Foster, Sloto & Ruby, 2006). This study led to the same conclusion: Only among those individuals who reported little personal discrimination, stronger meritocratic beliefs predicted higher self-esteem. At the same time, for those who reported personal discrimination meritocratic beliefs predicted a decreased self-asteem (Foster, Sloto & Ruby, 2006).

What do these findings mean for our analysis? While previous mentioned studies may seem to differ in line of argumentation at first glance, they do have a substantial common ground, as also acknowledged in the article of Mccoy et al (2013), namely the perception of control which is translated into wellbeing. For discriminated groups, the subjective feelings of having control

over their lives are lower than for groups who do not experience discrimination, leading to a lower wellbeing. Although some studies suggest that the relationship would be totally turned upside down, Mccoy et al (2013) showed that also for discriminated or lower status social groups a positive relationship might exists. However, since these specific groups do have to cope with forms of discrimination or exclusion, the relationship can be expected to be weaker among discriminated groups.

While the relationship between meritocratic beliefs and wellbeing as discussed here is only applied on women and ethnic minorities, the same mechanism can also be expected for unemployed people. It can for instance be expected that individuals who are unemployed due to less chances on the labour market see their unemployment as individual failure, especially when possessing high meritocratic beliefs, and therefore will therefore report a lower wellbeing. In addition to this, earlier literature does show that wellbeing is lower among the unemployed (Sage, 2019).

To summarize, meritocratic beliefs cause people to experience lots of opportunities in life to achieve their goals, hence leading to an increased wellbeing. Nonetheless, for discriminated social groups such as women and ethnic minorities, and for the unemployed these beliefs of having control over their life are lower. Based on all discussed literature, the following hypotheses can be formulated:

"Hypothesis 3: People with stronger meritocratic beliefs will have a higher wellbeing, but this association will be weaker for women."

"Hypothesis 4: People with stronger meritocratic beliefs will have a higher wellbeing, but this association will be weaker for ethnic minorities."

"Hypothesis 5: People with stronger meritocratic beliefs will have a higher wellbeing, but this association will be weaker for the unemployed (vs employed)."

## 2.4 Country level differences

To my knowledge, there has not yet been performed research towards possible differences in the strength of meritocratic beliefs – wellbeing relation on country-level. Nevertheless can it be

expected that characteristics on the country an individual lives in play a substantial role in determining how strong the impact of meritocratic beliefs can be on an individual's wellbeing.

A very influential book on this topic has been written by Wilkinson & Pickett (2010). With their book "The Spirit Level" they made strong claims that inequalities *within* countries have substantial effects on individual wellbeing and health, in contrast to inequalities *between* countries. They show for example how the average life expectancy within any country has no correlation whatsoever with the *average* income of that specific country. In contrast, higher inequalities within countries are related to worse health and wellbeing. This does not only hold for the poor, but also for the rich (Wilkinson & Pickett, 2010). What this indicates is that it is surprisingly enough not the income or wealth at the individual level, but rather on the societal or country level that affects the wellbeing of the individuals within that country, even for the ones with the highest incomes. Based on the results of their study, the authors advocate for states to strive for more equality within their countries, since this would not only benefit the mental health of the poor, but also the wellbeing of the richest people in the country would improve when large forms of (economic) inequality is countered (Wilkinson & Pickett, 2010).

A similar argument is made by Steckermeier & Delhey (2019), who argue that in more economically egalitarian societies, also on a cultural level more egalitarianism exist. What they mean with this is that when for instance income differences between the poorest and the richest are lower, there is a higher social trust among individuals and more collective values and beliefs are at place. This in turn leads to the fact that inferiority feelings among those from a lower status in society are dampened (Steckermeier & Delhey, 2019). So, these two studies provide evidence for the fact that wellbeing, for a large part, can be related to the relative position an individual holds with regard to other individuals around him. This suggests that, when taking into account the influence that country-specific affluence can have, it is most valuable to look at levels of within-country inequalities.

The absence of specific research towards the country level effects on the impact of meritocratic beliefs on wellbeing makes it hard to draw substantiated hypotheses. Though, the example that is mentioned in the section above indicates that limited inequality within countries can decline the impacts of meritocratic beliefs on wellbeing for the less advantaged individuals. That is why it can be argued that the level of (income) inequality which is present in a country is of substantial

importance for the average wellbeing. For instance, research has found that redistributive characteristics of the welfare system that exists within a country influence to what extend (involuntary) work dismissal can lead to declines in wellbeing (Richardson, Car, Netuveli & Sacker, 2019). Also, lower income inequality tend to have a positive effect on social wellbeing, even for the higher income groups (Bilan, Mishchuk, Samoliuk & Yurchyk, 2020). Based on these assumptions, countries will be looked at based on their level of income inequality. The differences of the effect of meritocratic views on wellbeing between these countries will be analysed and discussed. Because, based on the things discussed here, individuals that are nested in countries with low income inequality are expected to report in general a higher wellbeing, the following hypothesis will be drawn:

"Hypothesis 6: People with stronger meritocratic beliefs have a higher level of wellbeing, and this association is stronger in countries with low income inequality.

Below, the conceptual model of this study is shown. Within this model, both of the hypotheses that are drawn in this section are depicted. In the next section, an explanation will be provided on how these hypotheses will be tested.





