# The Contextual Effects of Culture on Status Anxiety in Europe

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# Abstract

The role of national cultural values in shaping individuals' status anxiety is so far underexplored. This thesis addresses this gap in the literature by examining the influence of two Hofstede national dimensions of culture (2001), power distance and individualism, on individual status anxiety. I proposed that countries characterized by higher individualism and larger power distance have higher levels of status anxiety and a steeper gradient in status anxiety across income ranks. In addition, I developed an opposing theoretical explanation about the effect of power distance on status anxiety. To test these hypotheses, I performed linear multilevel regression analysis using a sample of 31,886 individuals from 29 European countries taken from data of the European Quality of Life Survey 2016. According to the results, members of societies with larger power distance values tend to experience higher status anxiety. The empirical evidence did not support an effect of individualism, nor a cross-level interaction effect of cultural values and income rank on status anxiety. Overall, the findings emphasize the importance of considering the role of cultural conditions for understanding issues pertaining to social status and well-being.

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# Introduction

In their influential book "The Spirit Level" (SL), Wilkinson and Pickett (2010) have identified income inequality, before economic prosperity, as the main driver of disparities in indicators of health and social issues among affluent societies. The book highlights a wide range of factors that are negatively influenced by income inequality, including life expectancy, homicides, social trust, mental illnesses and drug addiction. Based on the theory, income inequality has implications for all members of society, but its effects are likely to intensify for individuals positioned lower on the social hierarchy (Wilkinson & Pickett, 2010, p. 42).

For all negatively affected areas of society, the authors propose the same underlying socialpsychological mechanisms. In an economically unequal society, the wide range of social disparities can lead to an increase in perceived differences among individuals on various indicators of social status (Wilkinson & Pickett, 2010, p. 43). Due to the greater social distance, individuals would experience a growing sense of detachment from their communities resulting in a deterioration of the quality of their social relationships (Wilkinson & Pickett, 2010, p. 51). Further, the frequent exposure to people of higher status in daily interactions would heighten people's sensitivity to social evaluative threats and increase the importance that they attribute to status characteristics. In research on SL-theory (e.g. Layte & Whelan, 2014; Delhey & Steckermeier, 2017), the feeling of inferiority and shame that results from unfavorable status comparisons with others has been termed status anxiety. According to Wilkinson and Pickett (2010), as a constant source of stress for people living in unequal societies, status anxiety represents the main mediator between income inequality and various undesirable societal outcomes. From a cross-sectional perspective, status anxiety has been found to be negatively associated with measures of health (Layte & Whelan, 2014) and happiness (Delhey & Dragolov, 2014; Delhey & Steckermeier, 2016), indicating the concept's relevance for the literature on health and well-being.

The overall picture of previous research on SL-theory suggests that evidence diverges depending on the methods that were employed (cross-sectional versus longitudinal). Studies based on cross-sectional designs predominantly confirm the association of income inequality with increases in social issues (Kondo et al., 2009; Layte, 2012; for contrary evidence view Pop et al. 2013), greater status concerns (Walasek & Brown, 2016; Schneider, 2019; for contrary evidence view Paskov et al. 2017), and higher levels of status anxiety (Layte & Whelan, 2014; Delhey & Steckermeier, 2017; Steckermeier & Delhey, 2019) - though the latter studies consistently do not find support for a steeper social gradient in status anxiety among more unequal societies. Longitudinal studies that have analyzed changes in income inequality over time, largely do not support the corrosive impact of inequality on societal outcomes as hypothesized by the SL (Shkolnikov et al. 2011; Hu et al., 2015; Delhey & Steckermeier, 2019; for contrary evidence view Neumayer & Plümper, 2016). Bartram's analysis (2022) suggests that increases in income inequality only causes higher status anxiety among lower earners, while for higher earners rising inequality might lower status anxiety. In the most comprehensive scrutiny of SL-theory to date, Delhey and Steckermeier (2019) identified economic prosperity rather than reducing income inequality to be most relevant in achieving societal improvements. According to their analysis, status anxiety at the individual level mediates the relationship between national wealth and country-level "social ills", while this is not the case for inequality. Based on these results, the scholars argue against the exclusive focus on inequality and call for exploring the potential role of cultural conditions in influencing societal outcomes (Delhey & Steckermeier, 2019).

The aim of this thesis is therefore to address this gap in the existing literature on the SL by investigating the research question of how national conditions of culture influence individual's status anxiety. Previous research provides initial support for the relationship between status anxiety and country-level measures of culture (Delhey & Steckermeier, 2017, Steckermeier & Delhey, 2019). Building on this evidence, I examine the role of two Hofstede dimensions of national culture (2001), *power distance* and *individualism*, in influencing the experience of status anxiety. Power distance refers to the extent to which members of a society expect and accept that power is distributed unequally (Hofstede, 2001, p. 98). The second cultural dimension of interest, individualism as opposed to collectivism, reflects the degree to which individuals are expected to be socially embedded (Hofstede, 2001, p. 225). In line with the Hofstede model, this thesis applies an understanding of culture as a collective phenomenon in terms of shared general values at the country level (Hofstede, 2011). I use a modified version of the conceptual framework for studying status anxiety by Delhey and Steckermeier (2017) to

derive this thesis' hypotheses. I empirically test them in the European context based on data from the European Quality of Life Survey (EQLS) 2016 by applying a multilevel analysis.

In what follows, I present the theoretical background, the conceptual framework, and introduce the Hofstede model of national culture. Next, I describe the data and methodology used in the empirical analysis. In the concluding chapters, I present the results, discuss and summarize the main findings of the analysis, and elaborate on this thesis' potential implications, limitations, and strengths.

# **Theoretical Background**

#### **Status Anxiety**

Wilkinson and Pickett describe the concept of status anxiety in terms of the negative psychological implications of occupying a low position within a status hierarchy:

'Higher status almost always carries connotations of being better, superior, more successful and more able. If you don't want to feel small, incapable, looked down on or inferior, it is not quite essential to avoid low social status, but the further up the social ladder you are, the easier it becomes to feel a sense of pride, dignity and self-confidence (Wilkinson & Pickett, 2010, p. 40).'

Accordingly, status anxiety can be understood as the feeling of inferiority and not counting much in the eyes of others that results from the perception of being negatively evaluated based on one's status characteristics. A key characteristic of status anxiety is thus, the social evaluative threat that its experience entails (Wilkinson & Pickett, 2010, p. 43). The concept of status anxiety is inherently relational and concerns an individual's current circumstances. In this sense, it is distinct from the fear of downward mobility which is mainly self- and future oriented (Delhey & Steckermeier, 2017). Further, *social comparison* processes play a crucial role within the SL framework by serving as the mechanism through which individuals obtain information regarding the comparative nature of their status characteristics:

'[F]urther up the social ladder...[s]ocial comparisons increasingly show you in a positive light – whether they are comparisons of wealth, education, job status, where you live, holidays or any other marker of success (Wilkinson & Pickett, 2010, p. 40).'

According to Festinger's classical theory (1954), social comparison is the act of referring to others for evaluating one's own abilities and opinions. In this context, people tend to select others as comparison standards based on their perceived relevance for self-evaluation purposes. Two key criteria for determining relevance are a person's perceived similarity and group membership, giving preference to similar persons and members of in-groups and otherwise perceived attractive groups (Festinger, 1954). Further, social comparison literature distinguishes between comparisons made among individuals (with a similar or different group membership) and comparisons made between one's own group and other groups (Hogg, 2000). Among these forms, in-group comparisons are considered to exert the strongest influence on self-evaluation and affective reactions (Major et al., 1993). Therefore, it can be expected that in the context of

status anxiety, social comparison processes between in-group members are of particular relevance.

The preceding direct quote also illustrates the SL-authors' broad concept of social status, encompassing any indicator of achievement or success within a given society. In classical sociological theory, status, besides resources and power, constitutes one of the three interrelated core dimensions of inequality (Weber, [1918] 1968). While strongly linked to one's socioeconomic position, status refers to the standing of an individual or group within a social hierarchy of respect, esteem, and influence (Ridgeway, 2014). The striving for status represents a fundamental human motive as it is pursued not only as a means to gain material benefits, but also for its inherent value (Huberman et al., 2004). Beliefs about the characteristics and social categories associated with status are based on widely shared cultural values that shape people's expectations at the social relational level (Ridgeway, 2014). Further, social status is commonly linked with perceptions of competence and worthiness, which contribute to legitimizing the socioeconomic positions occupied by privileged individuals and groups (Ridgeway, 2014).

