

ERASMUS UNIVERSITY ROTTERDAM

Erasmus School of Economics

Master Thesis Economics of Markets and Organisations

NATIONAL CULTURE AS A PRECURSOR OF SORTING INTO THE PUBLIC
SECTOR

Name student: Anastasia Cornovan

Student ID number: 428252

Supervisor: Josse Delfgaauw

Second assessor: Ana Figueiredo

Date final version: 23.09.2020

The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam

Abstract

This paper examines whether dimensions of culture affect how public service motivation affects individual's decision to enter the public sector. I explore regional variation in public service motivation and sorting across 21 countries, using a sample of 22,236 observations from the ISSP Work Orientation (2015) dataset. Furthermore, I use two different measures of national culture aligned with the altruistic behavior. These measures are extracted from the Global Preference Survey (Falk et al. 2016) and the Global Leadership and Organizational Behavior Effectiveness (GLOBE) project (House et al., 2004). Using Linear Probability Model, I identify that in countries with high preferences for altruistic behavior, the relation between public service motivation and the choice to work in public sector is stronger compared to the countries where preference for altruism is low.

Table of Contents

Abstract	2
Table of Contents	3
Introduction	4
Theoretical Framework	6
Public Service Motivation	7
Critique of the PSM concept	9
Socio-institutional approach for developing PSM and sorting into the public sector	10
Role of national culture	11
Hypotheses	13
Data	17
ISSP Work Orientation module (2015)	17
Global Preferences Survey (2018)	22
Global Leadership and Organizational Behavior Effectiveness (2002)	23
Methodology	26
Results	29
Altruism	29
Humane Orientation	31
Discussion and Conclusion	33
Limitations of the research	35
Implications	36
References	38
Appendix	45

Introduction

The outbreak of the COVID-19 pandemic has influenced over 180 countries and infected more than 22.7 million people (as per August 21st). The pandemic led to an abrupt disruption and has thrown the public service into a turmoil. Thus, public servants were forced to deal both with fighting the spread of the pandemic and trying to manage its accompanying socioeconomic consequences. In the response to the situation of crisis, public servants were put at a frontline: public health officials, healthcare workers, teachers, sanitation workers, social welfare officers, and other public servants have been put forward into the spotlight (Kauzya & Niland, 2020). This position elevated understanding and awareness of the critical role the public servants play in the daily life of citizens.

United Nations policy brief of June 2020 specified that one of the key roles that public servants must continue to play in order to ensure an effective response to the crisis is to provide service “before self: courage and humanness in practice”, to engage in the allocation of resources, to encourage accountability, and build and enhance government credibility and people’s trust (Kauzya & Niland, 2020). Further, the policy brief outlined the profile of a public servant that would be skilled to effectively play these roles. Besides such characteristics as adaptability, transparency, and accountability, authors highlight such qualities as trustworthiness, self-sacrifice, and being driven by “humanness in their personality”. These characteristics of public servants are in line with the literature that advocates hiring individuals who are public service motivated in order to improve the performance of employees in the public sector (Bouckaert, Peters, & Verhoest, 2016).

To ensure continuity of the public services during the critical times, UN policy brief offered recommendations for developing a comprehensive public service capacity development. However, capacity development would require human resources that could support and rebuild the public sector. In turn, attracting motivated employees with the right profile might be a challenge, since nowadays the private sector offers similar opportunities with higher pay.

Besley and Ghatak (2005) suggest that it is the match between individual preferences and the mission of the organization that attracts the employees to the public sector. As such, altruistic individuals who are willing to self-sacrifice, have compassion, interest in politics and devotion to

civic duty are attracted to the public sector due to the opportunities that the public sector brings them (Perry, 1996). However, driven by “humanness in their personality”, individuals that are attracted to the public sector might be hesitant to act on their values. This issue has received little attention in the literature. So far, the majority of studies on public service motivation and choosing the sector of employment have focused on a single nation. Nevertheless, Vandenaabeele and Van de Walle (2008) and Houston (2011) address the importance of the national context in the individual level of public sector motivation.