\*controlled for age, religion and political orientation

# 3. Data, methods and planning

In order to investigate the proposed research question and to test the hypotheses, I will make use of data from the European Values Study 2017 (EVS, 2022), which was collected via a representative multi-stage sample. The sample size was set as an effective sample size (an estimate of the sample size required to achieve the same level of precision if that sample was a simple random sample). This means that the number of respondents was set at 1200 for countries with a population over 2 million, and 1.000 for countries with a population less than 2 million (EVS 2017, 2022).

This dataset will be used for multiple reasons. First of all, this dataset contains data from 56,491 respondents from 34 different countries in Europe. This makes it possible to do a country-comparative analysis between countries on the European continent. This comparative perspective helps to identify country-level characteristics (in this case level of within-country inequality) that influence the translation from meritocratic beliefs into wellbeing. The choice for specifically comparing European countries is made because these countries have to a certain extent similar cultural, social and political characteristics which make comparisons more valid than comparing countries that are completely different. Moreover, the representative character of this dataset makes it a very valuable one with regards to drawing wide-based conclusions that can be generalized to the entire population. In addition, the concepts that I use in my hypotheses are included in this dataset, which makes it very suitable for the aim of this research. Furthermore, this dataset has been used earlier in other recent scientific research that focussed on the effect of meritocratic beliefs on system legitimacy (Pavić, 2020).

After the preparation of all the different variables that are used in this study and deleting all the individual cases that report missing values, a valid number of 23.470 respondents remains.

# 3.1 Operationalisation

**Dependent variable** – In this study, wellbeing is used as the dependent variable. For this analysis, wellbeing is measured in the EVS dataset with the use of a proxy variable, namely "control in life" (v38). This is a valid proxy to use when measuring wellbeing because of the

close correlation between the two, found by Lachman & Weaver (1998) who linked two different aspects of control (mastery and perceived constraints) to wellbeing and found significant correlations. Wellbeing is thus measured through a question which asked people to indicate "how many control they feel to have over the way life turns out". This question was measured over a scale from 1 to 10, from "none at all" to "a great deal" and with a mean score of 7,24 and a standard deviation of 2,11. The answer options "don't know" and "no answer" are coded as missing values.

**Independent variable** – The central or direct independent variable that is used in this study is meritocratic beliefs. Within the European Values Study 2017, this variable was best measured by a question which asked people to place their views on a scale from 1 to 10 between "Incomes should be made more equal" and "There should be greater incentives for individual effort" (v106). This measurement has been used before in scientific literature as indicator for meritocratic beliefs (Hadarics, Kende & Szabó, 2021), since it captures the acceptance of income meritocracy. It is important to note that this measure solely refers to income meritocracy (Bovens & Wille, 2017). However, the discussed theoretical mechanisms mainly apply to income meritocracy, which makes this a valid operationalisation. The mean of this variable is 5,66 with a standard deviation of 2,89. The answer options "don't know" and "no answer" are coded as missing values.

**Interaction variable: Socio-economic status** – The first moderating variable in this study is socio-economic status. Socio-economic status can be defined as the (relative) social standing of a certain social group or an individual. In the academic field, this is typically measured by someone's education, income or occupational status (Gaalema, Elliott, Morford, Higgins & Ades, 2017; Willms & Tramonte, 2019). Here, both educational level and (household) income are taken into account. I do not take into account occupational status since the way that this variable is measured in the dataset (i.e. with the use of job categories) does not allow us to use it as a good measure for socio-economic status. Moreover, occupational status can also be seen as quite arbitrary compared to educational level and (relative) income which are far more objective and stable over the long-term with regard to status than occupation, since "prestige, skill level and income of certain occupations can vary significantly across countries and levels of

development" (Avvisati, 2020, p. 16). In this study, we will look at household income and educational level separately. The reason behind this approach is that this allows us to see what the unique effect of each of these two components is when it comes down to moderating the relationship between meritocratic beliefs and wellbeing. Previous theory that looked at the two components separately concluded that income would have a stronger moderating effect than education, since especially the high educated who fail to obtain a high income can feel stigmatised (Roex, Huijts & Sieben, 2019). Based on the previous literature, we thus expect both components to have a positive moderating effect, but the effect of income is expected to be stronger.

In order to be able to measure household income in a valid way, some adjustments to the data had to be made. First of all, the used dataset only reports household monthly income, counting all wages, salaries, pensions and other incomes that come in (EVS, 2022). In order to adjust this variable for the needs of a household type, the new OECD equivalence scale was used that corrects for the size of the household and the number of children. In this study, the "OECD-modified scale" is used, since research showed that in contemporary times, using this scale tends to be a more reasonable choice than using the "old" OECD scale (Dudel, Garbuszus, & Schmied, 2021). This scale assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child below the age of 18. Because the European Value Study 2017 only reports the number of people in the household and the number of children in the household, firstly a separate variable for the number of adults in the household is created by subtracting the number of children in the household from the number of people in the household. Then, the following formula was used to calculate the equivalence scale:

# 0.5 + (adults in household \* 0.5) + (children in household \* 0.3)

\*Note that the constant in this formula is only 0.5 since the household head is also included in the 'adults in household' and thus gets an additional score of 0.5 assigned.

After that, the household monthly income was divided by the computed equivalence scale, in order to get the equivalized income. It is important to note here that within the academic field, varying equivalence scales are used (different weights for adults and children), but research has shown that the choice of equivalence scale does not have large effects on inequality statistics (Regan & Kakoulidou, 2022).