The concept of status anxiety is closely related to the overarching human need for social recognition which has been adopted theoretically by various scholars across the social sciences (Adler, 1938; Bourdieu, 1979; Honneth, 1985; Brennan & Pettit, 2004). According to psychologist Alfred Adler, the feeling of inferiority is an inevitable part of human experience which originates early in life as a child recognizes its helplessness and dependence upon its social environment (Adler & Wolfe, 1927). The strive for overcoming inferiority and ultimately achieving recognition and superiority represents the main psychological driving force in Adlerian theory (Adler, 1956). Within sociology, the need for social recognition constitutes the basis for sociality and represents the key factor for motivating behavior at the individual and collective level. The fulfillment of individuals' needs for inter-subjective emotional and formal legal recognition is viewed as the premise for a functioning society (Honneth, 1992). The notion of recognition can also be found in the concept of symbolic capital in Bourdieu's Distinction (1984). While all types of capital (economic, social, cultural, and symbolic) are indicators of social status, symbolic capital is defined as a direct representation of an individual's prestige and honor. According to Bourdieu's cultural analysis, especially high-status groups influence the classification of cultural practices, tastes, and lifestyles as prestigious ones. By establishing one's own culture as superior to that of lower status groups, cultural distinctions are drawn, and

lower classes excluded from societal privileges. This process contributes to the formation of social and symbolic boundaries and the reproduction of inequality structures (Lamont & Molnár, 2002). A body of literature on status consumption corroborates the notion that status concerns can motivate consumption patterns both at the individual (Elliot, 2013; Kim & Jang, 2014) and collective level (Lamont & Molnár, 2001). Further, social status threats have been linked with violent (Bruce, 2007) and negative health behaviors (Wray et al., 2005). What differentiates the concept of status anxiety from related forms of social recognition in the literature is the added 'element of self-consciousness' about the evaluated situational status inferiority (Wilkinson & Pickett, 2010, p. 42; Delhey & Steckermeier, 2017). In accordance with previous research and the data used in the analysis, status anxiety in this thesis refers to the *'the feeling of not counting much in the eyes of others'*.

#### **Cultural Influences on Status Anxiety**

In the SL, Wilkinson and Pickett argue that income inequality leads to the development of various societal conditions favorable for experiencing status anxiety such as the "atomization" of societies (2010, p. 42). However, in doing so they only vaguely consider the influence of alternative contextual factors in promoting these conditions (except for national wealth). Thus, in the following, I discuss core elements of SL-theory with regards to their cultural variability. The purpose of this section is not to contest the mechanisms proposed in the SL. Instead, the aim is to emphasize the theoretical significance of cultural factors within the SL-framework, which have only been explored by a small number of scholars despite their potential value.

The SL-authors postulate that increases in income inequality would erode the *quality of social relations* (Wilkinson & Pickett, 2010, pp. 51-56). According to them, people would identify and empathize with others that are perceived as equals in terms of their position in the social hierarchy. As material gaps and thereby status differentials widen, people would feel increasingly disconnected from each other and less involved in community life. Steckermeier and Delhey (2019) argue that the quality of social relationships in a society is contingent on its cultural climate or *socio-cultural style*. An inegalitarian style reflected in more hierarchical structures and a stronger achievement-orientation would increase people's concerns for status

issues and thereby worsen the quality of relationships. Their empirical analysis corroborates this assumption as it suggests that people in countries with a less egalitarian style characterized by lower general social trust, less prevalent self-expression values, and stronger beliefs in blaming individuals for poverty, experience lower levels of status anxiety (Steckermeier & Delhey, 2019). Findings from Delhey et al. (2018) suggest that country-level correlates of social cohesion differ by region. While the study shows that income inequality in Europe is indeed negatively related to social cohesion, Asian countries with moderate levels of inequality scored higher in cohesion than ones with high or low income inequality. Overall, these insights imply that the effects of income inequality on the quality of social relations are not straightforward across national cultures but contextual on a variety of socio-cultural and economic conditions.

Furthermore, the concept of *status competition* plays an important role in SL-theory. Rising levels of income inequality would have led to an increase in status competition which in turn has heightened the perceived social-evaluative threat in social interactions. While status competition is considered universal across countries and cultures (Anderson et al., 2015), there is considerable cross-country variation regarding the extent to which a competitive cultural climate prevails on the one hand and the manifestations of status-related value systems and practices on the other hand (Hofstede, 2001). A study by Torelli et al. (2014) has shown that individuals from the US (high in individualism) associated competent behavior stronger with high status than individuals from Latin America (high in collectivism), while the latter group also perceived warm behavior as indicative of high status. These tendencies have strong implications for the way that people with different cultural orientations engage in status competition. The extent to which a society is divided into classes is another factor by which cultural conditions can affect status competition. Evidence from a study by Delhey and Steckermeier (2017), comparing European countries, suggests that the extent of class divisions in cultural consumption is associated with higher levels of status anxiety. According to them, conspicuous cultural consumption increases the visibility of inequalities and thereby the salience of status differentials. Therefore, a society with pronounced divisions in cultural consumption would have a more competitive style of social relations. The extent of status consumption in a country has been related to the concept of power distance. It has been shown that for people in high power distance countries, social status is associated with more status consumption and a higher self-esteem than for people in low power distance countries (Souiden et al., 2011). This could imply that the psychological consequences of being placed at the bottom of the social ladder are particularly harsh for people in high power distance countries.

Finally, as described previously, *social comparison processes* are a core element in the SL and for the experience of status anxiety. Evidence from the field of cultural psychology suggests that people's proclivity to engage in social comparison differs with regards to national cultural dimensions such as individualism (Lorenzi-Cioldi & Chatard, 2006; Baldwin & Mussweiler, 2018) and power distance (Glick, 2006; Désert & Leyens, 2006). Gibbons and colleagues (1995) have found that a sample of US-American adolescents reported a higher comparison orientation than a sample of Danish adolescents. According to the researchers, this finding can be partially attributed to the relatively higher achievement orientation in the US.

In the following section, I introduce this thesis' conceptual framework for studying status anxiety which is adopted in a modified way from Delhey and Steckermeier, 2017.

#### **Conceptual Framework**

This thesis uses a modified version of the conceptual framework for studying status anxiety by Delhey and Steckermeier (2017). Figure 1 depicts the complete framework, indicating elements of the empirical analysis in red and modifications of the adopted framework in blue. While only the influence of power distance and individualism at the macro level on status anxiety at the micro level is empirically analyzed, the framework functions as a theoretical guideline for the concepts' expected relationships.

A society's cultural conditions are defined as its predominant social meaning and value systems encompassing general values such as the two cultural dimensions of interest. Depending on these characteristics, societies differ in their collective relational patterns which are learned through socialization processes (Burkitt, 2014, pg. 5). Such relational patterns are also referred to as the *collective style of relationships* which can be characterized on a spectrum from *egalitarian* and *cooperative* to *inegalitarian* and *competitive* (Delhey & Steckermeier, 2017). It comprehensively shapes the social experiences in people's everyday lives, whether through *social interactions* with family members, friends, colleagues, and strangers, or by relating oneself to others through *social comparisons*.

#### Figure 1

Conceptual Framework



*Note.* This is a modified version of the conceptual framework in Delhey and Steckermeier (2017). Elements of the empirical analysis are indicated in red and modifications of the original framework in blue. Adapted from "Sociocultural inequalities and status anxiety: Redirecting the spirit level theory," by J. Delhey, C. Schneickert, and L. C. Steckermeier, 2017, *International Journal of Comparative Sociology*, 58(3), 215-240.

It is assumed that in countries with a more inegalitarian relationship style, a colder, more competitive cultural climate prevails. Such a climate would negatively affect the quality of social interactions, render social comparisons more *salient* and *frequent*, and thereby, exacerbate people's *experience of status anxiety*. Regarding the two main modifications of the framework in Delhey and Steckermeier (2017), I first introduce a more nuanced understanding of social comparisons through the differentiation of between-group and within-group comparisons, as well as upward and downward comparisons. These distinctions are important as depending on the specific type of comparison, implications for the experience of status anxiety might differ

significantly. The SL largely follows the logic that increases in the salience and frequency of social comparisons also result in increases in status anxiety (Wilkinson & Pickett, 2010, p. 40). In the following chapters on power distance and individualism, I argue that it is in particular the role of upward within-group comparisons that is most relevant for status anxiety. Further, I incorporate the role of social norms and beliefs in legitimizing status differences into the framework. A person's psychological reaction to the perception of large status differences between oneself and others might differ vastly depending on the extent to which hierarchical relations are viewed as the natural and just order within society. Thus, norms and beliefs that serve to legitimize perceived status differences are conceptualized as moderators of the degree to which social comparisons and interactions elicit feelings of status anxiety. These norms and beliefs are assumed to depend on a society's dominant style of relationships (Burkitt, 2014, p. 22). In the literature on relative deprivation theory, justice beliefs and perceptions of fairness represent the key predictors for people's affective reactions to comparative disadvantages (Smith et al., 2012). Research suggests that the assessment of justice or injustice is based on distributive and procedural elements (Folger, 1986). Distributive justice refers to the quantity or outcome that an individual receives in relation to the amount received by a reference person (Cropanzano & Randall, 1995). On the other hand, procedural justice concerns the process by which a decision is made, or an outcome is allocated (Cropanzano & Randall, 1995). Perceptions of distributive and procedural justice have been associated with alleviating emotional reactions to relative disadvantages (Cropanzano & Folger, 1989). Because of their potential role in the evaluation of status differences leading to experiences of status anxiety, both elements are incorporated into the framework.

In the forthcoming section, the Hofstede model of national culture is presented, encompassing the cultural dimensions investigated in this thesis.