Houston (2011) provided a starting point for the research of variance of the level of public service motivation and sorting decisions across countries. He considered the nature of the welfare state of the nation as an element that could contribute to explaining the relationship between one’s choice of employment sector and one’s work motives. Thus, Houston (2011) noted that in countries with well-developed welfare, those in need are more likely to be directed to state institutions when looking for assistance. To support the public institutions citizens are obliged to pay higher taxes. This might eventually “crowd out” the norm of reciprocity (Fukuyama, 2000). Therefore, individuals might feel that by paying higher taxes, their moral obligation to care for others in need is fulfilled (Van Oorschot, Arts, & Halman, 2005), and they are less likely to value work motives related to public service motivation (Houston, 2011).

Realizing the significance of the national context, this paper aims to bring the study on public service motivation and sorting into the public sector one step further and investigate how culture affects the effect of individuals’ public service motivation on their choice where to work.

I use three different datasets to see whether dimensions of national culture that are aligned with compassion and altruism, moderate the relationship between individual level of public service motivation and choice of sector of employment across 23 nations. These datasets are the International Social Survey Programme (2015), Global Preference Survey (2018), and the GLOBE study (2002). The latter two offer various dimensions of national culture, where culture is defined as the collective programming that distinguishes the members of one group from another human group (Hofstede et al., 2010).

Considering cultural dimensions can be a starting point for a comparative cross-nation study on how elements of national culture can affect the relationship between individual values and choice of the sector of employment. Thus, if national culture indeed moderates the relationship between

one's public service motivation and choosing the public sector of employment as opposed to the private one, this would set a path for further research. Moreover, it will offer insights that will allow human resource managers around the world to further tailor their recruitment approach by appealing to certain work and moral values that are special for the national region. This has the potential to create a better person-position fit, attract hard-working employees, and decrease unemployment. The practical contribution of this paper consists in offering the basis for further research on the cross-cultural differences and the basis policy recommendations that are customized to each cultural cluster of nations.

This paper proceeds as follows. First, it briefly introduces the motivational bases of public service motivation. Second, it explores the socio-cultural approach in forming an individual level of public service motivation and choice of sector of employment. Thirdly, it approaches the measurements of cultural dimensions presented in the literature that can be aligned with the private service motivation and presents two hypotheses. Further, the data description and methods are presented. Finally, the paper outlines the results, discusses the implications and limitations of the research, and offers a brief conclusion.

Theoretical Framework

A rich body of literature presents evidence that public sector employees differ from their counterparts in the private sector by values and work motivations. Public servants have shown to be drawn to public service because they have a stronger preference of holding a job that will bring value to society in accordance with their altruistic motives (Perry & Wise, 1990; Brewer, 2003; Perry, 2000; Houston, 2006; Ma, 2007). Moreover, the employees that self-select into the public sector tend to be driven rather by intrinsic motivators than financial rewards (Dur & Zoutenbier, 2014), be more lazy if their effort is not verified (Delfgaauw & Dur, 2007), prefer higher job security and be more risk averse (Bellante and Link 1981; Buurman, Delfgaauw, Dur, & Van den Bossche, 2012; Luechinger et al., 2007), and have higher confidence in key national public institutions (Taylor, 2010).

The motivation context differs between employees of the public sector and those of the private sector. Besides the individual and work-related characteristics, job content and job challenge, the employees' motivation is affected by the characteristics of the external environment (Perry &

Porter, 1982). External environment characteristics include socio-normative changes, as these can directly affect the motivations of employees entering the public sector. The socio-normative influence refers to the social influence that stimulates change in the behavior of the individual, such that he can fit in a particular group (Reiss, 2012). In this way, if the general public holds negative attitudes about the public sector, the employee's perceptions of self-worth or personal significance can be affected.

Public Service Motivation

In order to explain the difference in beliefs and attitudes between public and private workers, Perry and Wise (1990) defined the construct of Public Service Motivation (PSM) that was intended to capture a share of this difference. The concept of PSM is explained by Perry and Wise (1990, p.368) as a predisposition of an individual to “respond to motives grounded primarily or uniquely in public institutions and organizations”. PSM refers to the set of rational, norm-based and affective motives that attract employees to attain a career in the public sector. These motives include individual's interest in participating in policy-making, advocating for a special interest, a desire to serve the public interest and to enhance social equity, feelings of loyalty to duty and to the government, commitment to a program in the public sector due to a genuine conviction about its importance to society, and willingness to sacrifice for others. The authors argue that a greater individual PSM leads to a higher level of individual performance and higher probability of the individual seeking employment in a public organization. Moreover, individuals with strong PSM will be less incentivized by the extrinsic rewards (Rainey, 1983).