With regard to educational level, a variable was used that divided educational level into the categories "low", "middle" and "high". This variable is included in the EVS 2017 dataset in order to make cross-country comparison possible between countries with different educational systems. Moreover, dividing educational level into three categories makes interpretation of the interaction effect easier later on.

**Interaction variable: Gender** – Gender is used in this study as one of the interaction variables. Gender is measured through the question "sex respondent". The answer categories are labelled as male (0) and female (1), while the answer options "don't know" or "no answer" are coded as missing values, resulting in a mean of 0,55 which indicates that there are slightly more females in the dataset. While also the variable "gender" was included in the EVS 2017 dataset, this variable strangely did not allow respondents to answer "don't know" or "no answer", which makes the variable "sex respondent" a more valid variable to measure gender.

**Interaction variable: Ethnic minorities** – Because of the absence of a direct measure for ethnic minorities, it is decided to use "immigrant" as a substitute variable since immigrants very often have an ethnic identity that is distinct from the identity of native inhabitants (Balidemaj & Small, 2019). Moreover, research shows that immigrants have to cope with discrimination, even when they are part of the same ethnic group as individuals from the host-country (Kim & Noh, 2014; Krings, Johnston, Binggeli & Maggiori, 2014). Therefore, the same theoretical mechanism is expected to be at play for immigrants as for ethnic minorities. An individual was labelled as "immigrant" if one of his/her parents is born in a different country than he/she leaves in. For this purpose a variable was created which combined two different variables which asked respondents whether "the mother/father was born in [country of residence]" (v230 and v232). In case one or two of the answers are "no", the respondent is labelled as immigrant, where a score of 0 means "no immigrant" and a score of 1 means "immigrant". This new variable gives a percentage of 13.1% of the respondents who are within our dataset labelled as immigrant.

**Interaction variable: Employment status** – For the operationalisation of employment status, a dichotomous variable which divided the respondents into either employed or unemployed is created out of an already existing variable with multiple answer categories. The answers "30 hours a week or more", "Less than 30 hours a week" and "Self-employed" were labelled as employed, and the answer "unemployed" was labelled as unemployed. Other answer categories

such as "student", "retired" or "disabled" were coded as missing because of its ambivalent character. The answer category "retired" contributes most to the number of missing values (N=14.584). This leads to a valid N of 34.723 and a mean score of 0,86 on this variable, indicating that 86% of the respondents in the dataset are self-identifying as employed.

Interaction variable: Within-country inequality – The European Values Study includes information on 34 countries. Portugal has been dropped from the analysis because of missing information on the household income variable. The remaining 33 countries are: Albania (N=568), Azerbaijan (N=776), Austria (N=792), Armenia (N=846), Bosnia and Herzegovina (N=737), Bulgaria (N=538), Belarus (N=579), Croatia (N=642), Czechia (N=640), Denmark (N=1880), Estonia (N=450), Finland (N=500), France (N=734), Georgia (N=1000), Germany (N=995), Hungary (N=580), Iceland (N=1051), Italy (N=682), Lithuania (N=579), Montenegro (N=229), Netherlands (N=958), Norway (N=706), Poland (N=487), Romania (N=378), Russia (N=607), Serbia (N=553), Slovakia (N=452), Slovenia (N=389), Spain (N=463), Sweden (N=579), Switzerland (N=1846), North Macedonia (N=405) and Great Britain (N=849).

Respondents are ordered based on the level of within-country inequality. This is done with the use of the Gini-coefficient, which is a measure of statistical dispersion intended to represent the income inequality within a country. Every individual is assigned a value which is the Gini-coefficient of the country that person lives in. The Gini-coefficient can be considered the most popular measure of inequality in the academic field (De Maio, 2007). The Gini-coefficients per country are calculated with the use of the STATS INEQUALITY command in SPSS. In order to be able to run this command, the 'Inequality Measures' extension was downloaded from the extension hub in SPSS. After calculating the different Gini-coefficients in SPSS, these were correlated with the Gini-coefficients collected from the World Bank Data (World Bank, 2017), resulting in a correlation of 0.568. This correlation, however quite positive, is lower than it should be since it could be expected that this would be close to 1 (both are intended to measure the same thing). For this study, we use the Gini-coefficient that is calculated based on the data from the European Values Study 2017.

**Control variables** – To account for other possible effects, it is important to include control variables in our model, that means to control for variables that both influence the dependent (control in life) as the independent variable (meritocratic beliefs). For this purpose, the variables

*age, religion and political orientation* are controlled for. Religion is measured on a 0 to 1 scale, where a score of 1 means that someone belong to a religious denomination. Political orientation is measured by a question asking respondents to place themselves on a left-right scale, ranging from 1 to 10. These variables are chosen to be controlled for because earlier research show that they have an effect on meritocratic beliefs and wellbeing (Chuang, Eom & Kim, 2021; Tan et al, 2021).

After deleting every respondent with one or more missing values on the variables used in this analysis, a number of 23.470 valid cases remains. Below the descriptive table containing information of the used variables is shown.