#### The Hofstede Model of National Culture

The Hofstede model of national culture (2001) is an influential framework that classifies a total of 76 countries based on their population's dominant cultural values along six dimensions. In this thesis, I investigate the influence of the two most studied dimensions of the model, individualism and power distance, on status anxiety. These dimensions are conceptualized in a way that they are only applicable at the ecological level, thus, describing characteristics of

countries, rather than of individuals. This renders the model well-suited for this thesis' theoretical framework and SL-theory, by which status anxiety is described as being bred within a social environment shaped by a collective style of relationships.

In the next section, I discuss the dimensions of power distance and individualism with regard to their potential role in the outlined framework and formulate hypotheses about their influence on status anxiety.

### **Power Distance**

Power distance is considered to reflect a general cultural value that legitimizes social hierarchies and power differentials between groups and individuals (Glick, 2005). The acceptance or rejection of inequality is assumed to shape relationships throughout a society's social institutions. In high power distance countries, children are socialized to be obedient to authority figures, while in countries of low power distance, children's relationships with their parents and teachers are expected to be based on equal grounds (Hofstede, 2001, pp. 97-98). At the workplace, high power distance is associated with a preference for autocratic supervisors, whereas people in low power distance countries tend to prefer a more participative leadership style (Dorfman et al., 2012). Further, a country's level of power distance is indicative of the extent to which hard work is valued and leisure is tolerated (Hofstede, 2001, p. 107). Schwartz (1999) suggests that cultures that legitimize inequality also motivate people to dedicate themselves to their work as a means of pursuing wealth and power. Hence, countries higher on power distance would attribute more value to power and status and encourage behaviors for the attainment of such goals. Findings from an experimental study comparing samples from five countries (Hong Kong, Germany, Finland, Turkey, USA) suggests that people from cultures high in power distance engage more actively in status-seeking behavior and open display of status (Huberman et al., 2004). These results imply that status differentials are more salient in high power distance countries in which the open display of status is more tolerated and encouraged than in countries with lower power distance. The perception of status differences represents the basis for negative status comparisons and thus, for the experience of status anxiety.

Empirical evidence from a series of studies by Guimond and colleagues (2005; 2006) suggests that people in countries higher in power distance engage more often in inter-personal

comparisons and less often in between-gender comparisons. As mentioned previously, in the social-psychological literature, it is widely acknowledged that inter-personal, and particularly in-group comparisons, hold greater relevance for self-evaluations than inter-group comparisons (Blanton et al., 2000; Tyler & Smith, 1999). An experimental study conducted by Major and colleagues (1993) has shown that individuals who engaged in unfavorable in-group comparisons reported lower levels of self-esteem and increases in depressed affect, while similar comparisons with out-group members showed only little effect. Thus, the pronounced social comparison orientation (at the individual level) of people in large power distance societies points to the expectation of higher levels of status anxiety in such societies.

Results from Guimond et al. (2005; 2006) further indicate that between-gender comparisons in high (compared to low) power distance countries have a weaker influence on shaping people's gender-related aspects of the self-construal. This could be due to the tendency of members of high power distance societies to deem between-gender comparisons less appropriate and thus, less relevant for the evaluation of the self. This is in line with Glick (2005) who argues that inter-group comparisons pose a threat to the stability of hierarchically organized structures because of the resentment they cause for disadvantaged individuals. If, however, status and power differences are legitimized by social norms and hence, perceived to be equitable, unfavorable comparisons are less likely to cause a sense of deprivation. Concerning social comparisons at the individual level, a cross-national study of university students from 28 countries, has shown that the relationship between individual relative deprivation and perceived respect from other citizens is worse for participants from countries scoring lower in power distance (Smith et al., 2018). A meta-analytic review of research on the relationship between employee's justice perceptions (distributive and procedural) and work-related outcomes supports the notion that individuals of countries scoring higher in power distance react less strongly to experienced injustice (Shao et al., 2013). The presented evidence suggests that members of high (versus low) power distance cultures are in general less sensitive to comparative disadvantages, implying that they might also be inclined to experience less status anxiety.

Concluding this chapter, cultures high in power distance can be characterized by a distinctly hierarchical collective relationship style, a high salience of status differences and a tendency to frequently engage in inter-personal comparisons. This leads to the following hypothesis:

H1a: Countries with larger power distance have higher levels of status anxiety.

However, the literature also suggests that high power distance cultures legitimize status differences between groups and individuals. Hence, members of high power distance cultures might be less affected by negative comparisons despite their relatively strong tendency to engage in comparisons and value status characteristics. Therefore, I formulate a second hypothesis contrary to the preceding one:

H1b: Countries with larger power distance have lower levels of status anxiety.

#### Individualism (Versus Collectivism)

Individualism as opposed to collectivism is the most widely researched dimension of national culture by Hofstede (2011). Individualist societies can be characterized by loose interpersonal ties and social norms about attending only to oneself and one's immediate family (Hofstede, 2001, p. 225). In contrast, in collectivist societies, people are expected to be integrated into strong, cohesive in-groups to which they stay loyal throughout their lives (Hofstede, 2001, p. 225). While power distance values concern the vertical structure of relationships, individualism is considered to apply to aspects of horizontal relations between people (Hofstede, 2011). Based on the importance that individualist societies place on personal uniqueness, one could assume people from such cultures rather than collectivist ones to give weight to values of achievement and status as a means to differentiate oneself from others. While the literature overall supports this link (Hofstede, 2001, p. 227), insights from cross-country comparisons - particularly of Western (individualist and low in power distance) and East-Asian countries (collectivist and high in power distance) - can often not be traced back solely to differences in individualism because of the confounding role of power distance scores (Salili, 1996; Sagie et al., 1996). Hence, the literature on differences between collectivist and individualist societies in the importance placed on achievement and achievement-based status is inconclusive. Schwartz (1990) suggests that such differences are expected to be weak at most. The main distinction in this regard would rather concern the extent to which a person's achievement motivation reflects individual goals as opposed to goals of the in-group. Individualist societies are further characterized by universalist values which are associated with a normative imperative of treating

everyone equally (Hofstede, 2001, p. 244) and respecting other cultures (Hofstede, 2010, p. 99). On the other hand, in collectivist societies, particularist values are predominant by which the preferential treatment of in-group members is tolerated and encouraged (Hofstede, 2010, p. 99). Experimental evidence suggests that members of individualist societies generally apply equal rules for distributing rewards, while participants from collectivist countries favor in-group members over out-group others in reward allocations (Leung & Bond, 1984; Fiedler et al., 2018). Hence, within the in-group, members of collectivist societies could be expected to act more cooperatively and supportive towards each other than people from individualist countries (Kahnemann et al., 1999). Since a person's relevant comparison standards and most frequent social contacts are likely to be conceived to some extent as members of an in-group, the distinction of group membership may be of particular importance for studying status anxiety.

Markus' and Kitayama's (1991) concept of self-construals concerns culturally shaped beliefs of people about the self in relation to others. The independent self-construal which is more prevalent in individualist societies, refers to the view of oneself as an autonomous person whose behavior, thoughts and, feelings are organized independently from others (Markus & Kitayama, 1991). In contrast, the interdependent self-construal which is assumed to be predominant in collectivist societies, involves conceiving the self as fundamentally connected to others (Markus & Kitayama, 1991). In this sense, a person's experience is to a large part contingent on the perceived behavior, thoughts, and feelings of interdependent others. The concept of selfconstrual has important implications for the ways in which people refer to others as comparison standards. Research overall suggests that people from collectivist societies have the tendency to engage more frequently in social comparisons than ones from individualist societies (White & Lehman, 2005; Baldwin & Mussweiler, 2018). This may be due to the nature of the interdependent self which constantly requires comparative information of in-group members to be able to adjust to relevant social norms and roles (White & Lehman, 2005). While a higher frequency of social comparison is generally assumed to foster experiences of status anxiety (Wilkinson & Pickett, 2010), the literature on self-contruals indicates a more nuanced relationship. People with an interdependent self-construal are expected to perceive higher similarities between themselves and others as they emphasize a common group identity and shared features of in-group members (Gardner et al., 1999; Kühnen & Hannover, 2000). In contrast, the independent self aims for personal uniqueness and is therefore associated with

notions of dissimilarity with others. Evidence in a similar direction resulted from a study of cross-cultural differences in individualism (Kühnen, 1999, as cited in Kühnen & Hannover, 2000). Thus, these findings point to the perception of less status differences between people and relevant others in collectivist societies as compared to individualist ones. Furthermore, an experimental study by Kemmelmeier and Oyserman (2001) has found students with an interdependent self to report a more positive self-evaluation after engaging in social comparisons with a relevant other who performed better at a task. Students with a less interdependent self-construal evaluated themselves lower as a consequence of upward comparison. These findings could also be explained by the tendency of people with an interdependent self to share stronger group identities with relevant others. High status and achievements of in-group members would therefore reflect positively on themselves and enhance their own self-image (Kemmelmeyer & Oyserman, 2001). In contrast, for the independent self, success of others undermines one's sense of uniqueness and thereby threatens a person's self-esteem. Cheng and Lam (2007) have used primes manipulating self-construals of students to investigate effects of downward comparison. Consistent with the previous argument, people whose independent self was activated reported higher self-evaluations after comparing themselves to others with lower test scores. However, in the interdependency conditions of the experiment, people assessed themselves positively after upward and downward comparisons. Thus, the self-image of these participants was not affected by low performances of in-group others. This finding could stem from the observed ability of people with an interdependent self to selectively focus on either individual or group outcomes to protect or enhance one's self-esteem (McFarland & Buehler, 1995). Further, a cross-national metaanalysis investigating the relationship between national individualism and people's sensitivity to relative deprivation suggested that in more individualist societies, people are affected stronger by comparative disadvantages (Smith et al., 2018). According to the scholars, this could be explained by the particular emphasis of individualist cultures on agency and self-responsibility over one's outcomes (Garcia & Branscombe, 2006) compared to the tendency of collectivist cultures towards views of mutual responsibility (Smith et al., 2018). In addition, members of individualist societies would be more likely to judge unequal resource distributions as unfair if they are not reflective of differences in performance (Silva & Caetano, 2016). In contrast, members of collectivist societies would tend to view a wider range of distribution criteria

including relationships, tenure and social status as legitimate (Silva & Caetano, 2016; Smith et al., 2018). Based on the presented evidence, it is likely that people with an interdependent self - which is chronically activated in collectivist societies - are less threatened by social comparisons (especially upwards) with relevant others (White & Lehman, 2005).