Perry and Wise (1990) specify a distinction between the public sector and public service, where public sector embraces everyone who works for the government, but public service signifies rather an attitude or a sense of duty (Staats, 1988). Thus, public service is not synonymous to government service, as it is not working in the public sector that attracts individuals with high public service motivation, it is various occupations that satisfy these motives are more commonly presented in the jobs provided by the government (Houston, 2011).

Perry (1996) elicits four dimensions that are empirically associated with the PSM: attraction to policy making, commitment to the public interest and civic duty, and self-sacrifice and compassion. The latter one – self-sacrifice and compassion - is closely aligned with altruism and

forms the motivational foundations of the PSM that go beyond the rational choice model. These are referred to as normative and affective processes that motivate individuals to work in the public sector. This research will focus on how the altruistic values of the general public can affect the sorting decision of individuals, by motivating them to act on their values of compassion and altruism.

Shamir (1991) pointed out several deficiencies in the public service motivation theory developed by Perry (1996). First, the motivational theory at the time did not provide any explanation for the complex situations that people encounter in public context. Moreover, it did not consider the peculiarities of institutions, laws, rules and external expectations, that shape the motivational situations. Thirdly, the motivation theory did not discuss values and moral obligations as a part of the intrinsic motivators. Specifically, the influence of values in the sense of social norms on the motivations and behaviors of individuals did not receive much attention.

As a response to this critique, Perry (2000) formulated a process theory of public service motivation that includes factors related to the society. This model identifies several environmental variables of different nature that can serve as the forces that influence public service motivation. These variables are sociohistorical context, motivational context and individual characteristics, and they result in a behavior which is in line with public sector motivation.

The sociohistorical context includes socialization in different settings, such as family, churches, or schools (Perry, 1997) and social learning, based on the observation of others (Bandura, 1986). Bandura (1986) states that most of the behaviors displayed by people are learned through the influence of example. People learn and act through observing others. Thus, altruistic behaviors can be attributed to parental, religious, educational or other type of socialization outside of work settings (Perry, 1997; Perry, 2000).

The motivational context involves factors such as organizational incentives, work environment, institutional values, job characteristics and other factors that influence one's behavior in organizations. These factors are consistent with the models of motivation discussed earlier by Perry and Porter (1982). The third category in the process model of Perry (2000) involves individual characteristics which influence the cognition of a person, and in turn, his behavior. Bandura (1986) outlines that instead of weighing different actions according to costs and benefits

and seeking to maximize utility, people determine the attractiveness of a certain action according to how consistent this action is to his internal standards. Therefore, people who self-select into the public sector, are more likely to have different interests but also different values compared to those who choose the private sector (Perry, 2000).

Critique of the PSM concept

Nevertheless, the modern concept of PSM has faced critique by Bozeman and Su (2015). The authors follow the framework developed by Gerring (1999) to analyze previous strands of PSM research. One of the crucial points discussed by Bozeman and Su (2015) is the diversity and consequent imprecision of the PSM concept within the literature. Thus, in some cases PSM is equated with the general altruistic motive (e.g., Brewer, Ritz, & Vandenabeele, 2012; Bright, 2008; Rainey & Steinbauer, 1999), work-related preferences (Christensen & Wright, 2012; Georgellis & Tabvuma, 2010), or prosocial behaviors (e.g., Andersen et al. 2013; Brewer, Ritz, & Vandenabeele, 2012; Perry & Hondeghem, 2008). Moreover, some conceptualizations focus on institutional factors (Houston, 2006; Houston & Cartwright, 2007), while others pay attention to individual predispositions in shaping PSM (Crewson, 1997; Pandey, Wright, & Moynihan, 2008; Perry et al. 2008). Despite the researchers' effort to integrate different components, the plethora of concepts that encompasses PSM adds to the research challenge of PSM.