	N	Minimum	Maximum	Mean	Std.
			maximum	mean	Deviation
Wellbeing	23,470	1	10	7.40	1.99
Meritocratic beliefs	23,470	1	10	5.75	2.81
Socio-economic status:					
Income (equivalized)	23,470	0.03	12.51	1.69	1.35
Educational level	23,470	1	3	2.33	0.67
Gender	23,470	0	1	0.50	0.50
Immigrant	23,470	0	1	0.14	0.35
Employment status	23,470	0	1	0.88	0.33
Within-country inequality (Gini)	23,470	0.24	0.43	0.31	0.05
Age	23,470	18	82	43.74	12.86
Religion	23,470	0	1	0.31	0.46
Political Orientation	23,470	1	10	5.45	2.26
Valid N	23,470				

## Table 1: Descriptives of the used variables

Data: European Value Study 2017

# 3.2 Methods for analysis

In order to conduct the analysis necessary to give an answer to the research question and to test the proposed hypotheses, I will use IBM SPSS statistics. My goal is to start with some explorative analysis with the use of simple statistical methods such as correlations and t-tests / ANOVA analysis, which give a first insight into the data. After that, in order to analyse more

detailed the effect that meritocratic beliefs have on feelings of control, I will perform a linear regression analysis, which shows the (direct) association between meritocratic beliefs and wellbeing. This analysis already tells us whether the direct relation between meritocratic beliefs and wellbeing (excluding any moderating effect) is significant or not.

Then, the different moderating effects will be analysed using line graphs for educational level, gender, immigrant and employment status. Line graphs are used for these four variables since these variables are the only ones that are measured categorically or ordinal. With the use of line graphs I intend to clarify and visualize whether the direct between meritocratic values and wellbeing might differ for the different groups discussed in the theoretical section. Although this does not give significant results at all, it can already give insights into how the analysis might work out. Since income and level of inequality are not measured categorical, line graphs will not be used for these variables.

In the next part, the interaction effects will be added to the linear regression model. This will be done in the same order as they are threated and discussed in the theoretical section of this paper. First of all, the interaction variables will each be added separately and in different models in order to investigate and analyse their unique effects. At the end of the analytical section, a full model, with all discussed variables included, will be shown. This variable tells what the total effect of the different variables combined is.

In addition to the line graphs who are mainly used to visualise the effect, this multiple linear regression also tells us whether the moderating effects are significant or not. I choose for this approach because this allows to compare differences in strength between the interacting or moderating effects. From the beginning of this linear regression analysis the control variables (age, religion and political orientation) will be included in the models in order to control for spurious effects directly from the start. When analysing interaction terms, multicollinearity (a high correlation between independent variables) is an issue. This has been checked for by correlating the different predictor terms, in this case meritocratic beliefs and the different interaction terms. Here, different correlations between two predictor variables showed a correlation of 0.7 or higher, what is considered as problematic (Pallant, 2020). In order to counter this, all the variables which are used in the interaction terms are first centered. Centering predictors around their mean (so that the mean of the new predictor is 0) is one way of reducing

the multicollinearity problems that may arise as a result of including predictors plus their product terms in a regression. After these variables are centered, the interaction term is created by multiplying the centered variables. These interaction terms were then added to the regression model.

The expectation, which is based upon the literature, is that the direct effect of meritocratic beliefs on wellbeing will differ significantly between the different groups that are included in the conceptual model (see figure 1). I aim on slowly building up my analysis in terms of complexity, in order to make the interpretation as easy as possible for the readers.

Limitations (a more in-depth elaboration will be provided later) mostly lay in the available data. Specifically the operationalisation of the variables wellbeing, gender and ethnic minorities can be interpreted as slightly problematic. Wellbeing is measured through a proxy variable which is feelings of control, what closely correlates with but is not an all-encompassing measurement of wellbeing (Lachman & Weaver, 1998). Moreover, in this study we do not make use of two distinctive groups existing of 'discriminated women' and 'non-discriminated women', as is done in earlier research (Foster & Tsarfari, 2005). Since the theoretical mechanism works through self-experienced discrimination, this could be considered problematic. However, since it is expected that the self-experienced discrimination among women is higher than among men, a moderating effect, although less strong than reported by Foster & Tsarfari (2005), is still expected. Lastly, ethnic minorities is measured through the variable immigrants: while research has shown that immigrants very often do not ethnically identify with native inhabitants, the fact that someone can be labelled as immigrant does not tell everything about his or her ethnic identity.

# 4. Results of the analysis

## 4.1 Correlations

To get a very first insight into our data, a correlation table was made including all the used variables in this study. As can be seen from the table below, a small correlation of 0.032 appears to exist between meritocratic beliefs and wellbeing. This correlation is however significant, so it can be concluded that a certain relation between these two variables does exist. Correlations (just as linear regression) however do tell nothing about the causality of this relationship so one should be careful interpreting these relations.

#### Table 2: Correlation table

Variables	1	2	3	4	5	6	7	8	9	10	11
(1) Wellbeing	1.000										
(2) Meritocratic beliefs	.032**	1.000									
(3) Income (equivalized)	.142**	-0.031**	1.000								
(4) Educational level	.109**	0.065**	0.249**	1.000							
(5) Gender	-0.014*	-0.036**	-0.036**	0.071**	1.000						
(6) Immigrant	0.014*	-0.025**	0.131**	0.044**	0.008	1.000					
(7) Employment status	0.093**	-0.024**	0.278**	0.174**	-0.043**	0.036**	1.000				
(8) Within-country inequality (Gini)	-0.044**	0.200**	-0.360**	-0.023**	0.018*	-0.110**	-0.252**	1.000			
(9) Age	-0.035**	0.008*	0.117**	-0.042**	-0.004	-0.030**	0.049**	0.003	1.000		
(10) Religion	-0.009	-0.052**	0.123**	0.058**	-0.058**	0.080**	0.086**	-0.208**	-0.044**	1.000	
(11) Political orientation	0.018*	0.210**	-0.034**	-0.050**	-0.055**	-0.080**	-0.014*	0.058**	0.015*	-0.108**	1.000