Concluding this section, members of individualist societies compared to members of collectivist societies are overall more likely to perceive differences between themselves and others and to suffer stronger psychological consequences from unfavorable social comparisons. Thus, I formulate the following hypothesis:

H2: Countries that are more individualist have higher levels of status anxiety.

The formulated hypotheses about the direct effects of power distance and individualism on status anxiety are illustrated in Figure 2.

#### Figure 2





# Cultural Influence on the Social Gradient of Status Anxiety

As described in the SL, individuals occupying lower positions within the status hierarchy are more likely to experience status anxiety (Wilkinson & Pickett, 2010: p. 40). Moreover, SL-theory claims that income inequality exacerbates the negative psychological implications that a lower status entails (Wilkinson & Pickett, 2010: p. 24). In other words, the social gradient of status anxiety is assumed to be steeper the more unequal a society is. The available empirical evidence for this hypothesis is overall weak at best (Layte & Whelan, 2014; Delhey & Steckermeier, 2017). Similarly, research on the influence of cultural conditions on status anxiety has found no support for a gradient steepening effect of inegalitarian cultures (Steckermeier &

Delhey, 2019) and cultural class divisions (Delhey & Steckermeier, 2017). In contribution to this discussion, I explore a potential influence of power distance and individualism on the income gradient of status anxiety. The previously discussed mechanisms by which general cultural values influence status anxiety may be disproportionately negative for people at the lower rungs of society as they are more likely to perceive comparative disadvantages. For instance, in high power distance cultures as compared to low power distance cultures, low status individuals may feel particularly inferior as a consequence of negative comparisons because of the higher importance attributed to status characteristics. Likewise, relative to collectivist cultures, individualist cultures stress values of independence which renders people more likely to perceive greater differences between themselves and others. This tendency may especially foster status anxiety for lower status individuals who are more vulnerable to experiencing unfavorable comparisons. These considerations lead to the final two hypotheses of this thesis (Figure 3):

H3: Countries with larger power distance have a steeper gradient in status anxiety across income ranks.

H4: Countries that are more individualist have a steeper gradient in status anxiety across income ranks.

In the next chapter, I describe the data and methods applied in the empirical analyses of this thesis.

#### Figure 3





# **Data and Methods**

#### Data

Individual-level data on status anxiety, indicators of social status (household income, education, employment status), and control variables (gender and age) are taken from the fourth round (2016) of the European Quality of Life Survey (EQLS) by Eurofound (Ahrendt et al., 2018). It captures a wide range of attitudes regarding European citizens' living standards, encompassing areas such as quality of life, quality of public services, and social cohesion and participation. The EQLS 2016 covers about 37,000 individuals from 33 countries - the 27 EU member states and Albania, Montenegro, North Macedonia, Serbia, Turkey, and the UK. Across countries, sample sizes vary between 1000 cases in Latvia, Malta, and Montenegro and 2019 cases in Turkey (Table 1). In addition, the following country-level data is retrieved from different sources. Data on power distance and individualism comes from the data matrix on Hofstede's model of national culture provided on his website (Hofstede, 2015). The measure of income inequality in this thesis is the Gini index, sourced from Solt's Standardized World Income Inequality Database for 2016 (Solt, 2020). Finally, national wealth is operationalized as the Gross Domestic Product per capita (GDP p.c.), Purchasing Power Parity (PPP), taken for the year 2016 from the World Bank (2023). The complete data employed for the empirical analysis of this thesis consists of a multilevel structure, wherein individuals are clustered within countries.

#### **Final Sample**

Countries for which data on individualism and power distance were not available (Albania, Cyprus, North Macedonia, and Montenegro) were removed from the sample. Because Wilkinson and Pickett formulated their theory focusing on high-income countries, this thesis applied a threshold of an annual GDP p.c. (PPP) above 15,000 Int'l\$ for country affluence, aligning with prior research on the SL-framework (e.g. Delhey & Steckermeier, 2017; Steckermeier & Delhey, 2019). According to the World Bank (2023), all of the remaining 29 countries in the sample meet this criterion for 2016. Applying a threshold of 5% (Schafer, 1999), missing values of status anxiety (3%), education (<1%), and employment status (<1%) were treated by listwise deletion. For the missing values of income rank which was derived from the

data on household income (19%), multiple imputations were conducted (for more details see the section of income rank below). Thus, the final analysis sample consists of 31,788 respondents in 29 countries.

#### Table 1

Country	Sample	Status anxiety	Status anxiety	Power	Indivi-	Gini	GDP
~ .	size	(country-mean)	(country-mean) (country-sd) distance 2.23 0.92 53		dualism	index	p.c. (ppp)
Sample-mean	1166	2.23	0.92	53	57	30.6	39786.37
Sweden	1022	1.62	0.82	31	71	26.4	50430.25
Austria	1159	1.75	0.90	11	55	27.9	52684.02
Denmark	992	1.77	0.91	18	74	25.8	51976.01
Finland	1031	1.83	0.85	33	63	25.7	44934.45
Germany	1558	1.87	0.92	35	67	29.4	50579.68
Netherlands	972	1.98	0.86	38	80	27.3	52288.42
Spain	996	2.03	0.85	57	51	33.6	37286.21
Latvia	916	2.04	1.05	44	70	34.8	26721.73
Estonia	918	2.05	0.89	40	60	31.6	31312.75
Slovakia	975	2.11	0.86	104	52	23.5	29645.74
Hungary	996	2.15	1.05	46	80	27.8	27947.64
Slovenia	965	2.18	0.87	71	27	24.7	33936.04
Portugal	1048	2.20	0.86	63	27	32.7	31607.75
Luxembourg	981	2.25	0.99	40	60	29.3	113365.18
Malta	955	2.27	0.82	56	59	27.5	39887.10
Ireland	995	2.31	0.96	28	70	29.9	71498.60
France	1175	2.33	1.04	68	71	29.7	42924.61
Croatia	991	2.33	0.99	73	33	29.4	25210.98
Lithuania	977	2.34	0.91	42	60	36.1	30925.17
Italy	1975	2.37	0.90	50	76	33.8	39926.95
Czech Republic	996	2.38	0.82	57	58	24.9	36097.71
United Kingdom	1250	2.40	0.90	35	89	31.3	44635.30
Belgium	1005	2.45	0.90	65	75	26.3	48597.40
Greece	1086	2.47	0.96	60	35	32.6	27511.80
Poland	982	2.48	0.94	68	60	29.3	28322.11
Romania	959	2.49	1.02	90	30	33.4	24271.47
Serbia	1027	2.49	1.03	86	25	33.5	15858.10
Bulgaria	986	2.53	0.95	70	30	37.6	20074.38
Turkey	1998	2.71	0.93	66	37	40.1	26512.02

Country-Level Descriptive Statistics	, Ordered by Mean Status Anxiety
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Notes. Analysis has been performed on data with 19% missing values on income rank

# Measures

#### Individual-Level Variables

#### Table 2

#### Description of Individual-Level Variables

Variable	Original item formulation	Transformation	Variable values	Mean	Standard deviation
Status anxiety	To what extent do you agree or disagree with the following statements?	Unweighted Index of the two items, scale was reversed	<ul> <li>(1) Strongly agree</li> <li>(2) Agree</li> <li>(3) Neither agree nor disagree</li> </ul>	2.23	0.96
	(1) 'I feel that the value of what I do is not recognized by others'		<ul><li>(4) Disagree</li><li>(5) Strongly disagree</li></ul>		
	(2) 'Some people look down on me because of my job situation or income'				
Income rank	Please can you tell me how much your household's net income per month is? If you don't know the exact figure, please give an estimate.	Respondent's position within the income distribution of a country in percentiles	1 <sup>st</sup> to 100 <sup>th</sup> percentile	50.17	28.82
Education level	What is the highest level of education you completed?	Aggregated into three categories	<ul><li>(1) lower secondary and below</li><li>(2) upper secondary or post-secondary</li><li>(3) tertiary</li></ul>	1.98	0.75
Employment status	Which of these categories best describes your situation?	Aggregated into binary variable	<ul><li>(1) unemployed</li><li>(2) employed</li><li>(Including paid leave)</li></ul>	0.51	0.5
Age	What was your age last birthday?	Aggregated into three categories	<ul> <li>(1) 18-34 years</li> <li>(2) 35-64 years</li> <li>(3) over 65 years</li> </ul>	2.04	0.68
Gender	Gender of respondent coded by interviewer	-	(0) male (1) female	0.56	0.5