Furthermore, even though PSM research accepts that the PSM concept is not unique to government organizations, the government provides occupations where PSM is more likely to be prevalent (Perry, Hondeghem, & Wise, 2010). However, excluding the public-specific nature from the context makes it difficult to distinguish the PSM concept from service motivation studies (Bozeman & Su, 2015), where service motivation is defined as “the chance to further the goals of the organization” (Pearce, 1983, p. 649).

An additional research challenge stems from the differentiation of PSM and altruism concepts, and the conceptualization of the altruism concept itself. Perry and Hondeghem (2008b) outline that PSM can be conceptualized as a subset of the idea of altruism. Nonetheless, the authors do not specify to what extent altruism complements PSM. Moreover, due to the ambiguous nature of the altruism concept, there are multiple definitions ranging from “undertaking costly acts that confer benefits to other individuals” (Fischbacher, 2003, p. 787) to “a motivational state with the ultimate

goal of increase another's welfare" (Batson & Shaw, 1991, p. 110). Additionally, West, Griffin, and Gardner (2007) question the differentiation of the altruism dimension of PSM: whether the reference group to which altruism is directed to refers to an association group or the entire society.

In order to set up a clear empirical strategy, this paper differentiates altruism as a complementary part of PSM concept following Perry and Hondeghem (2008). The paper sticks to the definition of PSM originally conceptualized by Perry and Wise (1990). Moreover, I look at altruism preferences at a societal level, while taking into account the fourth dimension of PSM that includes compassion, where compassion is defined as an affection-based motive that involves the will to act for the benefits of others.

Socio-institutional approach for developing PSM and sorting into the public sector

As advocated by Perry (2000), Vandenabeele (2007) included motivational psychology and institutional theory in an attempt to develop a general theory of PSM. The author turns to March and Olsen (1989) for defining the core concepts of the institutional approach. The latter work attributes the individual behavior to the logic of appropriateness, partly discussed by Bandura (1986). March and Olsen (1989) state that people behave the way they do due to the beliefs, codes, paradigms, cultures and knowledge they have obtained in various contexts. This characteristic is referred to as the institutionalization of identities and beliefs. In terms of PSM theory, an individual may act in accordance with PSM because of the realization of certain institutional values and not the rationality of self-interest.

Vandenabeele (2007) complements the institutional theory with of self-determination theory, developed by Deci and Ryan (2004). The later authors leave the traditional dichotomy of the extrinsic and intrinsic motivators and analyze the motivation of an individual as rather a continuum, where motivation is evaluated on a range from controlled motivation to autonomous motivation. Controlled motivation is the lower range point of this continuum, where the locus of causality of the action comes from an external source, and not from the self. Autonomous motivation is the other boundary of the continuum. An individual with autonomous motivation has fully internalized the value of his actions and has a feeling of personal commitment to make it happen. Ryan and Deci (2005) present three basic needs that can be considered the base for the

process of internalization of the individual. These basic needs are the need for relatedness, the need for autonomy and the need for competence.

Vandenabeele (2007) uses self-determination theory to develop a connection between the individual level and the institutional level. He argues that individuals' motivation is affected by how the institutional environment responds to individual basic psychological needs. If the institution satisfies these psychological needs, it stimulates the creation of a public service identity. Thus, the public service motivation originates from this kind of institution. This analysis results in the proposition that individuals follow certain behaviors only if the institutions in which they operate allow for these behaviors to be exercised. Following Vandenabeele (2007), Pandey and Stazyk (2008) study the antecedents of public service motivation, focusing on socio-demographic factors, organizational factors and social institutions. Social institutions are institutions that communicate norms, beliefs and values to individuals.

Role of national culture

To analyze the role of social context and cultural differences, Kim (2017) investigates the relationship between the cultural dimensions of Hofstede (1980) and individual-level PSM. Following Hofstede (1980, p. 25), culture is defined as “the collective programming of the mind which distinguishes the members of one human group from another”. Hofstede et al. (2010) identified six independent cultural dimensions. These dimensions are power distance (including problems of inequality), masculinity (as opposed to femininity; related to emotional gender roles), individualism (as opposed to collectivism; related to formation of interpersonal ties), uncertainty avoidance (dealing with the unknown), goal orientation (long-term versus short-term) and restraint (as opposed to indulgence, related to control versus gratification of basic human desires). Taras et al. (2010) provided a meta-analysis between the cultural value dimensions of Hofstede and a set of organizationally relevant outcomes and concluded that Hofstede's cultural framework can be optimally used in cross-cultural research.