\*p < 0.05 \*\*p < 0.001

Data: European Value Study 2017

Some other interesting relationships are also shown by the correlation table. The highest observed correlation is a correlation between income level and level of inequality (p = -0.360). This indicates that higher incomes more often can be found in countries with lower (income) inequality, or to put it the other way around; lower incomes are more likely to be found in countries with a high level of income inequality. A possible explanation for this could be that the lowest incomes are found in countries without redistributive policies, and therefore also in countries with most income inequality. The second highest observed correlation of 0.278, between employment and income level, seems to be a logical one; employed people are likely to have a higher income than unemployed people. Also a correlation of 0.210 between meritocratic beliefs and political orientation and the negative correlation of -0.252 between employment level and level of inequality, which can also be explained as a result of few protective state regulations; in countries with very few state intervention (income redistribution and job

protection), both unemployment as level of inequality tend to be high. Less straightforward is the correlation between meritocratic beliefs and level of inequality (p = 0.200), which is significant and thus can be generalized. The latter one can be explained by the fact that meritocratic beliefs are likely to advocate for income differences, as explained earlier.

## 4.2 T-tests and ANOVA

After examining the most considerable correlations, t-tests were performed for the variables gender, immigrant and employment status. T-tests are a way of showing whether the mean of two different groups significantly differ on a dependent variable, in this case wellbeing. In this study gender, immigrant and employment status have been measured with a dichotomous variable, which makes it possible to perform a t-test to measure possible differences in mean with regard to wellbeing. This might already give some information on the interaction effects that will be discussed later on. The three different t-tests are shown in the table below.

		Mean	Std. Dev.	df	t	Sig.	Cohen's d
	Male	7.43	1.976				
Gender				23468	2.184	0.029	1.983
	Female	7.37	1.99				
	Native	7.39	2.003				
Immigrant				23468	-2.228	0.026	1.983
	Immigrant	7.47	1.853				
	Unemployed	6.9	2.498				
Employment status				23468	-11.585	<0.001	1.974
	Employed	7.47	1.894				

Table 3: Inde	pendent-samp	ole T-test	for mean	differences	in	wellbeing
	p • • • • • • • • • • • • • • • • •		10			

\*Only for gender, equal variances were assumed

Data: European Value Study 2017

What can be observed from this table is that significant differences in mean on wellbeing exist for all three dichotomous variables (p < .05). It appears that both males, immigrants and the employed score higher on wellbeing in regard with females, natives and unemployed. For males and the employed this might signify that the interaction effect on wellbeing that is hypothesised

does exist; a higher wellbeing for these groups could be the result of a stronger effect from meritocratic beliefs on wellbeing, assuming meritocratic beliefs are similar for men and women. Note however that significant differences in mean do not yet tell the direction of the interaction effect.

Since educational level is measured with the use of three groups instead of two, a one-way ANOVA needs to be performed to compare the mean scores on wellbeing instead of a t-test. The results of this analysis can be found in the table below.

				Mean square	Sum of Squares		
	Ν	Mean	Std. Dev.	(between groups)	(between groups)	F	Sig.
Lower	2630	7.01	2.22				
Medium	10491	7.26	2.077	602.886	1205.773	155.338	< 0.001
Higher	10349	7.64	1.783				
Total	23470	7.40	1.983				

Table 4: One-way ANOVA for differences in mean on wellbeing for educational level

Data: European Value Study 2017

As immediately becomes clear, a higher educational level is related to a higher mean score on wellbeing. What can be seen in the table is that the mean score (which indicates mean score on wellbeing for that specific group) increases for every higher educational group. The table also shows that this association is significant (p < .001). What this means is that at least two means are significantly different from each other. It does not, however, tell which of the groups have a significantly different mean score on wellbeing. What this might indicate is that educational level has a positive interacting effect on the relationship between meritocratic beliefs and wellbeing. Nevertheless, regression analysis must be performed to be certain of this effect.

## 4.3 Linear regression: direct effect

After these exploratory analyses a regression analyses is performed, starting with a linear regression model only including the direct relationship between meritocratic beliefs and wellbeing, while controlling for age, religion and political orientation. The interacting variables are not included in this regression analysis. The model is shown below.

	Wellbeing					
Variables	b	S.E.	Beta	t	Sig.	
Constant	7.476	0.060		123.592	0.000	
Meritocratic beliefs	0.021	0.005	0.030	4.466	< 0.001	
Age	-0.005	0.001	-0.036	-5.449	< 0.001	
Religion	-0.034	0.028	-0.008	-1.226	0.220	
Political orientation	-0.010	0.006	0.011	1.671	0.095	

Table 5: Linear regression analysis

Data: European Value Study 2017

As can be seen, the B score of 0.021 indicates a small but positive association between meritocratic beliefs and wellbeing. This B score means that an increase of one unit on meritocratic beliefs is associated with an increase of 0.021 unit on wellbeing (both were measured on a 10-point scale). This relationship is in line with the earlier showed correlation, which also showed a (small but significant) relation between the two. Here, the reported B score is also significant (p < 0.001), meaning that this effect can be generalized from the dataset to the general population. Therefore, the first hypothesis can be confirmed: people with stronger meritocratic beliefs in general have a higher level of wellbeing.