Notes. Analysis has been performed on data with 19% missing values on income rank

#### **Status Anxiety**

Status anxiety represents the dependent variable in the analysis. In line with previous research (e.g. Layte and Whelan, 2014; Delhey & Steckermeier, 2017; Steckermeier & Delhey, 2019), in this thesis it is operationalized by two items from the EQLS 2016 (Table 2): (1) 'I feel that the value of what I do is not recognized by others' and (2) 'Some people look down on me because of my job situation or income'. The response categories ranged on a scale from one (strongly

agree) to five (strongly disagree). Both items reflect the subjective feeling of being negatively evaluated by others based on indicators of social status. In this sense, they capture the notion of inferiority in experiencing status anxiety as it is described in the SL (Wilkinson & Pickett, 2010, p. 40). The scales of both items have been reversed so that higher values correspond with higher levels of status anxiety. The Pearson's correlation coefficient between the two items is 0.51. Based on their high statistical association, the two items have been combined by creating an unweighted additive index (Table 3). Within the sample, average levels of status anxiety are lowest in Sweden (1.62) and highest in Turkey (2.71).

#### Table 3

Status Anxiety Scale Statistics

Sample size	Mean	Standard Deviation	Pearson's Correlation	Cronbach's Alpha		Items
35,936	2.26	0.97	0.51	0.68	(1)	'I feel that the value of what I do is not recognized by others'
					(2)	'Some people look down on me because of my job situation or income'

Notes. Analysis has been performed on data with 19% missing values on income rank

#### Social status

The EQLS provides data on respondent's household income (equivalized by household size) in purchasing power parity (Table 2). Household income was transformed into another variable indicating respondent's position within the income distribution of a respective country as percentiles, ranging from one to 100. Following similar approaches of previous research (e.g. Layte & Whelan, 2014; Delhey & Steckermeier, 2017), this variable on respondent's income rank is the operationalization of social status in this thesis. Using a relative instead of an absolute status measure is consistent with SL-theory by which people's position within a status hierarchy is most relevant for the experience of status anxiety.

Prior research has shown that individuals who are unemployed and have lower education levels are at higher risk of experiencing status anxiety (Delhey & Steckermeier, 2017). For these reasons, education level (lower secondary and below [reference], higher secondary, and tertiary) and employment status (employed and unemployed [reference]) represent additional status measures in the analysis.

#### **Other Individual-Level Variables**

In addition, research suggests that men (Alba et al., 2014) and individuals in young adulthood (Jin et al., 2011) are more status-oriented than women and people at older ages. Hence, gender (men as reference) and age (18-34 [reference], 35-64, and over 65 years) are included into the analysis as control variables.

#### **Country-Level Variables**

The small number of macro-level groups in the sample (29 countries) does not provide sufficient power to produce accurate estimates for complex between-level models (Meuleman & Billiet, 2009; Bryan & Jenkins, 2015). For that reason, I limit the macro-level predictors in the analysis models to the variables essential to this thesis' hypotheses (cultural dimensions and cross-level interactions). Hence, the country-level variables GDP and Gini index are only investigated within sensitivity analyses.

#### Table 4

Variable	Data source	Potential value range	Mean	Standard deviation
Power distance	Hofstede's Dimension data matrix (2015)	0-100 (low to high power distance; some scores from replication studies fall outside this range)	53.28	21.54
Individualism	Hofstede's Dimension data matrix (2015)	0-100 (collectivist to individualist)	56.72	18.67
Gini index	Standardized World Income Inequality Database (Solt, 2020)	0 (perfect equality: everyone earns the same) to 1 (perfect inequality: one person earns everything)	30.20	4.11
Gross Domestic Product per capita (GDP p.c.), Purchasing Power Parity (PPP)	World Bank (2023)	Varies globally from below 1000 Int'l\$ to over 100,000 Int'l\$	39895.50	18722.85

#### Description of Country-Level Variables

Notes. Analysis has been performed on data with 19% missing values on income rank

#### **Power Distance and Individualism**

Hofstede's cultural dimensions generally range from values of 0 to 100 (Table 4). Within the sample, Austria (11) and Denmark (18) score the lowest on power distance, while Slovakia (104), Romania (90), and Serbia (86) are the countries with the highest scores. With regards to

individualism, Serbia (25), Slovenia (27), and Portugal (27) are the most collectivist countries in the sample with the UK (89), the Netherlands (80), and Hungary (80) representing the most individualist ones.

#### National Wealth p.c. and Natioal Income inequality

Across all countries in the sample, GDP p.c. (PPP) varies from 15,858 Int'l\$ for Serbia to 113,365 Int'l\$ for Luxembourg. Income inequality in the sample ranges from Turkey, the most unequal country with a Gini index of 40.1 to Slovakia, the most equal country with a Gini index of 23.5.

In the next section, the methodology of this thesis' empirical analysis is explained.

# Methodology

#### **General Methodology**

In the first phase of the analysis, a descriptive overview of the sample's characteristics is obtained, focusing on status anxiety and key macro-level variables. In addition, Pearson's correlation coefficients are computed for the country-means of status anxiety and all country-level variables in the analysis models. Following recommendations by Hardt et al. (2013), the descriptive part of the analysis is executed on the data prior to conducting multiple imputations while reporting the number of missing values for income rank.

The main analysis involves estimating a series of linear multilevel regression models (Bosker & Snijders, 2011) that build incrementally. Unlike standard multivariate regression models, multilevel models account for the clustering of data with a hierarchical structure, resulting in more accurate predictions of model parameters. Multilevel models allow for the estimation of a fixed (regression coefficients) and a random part (variance components), differentiating between within- and between-group effects. Consistent with standard practice in multilevel analysis (Hox, 1998), all statistical models in this thesis are estimated using maximum likelihood procedures. In order to assess the potential bias resulting from neglecting the multilevel nature of the data, the intra-class correlation (ICC) is computed for each model (Muthén, 1994). It ranges from 0 to 1, with higher values indicating greater proportions of group-level variance. While most multilevel studies typically report an ICC between 0.1 and 0.3

(Maas & Hox, 2004), it is important to recognize that ICC values as low as 0.01 can lead to significant Type 1 errors if the clustering of the data is disregarded (Hox & Kreft, 1994). The fit statistics used for model comparison were the Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC; Burnham & Anderson, 2004). AIC and BIC reward goodness of fit and parsimony, including a penalty that increases with the number of estimated parameters. For both statistics, lower values correspond with a better fit of the model.

To investigate the missingness type of the income variable (19%) a series of t-tests and chisquared tests have been conducted, indicating significant differences between individuals with observed and missing values in income across all analyzed variables, except for gender. Hence, based on the assumption that the missing values in income (19%) were missing at random, multiple imputation by predictive mean matching (PMM) was performed in Stata. PMM is an imputation method that has shown to produce robust estimates for non-normally distributed continuous data (Morris et al., 2014; Lee & Carlin, 2017) such as income rank. Following recommendations of classical PMM approaches, for each missing value five imputations *m* have been created (Rubin, 1987) using five potential donors k (Heitjan & Little, 1991). To ensure consistency between imputation and analysis, all individual-level variables in the analyses models have been added into the imputation model. Further, two variables that resulted from multiplying income rank with power distance and individualism respectively were included into the imputation model as dependent variables to account for cross-level interactions that are investigated in the analyses. Finally, in consideration of the multilevel structure of the data, the macro-level identifier 'country' has been added to the imputation model as a factor variable (StataCorp, 2022).

#### Statistical Models

The multilevel analysis involves an estimation of 8 nested models in total. At first, a baseline model is estimated to determine the initial amount of country-level variance in status anxiety. Model 1 incorporates the associations of the individual-level status and control variables with the dependent variable. Given the emphasis of this thesis on macro-level predictors of status anxiety, all level-1 variables are simultaneously included for the sake of parsimony. In model 2, a random effect of income rank is added as the variable's impact on status anxiety is theoretically expected to vary across countries. Models 3 and 4 investigate the individual direct effects of

power distance (H1a – Higher levels of power distance are associated with higher levels of status anxiety; H1b is contrary to H1a) and individualism (H2 – Higher levels of individualism are associated with higher levels of status anxiety), respectively, while controlling for level-1 predictors. In model 5, the effects of both cultural dimensions are examined simultaneously. In the final step, models 6 and 7 introduce cross-level interactions, one at a time, between income rank and power distance (H3 – Countries with larger power distance have a steeper income gradient in status anxiety), and income rank and individualism (H4 – More individualist countries have a steeper income gradient in status anxiety), respectively.

Following, the results of the analysis are presented.

# Results

#### **Descriptive Analysis**

The sample-mean in status anxiety is 2.23, indicating that the average European disagrees with the two survey statements related to the concept (Table 1). The standard deviation of status anxiety varies from 0.82 in Sweden and the Czech Republic to 1.05 in Latvia, averaging at 0.92 over the whole sample. Further, the sample on average can be characterized by moderate levels of power distance (52.97) and individualism (57.08) and a Gini index of 30.60 which, according to UNICEF (2023), corresponds with a relatively reasonable income gap.

#### Table 5

Variables	(1)	(2)	(3)	(4)	(5)
(1) Status anxiety (country-mean)	1.00				
(2) Power distance	0.61***	1.00			
	(0.00)				
(3) Individualism	-0.37**	-0.61***	1.00		
	(0.05)	(0.00)			
(4) GDP p.c. (ppp)	-0.31*	-0.54***	0.44**	1.00	
	(0.10)	(0.00)	(0.02)		
(5) Gini index	0.52***	0.14	-0.33*	-0.33*	1.00
	(0.00)	(0.47)	(0.08)	(0.08)	

Pairwise Pearson's Correlations of Country-Level Variables

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

*Notes.* N = 29 for all correlations. P-values in brackets. Analysis has been performed on data with 19% missing values on income rank

At a significance level of  $\alpha$ =0.05, the Pearson's correlation analysis displayed in Table 5, reveals that status anxiety at the country-level is significantly and moderately positively correlated with power distance (*r*=.61), and significantly and weakly negatively correlated with individualism (*r*=-.37). From a descriptive perspective, the results offer preliminary backing for H1a, which proposes a positive correlation between status anxiety and power distance. They contradict the expectations outlined in H1b, which posits a negative correlation between these variables, as well as in H2, which predicts a positive correlation between status anxiety and individualism. Further, national status anxiety is weakly negatively and not significantly correlated with GDP p.c. (r=-.32) and significantly, moderately positively correlated with the Gini index (r=.52). Finally, individualism and power distance are significantly and moderately negatively correlated with each other (r=-.61).

#### Figure 4

Countries by Power Distance and Individualism



Indicated by the statistical association of the two dimensions, most countries in the sample fall into one of three categories (Figure 4): (1) high power distance collectivist countries, (2) low power distance individualist countries, and (3) countries that exhibit moderate levels of power distance and individualism. This pattern regarding power distance and individualism is not a peculiarity following from the selection of countries in this sample, but rather reflects the general cross-regional relationship between the dimensions (Hofstede, 2001, p. 216). According to Hofstede (2001, p. 216), the uniqueness of both dimensions is still evident due to their conceptual differences and the existence of several countries that don't follow the dominant pattern. In the case of the European sample in this thesis, there are a few countries that stand out. The two most prominent outliers are Slovakia (very high power distance [104] and moderately individualist [52]) and Austria (very low power distance [11] and moderately

individualist [55]). Further, France and Belgium can also be considered exceptions as they are characterized by high scores on both power distance and individualism. Hofstede's (2001, p. 216) most crucial argument for keeping the dimensions separate follows from the considerable size of both of their associations with national wealth (power distance: r=-54; individualism: r=-.37). In this sample, after controlling for GDP p.c., the statistical association between the two dimensions shrinks to a partial correlation coefficient of r=-0.49 (p=.004;  $\alpha$ =0.05). While the relationship between the dimensions is still evident, this demonstrates the importance of controlling for indicators of national wealth in analyses including both power distance and individualism.

# The effects of individual-level variables

### Table 6

Multilevel Linear Regression Models for Individual Status Anxiety

	(1)		(2)	(2) (3)			(4)	
	Model	0	Model	1	Model	2	Model	3
	β	SE	β	SE	β	SE	β	SE
Fixed components								
Income rank <sup>a</sup>			-0.0042***	0.00	-0.0043***	0.00	-0.0043***	0.00
Upper secondary <sup>a</sup>			-0.1572***	0.01	-0.1569***	0.01	-0.1565***	0.01
Tertiary <sup>a</sup>			-0.2821***	0.02	-0.2813***	0.02	-0.2807***	0.02
Employed <sup>b</sup>			-0.0667***	0.01	-0.0637***	0.01	-0.0637***	0.01
35-64 years <sup>c</sup>			-0.0104	0.01	-0.0058	0.01	-0.006	0.01
Above 65 years <sup>c</sup>			-0.2460***	0.02	-0.2431***	0.02	-0.2431***	0.02
Female <sup>d</sup>			-0.0169	0.01	-0.0176	0.01	-0.0176	0.01
Power distance							0.0061***	0.00
Individualism								
PD x income rank								
IDV x income rank								
Constant	2.2130***	0.05	2.6829***	0.05	2.6827***	0.05	2.3577***	0.11
Random components								
Variance Level-2	0.0695		0.0616		0.0581		0.0414	
Variance Level-1	0.8538		0.8163		0.8139		0.8139	
Model statistics								
ICC	0.0753		0.0701		0.0666		0.0484	
AIC	27599.62		24562.42		24550.43		24545.52	
BIC	27620.57		24631.89		24625.73		24628.88	
Observations	31886		31886		31886		31886	
Groups	29		29		29		29	
Imputations	5		5		5		5	

#### Table 6 (continued)

	(5)		(6)		(7)		(8)	
	Model	4	Model	5	Model	6	Model	7
	β	SE	β	SE	β	SE	β	SE
Fixed components								
Income rank <sup>a</sup>	-0.0043***	0.00	-0.0043***	0.00	-0.0053***	0.00	-0.0021*	0.00
Upper secondary <sup>a</sup>	-0.1569***	0.01	-0.1565***	0.01	-0.1571***	0.01	-0.1577***	0.01
Tertiary <sup>a</sup>	-0.2812***	0.02	-0.2806***	0.02	-0.2807***	0.02	-0.2810***	0.02
Employed <sup>b</sup>	-0.0637***	0.01	-0.0637***	0.01	-0.0635***	0.01	-0.0633***	0.01
35-64 years <sup>c</sup>	-0.0059	0.01	-0.006	0.01	-0.0054	0.01	-0.0051	0.01
Above 65 years <sup>c</sup>	-0.2430***	0.02	-0.2431***	0.02	-0.2424***	0.02	-0.2418***	0.02
Female <sup>d</sup>	-0.0176	0.01	-0.0176	0.01	-0.0177	0.01	-0.0179	0.01
Power distance			0.0069**	0.00	0.0057**	0.00		
Individualism	-0.0034	0.00	0.0015	0.00			-0.0027	0.00
PD x income rank					0.0000	0.00		
IDV x income rank							-0.0000*	0.00
Constant	2.8730***	0.14	2.2345***	0.25	2.3760***	0.11	2.8360***	0.15
Random components								
Variance Level-2	0.0543		0.041		0.0415		0.0543	
Variance Level-1	0.8139		0.8139		0.8139		0.8139	
Model statistics								
ICC	0.0626		0.0479		0.0485		0.0626	
AIC	24551.58		24545.8		24546.9		24552.35	
BIC	24633.82		24633.88		24637.21		24641.54	
Observations	31886		31886		31886		31886	
Groups	29		29		29		29	
Imputations	5		5		5		5	

Multilevel Linear Regression Models for Individual Status Anxiety

<sup>a</sup> reference category (rc): lower secondary education and below <sup>b</sup> rc: unemployed <sup>c</sup> rc: 18-34 years <sup>d</sup> rc: male \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

The ICC which corresponds with the empty model indicates that about 7.5% of the total variance in status anxiety can be attributed to the country level (Table 6). While the primary source of variance lies at the individual level, this result justifies the usage of multilevel modeling to account for the existing between-country variance (Hox & Kreft, 1994). In the next step, status anxiety is regressed on all individual-level predictors of the analysis in model 1. The effect of income rank on status anxiety is negative and highly significant ( $\beta$ =-.0042, p<.001), indicating that a 1% rise within a society's income hierarchy corresponds with a decrease on the status anxiety scale by 0.004. Further, education and employment status exhibit significant negative effects on status anxiety, implying that higher educated and employed individuals experience less status anxiety. The effect of being a woman as compared to a man is negative and non-significant, while age does only significantly relieve status anxiety for the group of over 65-year-olds as compared to individuals below the age of 35. In model 2, a random effect for income rank is added. The improvement in model fit and decrease in ICC as compared to model 1 suggest that the effect of income rank on status anxiety varies across countries.

#### The direct effects of power distance and individualism

The effect of power distance, which is included into the analysis in model 3 (Table 6), on status anxiety is significant and positive ( $\beta$ =.0061, *p*=.001). This result provides support for the expectations formulated in H1a that members of higher power distance societies experience more status anxiety. Model 4 estimates the effect of individualism without the inclusion of power distance. In this model, the effect of individualism on status anxiety is negative and non-significant ( $\beta$ =-.0034, *p*=.165). In addition, no substantial improvement of model fit can be observed as compared to model 2. Consequentially, H2 is rejected, which posits that members of more individualist societies experience higher levels of status anxiety. In the next step, both national cultural dimensions are added (model 5). The effect of individualism remains non-significant in this model, it is now positively directed. The findings from model 5 increase confidence in the conclusions drawn from the previous models regarding the cultural dimensions' effects on status anxiety.