The R square value of 0.002 shows that this model can only explain 0.2% of the differences on the score on wellbeing. In the next models, the interacting variables will be added to the analysis, resulting in a slightly higher explained variance.

# 4.4 Line graphs

After the direct effect is analysed, we will now turn to the interaction effects. Before putting these effects into the regression model and testing whether they are significant, first line graphs will be shown for educational level (a), gender (b), immigrant (c), and employment status (d). With the use of line graphs, it is intended to visualise the strength of the effect of meritocratic beliefs on wellbeing for the different groups on these variables. This is done because only providing the regression model makes it sometimes hard for the reader to fully grasp what the interaction effects means. The lines graphs for these four different groups are shown below.



Figure 2: Line graphs for educational level (a), gender (b), immigrant (c), and employment status (d)

For educational level, the effects for the three different groups all tend to be slightly positive, as can be seen from the ascending lines. While a higher education is associated with a higher wellbeing (as was also indicated by the ANOVA), the strength of the effect differs between the different groups as well. While the equation shows a similar effect for higher and medium education (b = 0.02), this effect is stronger for the lower educated (b = 0.04). This indicates that higher meritocratic beliefs result in a higher wellbeing for all educational groups, but especially for the lower educated. This suggests that there might be some evidence in favour of the second hypothesis.

Gender also shows to have a clear interacting effect on the relationship between meritocratic values and wellbeing. What can be witnessed is that, while both lines show a positive effect, the line indicating male respondents (b = 0.04) is a lot steeper than the one for females (b = 0.009),

indicating that the direct effect of meritocratic beliefs on wellbeing is stronger for males. What is also interesting is that while for the lowest meritocratic beliefs females show a higher wellbeing than males, this eventually turns around. This seems to confirm our third hypothesis.

Also the effect of immigrants seems to be interacting the direct relationship between meritocratic beliefs and wellbeing. The different lines related to natives and immigrants show a similar trend as the graph for gender. First of all, both lines are ascending, and thus indicate a positive relationship. For the lowest categories of meritocratic beliefs natives tend to have a higher wellbeing than immigrants. This changes however when meritocratic beliefs increase, because of the stronger effect for immigrants (b = 0.06) compared to natives (b = 0.02). This tells that the effect of meritocratic beliefs on wellbeing is stronger for immigrants than for natives. While this is a clear example of an interacting effect, it is the exact opposite of what hypothesis 4 argued.

When it comes to employment status, the interaction effect is quite different from the ones discussed before. While the interaction effects discussed above only showed a difference in strength, the effects for employed and unemployed turns out to differ in direction as well. When meritocratic values are zero, the two groups almost seem to have an equal wellbeing. For the employed, the equation shows a positive coefficient (b = 0.04) meaning that for this group, meritocratic beliefs have a positive effect on wellbeing. But, for the unemployed, this coefficient is negative (b = -0.04) indicating that wellbeing decreases when meritocratic beliefs are higher. This signifies that meritocratic beliefs have a positive effect on wellbeing for the employed, but a negative effect on wellbeing for the unemployed. This is (partially) in line with the 5<sup>th</sup> hypothesis that predicted a higher wellbeing for the employed when meritocratic beliefs increase, compared to the unemployed.

## 4.5 Linear regression: interactions

To check whether the interaction effects that are visualised in the line graphs are indeed statistically significant, these interactions will now be included in the linear regression model. This will be done in separate models, meaning that first model a will be analysed that includes both the independent variable (meritocratic beliefs) as well as the main effects and control variables. After that, different models will be presented which all include one of the interaction terms (together with the main effects and control variables. As mentioned in the methodology section, to deal with the issue of multicollinearity, all variables used in the interaction terms have

been centered. The table below shows the results of the different interaction models.

A 9 V	Wellbeing							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Variables	в (S.E.)	(S.E.)	в (S.E.)	в (S.E.)	в (S.E.)	в (S.E.)	в (S.E.)	в (S.E.)
Constant	7.476*** (0.060)	6.482*** (0.121)	6.428*** (0.122)	6.482*** (0.121)	6.478*** (0.121)	6.473*** (0.121)	6.439*** (0.122)	6.354*** (0.122)
Meritocratic beliefs	0.021*** (0.005)	0.019*** (0.005)	0.023*** (0.005)	0.019*** (0.005)	0.019*** (0.005)	0.020*** (0.005)	0.021*** (0.005)	0.025*** (0.005)
Income * Meritocratic beliefs			0.018*** (0.004)					
Educational level * Meritocratic beliefs				-0.004 (0.007)				
Gender * Meritocratic beliefs					-0.017 (0.009)			
Immigrant * Meritocratic beliefs						0.029* (0.013)		
Employment status * Meritocratic beliefs							0.073*** (0.013)	
Level of inequality * Meritocratic beliefs								-0.642*** (0.083)
Income		0.180*** (0.011)	0.180*** (0.004)	0.180*** (0.011)	0.179'*** (0.011)	0.180*** (0.011)	0.180*** (0.011)	0.176*** (0.011)
Educational level		0.221*** (0.020)	0.223*** (0.020)	0.221*** (0.020)	0.221*** (0.020)	0.220*** (0.020)	0.221*** (0.020)	0.222*** (0.020)
Gender		-0.049 (0.026)	-0.043 (0.026)	-0.049 (0.026)	-0.049 (0.026)	-0.048 (0.026)	-0.044 (0.026)	-0.042 (0.026)
Immigrant		-0.016 (0.037)	-0.017 (0.037)	-0.016 (0.037)	-0.016 (0.037)	-0.011 (0.037)	-0.017 (0.037)	-0.019 (0.037)
Employment status		0.316*** (0.042)	0.318*** (0.042)	0.316*** (0.042)	0.315*** (0.042)	0.316*** (0.042)	0.310*** (0.042)	0.305*** (0.042)
level of inequality		0.108 (0.284)	0.261 (0.285)	0.107 (0.284)	0.121 (0.284)	0.135 (0.284)	0.226 (0.284)	0.305 (0.042)
Age	-0.005*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	-0.007*** (0.001)
Religion	-0.034 (0.028)	-0.135*** (0.028)	-0.134*** (0.028)	-0.135*** (0.028)	-0.135*** (0.028)	-0.135*** (0.028)	-0.136*** (0.028)	-0.134*** (0.028)
Political orientation	0.010 (0.006)	0.014* (0.006)	0.011 (0.006)	0.015* (0.006)	0.014* (0.006)	0.014* (0.006)	0.013* (0.006)	0.012* (0.006)
R square	0.002	0.034	0.035	0.034	0.034	0.034	0.035	0.036
N	23,470	23,470	23,470	23,470	23,470	23,470	23,470	23,470