#### The cross-level interaction effects

Model 6 estimates the effects of power distance directly and in interaction with income rank on status anxiety. The interaction effect is positive, but non-significant ( $\beta$ =.0000, p=.160), while the direct effect of power distance stays significant and positive, although weaker as compared to model 3. This leads to a rejection of H3 about a steeper gradient in status anxiety across income ranks in higher power distance countries. Finally, model 7 investigates the direct effect of individualism and its interaction effect with income rank on status anxiety. While the

interaction effect in this case is significant and negative ( $\beta$ =-.0000, p=.017), the direct effect of individualism is non-significant and negative. Consequentially, a steeper income gradient in status anxiety in more individualist societies is not supported by the analysis and H4 is rejected. This conclusion is overall also supported by the fit statistics which indicate a deterioration of the model fit after the inclusion of the interaction effects in the respective models.

In the final chapter, a summary of this thesis and a discussion of the main findings follow.

# Summary and discussion

The primary objective of this thesis was to investigate the research question of how two national cultural value dimensions, power distance and individualism, shape individuals' experience of status anxiety. This thesis contributes to the existing literature of SL-theory (Wilkinson & Pickett, 2010) and health in general by addressing the gap regarding the role of cultural conditions as an alternative contextual factor besides income inequality in influencing status anxiety. In order to explore the effect of power distance on status anxiety, I developed and tested two opposing theoretical explanations. Given the hierarchical nature of social relationships in countries with high power distance, I expected that members of countries with larger power distance would experience heightened levels of status anxiety. In contrast, I hypothesized that the presence of social norms legitimizing status inequality in high power distance countries would result in individuals being more content with their position and thus, experiencing less status anxiety. Regarding individualism, I anticipated that the tendency of people in more individualist societies to perceive greater differences among themselves and suffer stronger psychological consequences from unfavorable social comparisons would lead them to be more prone to experiencing status anxiety. Moreover, I expected that in countries that are characterized by a higher degree of individualism and power distance, the social gradient in status anxiety would be steeper across income ranks. To test these hypotheses, I examined crosssectional data of the European Quality of Live Survey (2016) with over 30,000 individuals from 29 European countries by nested linear multilevel regression analysis.

The findings demonstrated that members of countries characterized by larger power distance reported higher levels of status anxiety, in line with H1a. With regards to individualism, no significant association with status anxiety was found which led to the rejection of H2. Further, the analysis provided no support for a moderating effect of cultural dimensions on income gradients of status anxiety (H3 and H4). Although the interaction term between individualism and income rank yielded a significant result, it could not be meaningfully interpreted due to the non-significance of the main effect of individualism in the same model.

The analysis has been conducted with data imputed by predictive mean matching. The main conclusions drawn from the analysis results have shown to be robust over alternative approaches of handling missing values such as listwise deletion and conducting the analysis excluding the

income rank variable. This is a strong indication that the chosen multiple imputation approach yielded reasonable results. For the regression outputs of the sensitivity analysis, please refer to the appendix.

Following the argumentation of this thesis, the finding that national power distance facilitates status anxiety suggests that the implications of a hierarchical relationship style, involving a strong emphasis on status and frequent social comparisons, outweigh the contrary effects of normative legitimization of people's status. This may suggest that hierarchical conditions, whether in the form of value systems or structural conditions, make individuals worry more about their positions within a status hierarchy, rather than fostering contentment with their place in society. This is in line with research indicating a negative effect of national power distance on average country-levels of subjective well-being (Steel et al., 2018). Because status anxiety is associated with chronic stress (Wilkinson & Pickett, 2010), leading to detrimental effects for an individual's health (Layte & Whelan, 2014) and well-being (Delhey & Dragolov, 2014; Delhey & Steckermeier, 2016), it is important to promote environments that mitigate people's likelihood of experiencing status anxiety. In general, such environments should cultivate inclusivity, for instance by providing opportunities for individuals to participate in decision-making processes. Moreover, following from the results, it is crucial, particularly in societies characterized by high power distance, for institutions to ensure sufficient access to mental health services, including stress management programs (Van der Hek & Plomp, 1997), counseling services (McLeod, 2010), and peer support networks (Repper & Carter, 2011).

The findings further strengthen the link between status anxiety and country-level characteristics associated with social stratification and hierarchy, as supported by prior research such as in the cases of income inequality (Wilkinson & Pickett, 2010), cultural class divisions (Delhey & Steckermeier, 2017), and inegalitarian values (Steckermeier & Delhey, 2019). It is worth noting that individualism and national wealth, which do not involve this notion of hierarchy, were not found to be significantly associated with status anxiety. While one might infer that hierarchical characteristics are a fundamental shared aspect of societal conditions that foster status anxiety, the statistical analysis suggests that the effects of income inequality and power distance are largely distinct from each other: First, among the countries in the sample, more economically unequal countries did not significantly score higher in power distance (Table 5). Second, results of the sensitivity analysis indicate that the effect sizes of both income inequality and power

distance on status anxiety are only attenuated by less than 1% when the other variable is included (Table 9 [Appendix]). Therefore, to fully understand the micro-level mechanisms underlying the influence of country-level factors on status anxiety, it is imperative to conduct research that explicitly examines and tests these mechanisms.

In addition to the presented empirical findings, this thesis also contributes theoretically to the SL-framework (Wilkinson & Pickett, 2010, Delhey & Steckermeier, 2017) and research on status concerns and well-being by refining our understanding of macro- and micro-level mechanisms that may lead to status anxiety. This entails a more nuanced consideration of social comparison processes, emphasizing the significance of within-group comparisons when studying status anxiety. This notion was supported by the empirical analysis indicating increased levels of status anxiety in high power distance countries, which are characterized by high withingroup, but low between-group comparison orientations (Guimond et al., 2005). Moreover, the role of status legitimizing social norms and beliefs was introduced, arguing that the perception of status differences may only lead to status anxiety if this difference is also recognized to be inadequate. While this expectation, formulated in the hypothesis that status anxiety is less prevalent in high power distance countries, was rejected based on the analysis results, further exploration of this theoretical relationship may be a fruitful avenue for future research.

I will now turn to the limitations of the present research. Given that the empirical analysis was performed using data from a European sample, the conclusions drawn from it are only representative of the European context. This European focus likely has implications for the range and variance of national power distance and individualism considered in the analysis. This is especially the case for individualism, as the sample lacks highly collectivist countries (most collectivist country is Serbia with a score of 25) and overrepresents more individualist ones. Comparing descriptive statistics of the country selection in this thesis to a sample of all countries with available data on individualism further demonstrates this European bias: Countries in the sample of this thesis score on average substantially higher in individualism ( $\Delta \bar{x}$ =11.55) and vary less around the mean ( $\Delta s_x$ =-5.30) than the global sample (Hofstede, 2015). Therefore, similar analyses should be repeated based on more diverse country selections to explore, for instance, how people in highly collectivist countries experience status anxiety.

This thesis has utilized Hofstede's (2001) cultural model, which application is restricted to the national level. However, this comes with the significant drawback of disregarding any withincountry cultural variation. It is expected that individual-level attitudes and behaviors can be predicted more accurately by value orientations measured at the same level (Lenartowicz & Roth, 2001). Thus, it is recommended that future research employs alternative cultural models that utilize micro-level measures such as Schwartz' theory of basic human values (2012) or recently developed individual-level scales of Hofstede values (Yoo et al., 2011).

Moreover, due to their theoretical overlaps with status anxiety, investigating the influence of Hofstede values not addressed within the scope of this thesis may contribute valuable insights to the field. This particularly concerns the construct of uncertainty avoidance, which exhibits a strong association with neuroticism, a personality trait linked to the experience of negative emotions. Additionally, it encompasses masculinity versus femininity, a value dimension that encompasses hierarchical gender relations, as well as indulgence versus restraint, which encompasses work and achievement values (Hofstede, 2001).

Notwithstanding these limitations, this thesis presents, to my knowledge, the first analysis of the influence of individualism and power distance on status anxiety. The results particularly highlight power distance as a contextual factor associated with heightened levels of status anxiety. Therefore, it represents a valuable theoretical and empirical advancement to the existing body of knowledge. Overall, the findings of this thesis provide additional evidence that besides income inequality, cultural conditions are important country-level factors facilitating and mitigating status anxiety. As such, the results align with prior research on the relationship between culture and status anxiety (Delhey & Steckermeier, 2017; Steckermeier & Delhey, 2019; Steckermeier & Delhey, 2020) and underscore the significance of exploring a broad range of macro-level factors to comprehensively understand societal issues regarding health and wellbeing.