# Table 6: Multiple regression analysis

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001

Data: European Value Study 2017

The first model is a direct copy of the direct linear regression discussed earlier, which showed hypothesis 1 to be confirmed. Therefore this will not be discussed here again. The other models all include the direct effect and one of the interaction effects (as well as the main effects and control variables).

In model 2, the main effects are included. It is shown that both income, educational level and employment status have a positive direct effect on wellbeing. This means that when wellbeing increases if income and/or educational level is higher and when someone is employed. For gender, immigrant and country level of inequality, no significant associations were found.

Model 3 includes both the direct effect and main effects as well as the interacting effect of income. It can be witnessed that the interaction effect (income\*meritocratic beliefs) is positive (b = 0.018) as well as significant (p < 0.001). This indicates that the effect of meritocratic beliefs on wellbeing is positively moderated by income, where a higher income means a stronger effect of meritocratic beliefs on wellbeing. Although this seems like a very small effect, it is still significant and therefore can be generalized to the population.

In model 4, our second component of socio-economic status, educational level, is included in the model. A slightly negative effect (b = -0.004) of the interaction term educational level\*meritocratic beliefs is shown, indicating that the relationship between meritocratic beliefs and wellbeing is less strong when educational level increases. This association was also depicted in the line graphs. The b-score that is shown in the regression table is however not significant, so no generalising conclusions can be made here.

What does this mean with regard to the second hypothesis, that stated a positively moderating effect of SES? While the first component (income) is significantly positive, the second component is negative, however not significant. This means that when it comes to our second hypothesis (moderation of socio-economic status), it seems that the income component plays a much stronger role in moderating the relationship between meritocratic beliefs and wellbeing. Hypothesis 2 can however not be confirmed, although this analysis does prove the (significant) moderating effect of income.

The fifth model includes the interaction variable gender. The line graph already visualized the stronger effect for males than for females, and this seems to be confirmed by the regression

analysis. While the direct effect of meritocratic beliefs on wellbeing is positive (b = 0.023) the negative coefficient (b = -0.017) for the interaction term gender indicates that the direct relationship is less strong for females than for males. However, it turns out that the association that is shown in the regression table is not significant. Therefore, the third hypothesis, stating that "people with stronger meritocratic beliefs will in general have a higher wellbeing, but this effect will be weaker for women", can not be confirmed.

The interaction variable immigrant is included in the sixth model. The line graph already showed that the direct relationship might be stronger for immigrants than for natives, and this is confirmed by the regression model. The coefficient (b = 0.029) is both positive and significant (p < 0.05), meaning that for immigrants, the effect of meritocratic beliefs on wellbeing is stronger than for natives. This is surprisingly the exact opposite of what was expected based on the literature. Therefore, hypothesis 4 needs to be rejected.

Model 7 includes the interaction employment status. In the line graph it was shown that for employed and unemployed, contrary relationships exist. The positive coefficient (b = 0.073) in the regression model show indeed that for employed, the effect of meritocratic beliefs on wellbeing is higher than for the unemployed. This coefficient is also significant (p < 0.001) meaning that the results can be generalized to the population. For that reason, the fifth hypothesis which stated that the relationship between meritocratic beliefs and wellbeing would be stronger for the employed, can be confirmed as well.

The last interaction effect, level of inequality, is included in model 8. It was hypothesised that the lower the inequality in a country, the stronger the direct effect of meritocratic beliefs on wellbeing would be. Note that a higher Gini-coefficient means more inequality, so in order to fit our hypothesis, the b-coefficient should be negative. It can be seen that this is indeed the case (b = -0.642). This high b-score can give the appearance of a very strong effect compared to the other b-scores, but be aware that b-coefficients are related to the measurement of a variable. This coefficients is significant as well (p < 0.001), which means that hypothesis 6 can be confirmed: people with stronger meritocratic beliefs have a higher level of wellbeing, and this association is stronger in countries with low income inequality.

Lastly, a short note on the explained variance needs to be made. It can be seen in the table that the R square value of our different models including the interaction variables fluctuates between 0.034 and 0.036 in the last model. This means that the different models are each able to explain approximately 3.5% of the variance in wellbeing scores, which seems quite low. However, the main aim of this study was not to explain wellbeing scores, but to explain differences in the relationship between meritocratic beliefs and wellbeing for different social groups.