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# Appendix

# Sensitivity analysis

### Missing Value Analysis

#### Table 7

Multilevel Linear Regression Models for Individual Status Anxiety, Income Rank Excluded as Predictor Variable

	(1)	(1) (2)		(3)	(3)			(5)		
	Mode	10	Model 1		Mode	12	Mode	13	Mode	14
	β	SE	β	SE	β	SE	β	SE	β	SE
Fixed										
Components Upper secondarv <sup>a</sup>			-0.1978***	0.01	-0.1976***	0.01	-0.1978***	0.01	-0.1976***	0.01
Tertiarya			-0.3758***	0.01	-0.3751***	0.01	-0.3756***	0.01	-0.3751***	0.01
35-64 years <sup>b</sup>			-0.0202	0.01	-0.0203	0.01	-0.0202	0.01	-0.0203	0.01
Above 65 years <sup>b</sup>			-0.2765***	0.02	-0.2764***	0.02	-0.2764***	0.02	-0.2764***	0.02
Female <sup>c</sup>			-0.0035	0.01	-0.0036	0.01	-0.0036	0.01	-0.0036	0.01
Employed <sup>d</sup>			-0.1338***	0.01	-0.1337***	0.01	-0.1337***	0.01	-0.1337***	0.01
Power distanc					0.0064***	0.00			0.0065**	0.00
Individualism							-0.0045	0.00	0.0000	0.00
Constant	2.2130***	0.05	2.5566***	0.05	2.2129***	0.10	2.8121***	0.14	2.2108***	0.24
Random components										
Variance Level-2	0.0695		0.0587		0.0401		0.0518		0.0401	
Variance Level-1	0.8538		0.8283		0.8283		0.8283		0.8283	
Model statistics										
ICC	0.0753		0.0661		0.0461		0.0589		0.0461	
AIC	85585.48		84626.41		84617.53		84624.87		84619.53	
BIC	85610.58		84701.74		84701.23		84708.57		84711.6	
Observations	31886		31886		31886		31886		31886	
Groups	29		29		29		29		29	

<sup>a</sup> reference category (rc): lower secondary education and below <sup>b</sup> rc: 18-34 years <sup>c</sup> rc: male <sup>d</sup> rc: unemployed \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

# Table 8

Multilevel Linear Regression Models for Individual Status Anxiety, Missing Values of Income Rank Treated by Listwise Deletion

	(1)		(2)		(3)		(4)	
	Model 0		Model 1		Model	Model 2		3
	β	SE	β	SE	β	SE	β	SE
Fixed components								
Income rank			-0.0050***	0.00	-0.0052***	0.00	-0.0052***	0.00
Upper secondary <sup>a</sup>			-0.1437***	0.01	-0.1432***	0.01	-0.1426***	0.01
Tertiary <sup>a</sup>			-0.2622***	0.02	-0.2611***	0.02	-0.2603***	0.02
35-64 years <sup>b</sup>			-0.0157	0.01	-0.0093	0.01	-0.0097	0.01
Above 65 years <sup>b</sup>			-0.2558***	0.02	-0.2500***	0.02	-0.2502***	0.02
Female <sup>c</sup>			-0.0110	0.01	-0.0124	0.01	-0.0124	0.01
Employed <sup>d</sup>			-0.0643***	0.01	-0.0596***	0.01	-0.0596***	0.01
Power distance							0.0065***	0.00
Individualism								
PD x income rank								
IDV x income rank								
Constant	2.2310***	0.05	2.7314***	0.05	2.7328***	0.05	2.3856***	0.11
Random components								
Variance Level-2	0.0742		0.0658		0.0617		0.0426	
Variance Level-1	0.8568		0.8133		0.8096		0.8096	
Model statistics								
ICC	0.0797		0.0748		0.0708		0.0500	
AIC	69517.22		68180.84		68105.88		68097.83	
BIC	69541.70		68262.44		68195.64		68195.75	
Observations	25858		25858		25858		25858	
Groups	29		29		29		29	

#### Table 8 (continued)

Multilevel Linear Regression Models for Individual Status Anxiety, Missing Values of Income Rank Treated by Listwise Deletion

	(5)		(6)	(6)		(7)		
	Model	4	Model	5	Model	Model 6		7
	β	SE	β	SE	β	SE	β	SE
Fixed components								
Income rank	-0.0052***	0.00	-0.0052***	0.00	-0.0063***	0.00	-0.0029*	0.00
Upper secondary <sup>a</sup>	-0.1431***	0.01	-0.1426***	0.01	-0.1430***	0.01	-0.1437***	0.01
Tertiary <sup>a</sup>	-0.2610***	0.02	-0.2603***	0.02	-0.2603***	0.02	-0.2610***	0.02
35-64 years <sup>b</sup>	-0.0095	0.01	-0.0097	0.01	-0.0094	0.01	-0.0091	0.01
Above 65 years <sup>b</sup>	-0.2501***	0.02	-0.2502***	0.02	-0.2500***	0.02	-0.2495***	0.02
Female <sup>c</sup>	-0.0124	0.01	-0.0124	0.01	-0.0125	0.01	-0.0125	0.01
Employed <sup>d</sup>	-0.0596***	0.01	-0.0595***	0.01	-0.0595***	0.01	-0.0594***	0.01
Power distance			0.0071**	0.00	0.0063***	0.00		
Individualism	-0.0039	0.00	0.0010	0.00			-0.0034	0.00
PD x income rank					0.0000	0.00		
IDV x income rank							-0.0000*	0.00
Constant	2.9551***	0.15	2.2985***	0.26	2.3996***	0.11	2.9245***	0.15
Random components								
Variance Level-2	0.0566		0.0424		0.0426		0.0562	
Variance Level-1	0.8096		0.8096		0.8096		0.8096	
Model statistics								
ICC	0.0653		0.0498		0.0500		0.0650	
AIC	68105.47		68099.69		68098.63		68103.67	
BIC	68203.40		68205.77		68204.71		68209.75	
Observations	25858		25858		25858		25858	
Groups	29		29		29		29	

<sup>a</sup> reference category (rc): lower secondary education and below <sup>b</sup> rc: unemployed <sup>c</sup> rc: 18-34 years <sup>d</sup> rc: male

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

# Analysis with Gini index and GDP

#### Table 9

Multilevel Linear Regression Models for Individual Status Anxiety, Gini index and GDP P.C. (PPP) Included in Analysis

	(1) Model 1		(2)	(3)	(4) Model 4	
			Model 2	Model 3		
	β	SE	β SE	β <b>S</b> E	β	SE
Fixed components						
Income rank	-0.0043***	0.00	-0.0043*** 0.00	-0.0043*** 0.00	-0.0043***	0.00
Upper secondary <sup>a</sup>	-0.1568***	0.01	-0.1570*** 0.01	-0.1568*** 0.01	-0.1562***	0.01
Tertiary <sup>a</sup>	-0.2813***	0.02	-0.2813*** 0.02	-0.2813*** 0.02	-0.2804***	0.02
35-64 years <sup>b</sup>	-0.0057	0.01	-0.0059 0.01	-0.0057 0.01	-0.0059	0.01
Above 65 years <sup>b</sup>	-0.2428***	0.02	-0.2433*** 0.02	-0.2429*** 0.02	-0.2427***	0.02
Female <sup>c</sup>	-0.0176	0.01	-0.0176 0.01	-0.0176 0.01	-0.0176	0.01
Employed <sup>d</sup>	-0.0637***	0.01	-0.0637*** 0.01	-0.0637*** 0.01	-0.0636***	0.01
Gini index	0.0319***	0.01		0.0296** 0.01	0.0280***	0.01
GDP p.c. (ppp)			0.000 0.00	0.000 0.00		
Power distance					0.0054***	0.00
Individualism						
Constant	1.7172***	0.29	2.8320*** 0.11	1.8523*** 0.35	1.5523***	0.25
Random component	S					
Variance Level-2	0.0414		0.0533	0.0407	0.0289	
Variance Level-1	0.8139		0.8139	0.8139	0.8139	
Model statistics						
ICC	0.0484		0.0615	0.0476	0.0343	
AIC	24548.15		24550.22	24549.5	24543.58	
BIC	24629.28		24632.47	24638.69	24632.77	
Observations	31886		31886	31886	31886	
Groups	29		29	29	29	
Imputations	5		5	5	5	

#### Table 10 (continued)

Multilevel Linear Regression Models for Individual Status Anxiety, Gini index and GDP P.C. (PPP) Included in Analysis

	(5) Model 5		(6) Model 6		(7) Model 7	
	β	SE	β	SE	β	SE
Fixed components						
Income rank	-0.0043***	0.00	-0.0043***	0.00	-0.0043***	0.00
Upper secondary <sup>a</sup>	-0.1565***	0.01	-0.1568***	0.01	-0.1570***	0.01
Tertiary <sup>a</sup>	-0.2806***	0.02	-0.2813***	0.02	-0.2812***	0.02
35-64 years <sup>b</sup>	-0.0060	0.01	-0.0057	0.01	-0.0059	0.01
Above 65 years <sup>b</sup>	-0.2431***	0.02	-0.2428***	0.02	-0.2432***	0.02
Female <sup>c</sup>	-0.0176	0.01	-0.0176	0.01	-0.0176	0.01
Employed <sup>d</sup>	-0.0637***	0.01	-0.0637***	0.01	-0.0637***	0.01
Gini index			0.0302**	0.01		
GDP p.c. (ppp)	0.0000	0.00			0.0000	0.00
Power distance	0.0061**	0.00				
Individualism			-0.0011	0.00	-0.0021	0.00
Constant	2.3524***	0.20	1.8336***	0.37	2.9150***	0.15
Random components						
Variance Level-2	0.0414		0.041		0.0521	
Variance Level-1	0.8139		0.8139		0.8139	
Model statistics						
ICC	0.0484		0.048		0.0602	
AIC	24547.13		24550.36		24552.01	
BIC	24636.32		24639.55		24641.21	
Observations	31886		31886		31886	
Groups	29		29		29	
Imputations	5		5		5	

<sup>a</sup> reference category (rc): lower secondary education and below <sup>b</sup> rc: 18-34 years <sup>c</sup> rc: male <sup>d</sup> rc: unemployed

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