# 5. Conclusion and discussion

# 5.1 Conclusion

This study has mainly focussed on explaining the relationship between meritocratic beliefs and wellbeing for different social groups in society. Reason for this topic is the growing belief in the existence of a meritocratic society ((Mijs, 2018; Civil & Himsworth, 2020) and the two contradicting theoretical mechanisms that seek to explain how this affects wellbeing. On the one hand, meritocracy appears to advocate equality of opportunity and hence boosting wellbeing. On the other hand, it accounts for inequalities in society and makes lower social positions look fair and justified. In this paper the aim was to answer the research question "How are meritocratic beliefs related to mental wellbeing, and to what extend does this relationship differ across different socio-economic groups and different contexts?"

Based on earlier research, it was hypothesised that a positive relationship between meritocratic beliefs and wellbeing does exist, but that this would be less strong for people in lower socioeconomic positions, for victims of discrimination such as females and ethnic minorities, and for people who live in highly unequal countries. In order to test these hypotheses, multiple linear regression analysis is used.

The results of this analysis show that a positive relationship between meritocratic beliefs and wellbeing indeed exists. What has also been found is that this relationship is stronger for people with a higher income, immigrants, the employed and people who live in more equal countries. All these results are in line with the earlier made hypotheses, except for educational level, gender and immigrants. For educational level and gender, no significant results could be found in the

regression model, although the results of the one-way ANOVA and the line graphs seem to indicate that a certain interacting effect might exist.

What can be considered as interesting contribution of this study is the disentanglement of socioeconomic status into two separate components, namely income and educational level. While income turns out to have a significant impact on the relationship between meritocratic beliefs and wellbeing, no association could be found for educational level. This might indicate something for the theories about socio-economic status that argued meritocratic beliefs can result in either selfesteem or self-blaming (Foster, Sloto & Ruby, 2006; Foster & Tsarfati, 2005; Jost & Hunyady, 2003; McCoy et al, 2013). It appears that especially the income component has a large effect on whether someone considers him- or herself to be successful. It could even be argued that for someone with high meritocratic beliefs, educational level could work as a burden when the income level is relatively low, since the financial success does not match the premises that a high educational level brings.

In this paper it turns out that gender does not have a significant impact on the relation between meritocratic beliefs and wellbeing. This is a surprising finding since it is contrary of what earlier literature argued. Moreover, the line graphs included in this paper also seemed to depict a certain effect. Therefore the rejection of the third hypothesis should not be considered as an argument that no association exists at all. What should be a point of attention is to critically evaluate the impact of gender and to be careful of drawing short-sighted conclusions.

While it was hypothesised that the relationship between meritocratic beliefs and wellbeing would be stronger for natives compared to immigrants, this turned out to be the other way around. A possible explanation for this could be that among the group of immigrants, those with high meritocratic beliefs hold the belief that they can achieve their goals, while at the same time those with low meritocratic beliefs feel like they are bounded by discrimination. For instance, Leo (2020) performed a qualitative study towards educational attitudes of immigrants and he found that some immigrant students were able to use optimistic views as motivation to overcome (racial) barriers.

Overall, it is showed that our different models are only able to explain a small proportion of variance on wellbeing scores. This means that wellbeing only for a very small part depends on meritocratic beliefs. However, the main focus point of this study was not explaining wellbeing

but analysing how the effect of meritocratic beliefs on wellbeing differs between people.

# 5.2 Discussion

In order to make this paper as useful as possible for future research, the last part of this paper will be a critical evaluation towards this research itself. As with all scientific investigations, this research contains some limitations on which will be elaborated below. First the potential shortcomings of this study will be addressed, and after that some possible pathways for future research will be mentioned.

For this paper I have used the EVS 2017 dataset. This dataset contains numerous questions about the variables used in this study, but nevertheless some of the concepts that are used in this study were not perfectly measured. To start with, because of the absence of a clear variable measuring wellbeing, a variable on feelings of control was used as a proxy. While earlier research proves that wellbeing is for a large part determined by feelings of control (Lachman & Weaver, 1998) these two are not the exact same. Moreover, the variable immigrant was used in this study, while the theoretical mechanism behind this is mainly about discrimination of ethnic minorities. However, using immigrant status as variable instead of ethnic background can be justified since immigrants very often have an ethnic identity that is distinct from the identity of native inhabitants (Balidemaj & Small, 2019). Moreover, research shows that immigrants have to cope with discrimination, even when they are part of the same ethnic group as individuals from the host-country (Kim & Noh, 2014; Krings, Johnston, Binggeli & Maggiori, 2014). Nevertheless, studying these relationships with more valid measurements for wellbeing and ethnic minorities is recommended for future research. Further studies can also aim on explaining why the direction of the interaction differs between for instance women and immigrants, which are both discriminated groups.

This paper has shown that in the area of meritocratic beliefs and wellbeing, earlier research does not always provide valid and reliable conclusions and that there still exist a lot of unclarities that need to be discovered. Moreover, it has become clear that further research can contribute to a broader understanding of the mechanisms at play and therefore it is important for researchers to continue focussing their interest on this topic in the future. In the context of a growing meritocratic society, the results of this study are very relevant and could be of use for policy makers who aim for protecting the wellbeing of groups who are negatively affected by the premise of meritocracy.

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