Kim (2017) defines PSM on the individual level, using data from data from the third wave of ISSP Work Orientations (2005). He uses hierarchical linear modeling with individual level-controls and country-level variables, with PSM as the dependent variable is measured using questions like “How important to you is a job that is useful to society?”. The author found that cultural dimension of individualism on a national level is negatively related to individual level of PSM, but

masculinity and indulgence are positively associated with the individual level of PSM. Therefore, society in which such values as high independency of an individual and being concerned with his own-self-interest prevail over valuing group interest and cooperation over individual accomplishment (Hofstede, 1984), are more likely to have lower levels of PSM (Kim, 2017).

Houston (2011) hypothesizes that in countries with well-developed welfare, individuals are less likely to value work motives related to public service motivation compared to the individuals from the nations with less-developed welfare. Using the data from the ISSP Work Orientations wave of 2005, Houston looks at how PSM related work motivators at the individual level differ by the locus of occupation (government versus non-government employed) and by the focus of occupation (public service versus non-public service). Then he evaluates the national context by assessing how types of welfare regimes influence the relationship between holding a governmental job or a public service occupation and individual level of public service motivation. The cross-level interaction term (welfare type and occupational characteristics) provide evidence that government employees have different attitudes toward public service motivation across the welfare system types (Houston, 2011).

Anderfuhren-Biget (2012) analyses to what extent culture and social trust can explain the PSM level of civil servants. Based on primary Swiss-French and Swiss-German data, the author finds that cultural belonging has a significant effect on individual level of PSM. The author uses language of an individual as a proxy for cultural belonging, since on one part of the Switzerland people speak French and on the other part of the country, German is spoken. PSM is measured as by separate and aggregated dimensions discussed by Perry (2002), which are attraction to politics, commitment to the public interest, compassion, and self-sacrifice.

For all the measures of the PSM employed by Anderfuhren-Biget (2012), the author finds that cultural belonging has a consistent impact on individual level of PSM. Thus, Swiss-Germans score higher on public service motives compared to the Swiss-French citizens. Further, also based on Swiss data, Ritz and Brewer (2013) discuss that societal culture influences the sense of one's identity, which is an important element in the formation of PSM and future career choices. Hence, based on the previous literature it can be concluded that cultural contexts appear to influence the relation between one's public service motivation and choice of employment sector.

Ahlstrom and Bruton (2002) suggest that national culture may affect certain types of behavior both directly (through the cultural beliefs and values that persist in a society) and indirectly (through the institutions to which attributes of culture give meaning to). Nevertheless, the challenge of disentangling the influence of national culture on the individual level of PSM or on the sorting decision still persists. The main difficulty is that national culture is as a rule defined on the aggregated national level (as in the work of Kim (2017)), while public service motivation is the individual-level variable, which might lead to the presence of omitted variable bias.

Hypotheses

As the level of PSM can potentially be influenced by some of the dimensions of the national culture, I am interested in how cultural values affect the relation between PSM and the choice of working in the public sector. I focus on the aspect of PSM related to altruism, as it connects normative and affective motivation (Perry, 2000). Individuals internalize societal norms and self-express by making a decision driven by social context and prevailing norms, and they express altruistic traits as an emotional response to social context, referred by Knoke and Wright-Isak (1985) as affective bonding.

Falk, Becker, Dohmen, Huffman and Sunde (2016) experimentally validate measures for differing sets of social preferences, including national preference for altruistic behavior, risk-taking, trust and reciprocity. Moreover, the authors used the experimentally validated set of measures to collect data on social preferences within the Gallup World Poll 2012, thus creating an alternative to Hofstede's dataset (1980) of national preferences that is referred as Global Preference Survey (GPS).

Further, the authors evaluate the GPS data aiming to find out whether there is substantial heterogeneity in preferences across countries (Falk et al., 2018). One of the questions that the authors expand on is whether countries differ in terms of average preferences, including preferences for altruistic behavior. GPS data makes use of representative population samples within each country with a total of 80,000 respondents and covers 76 countries that represent approximately 90 per cent of the world population. Thus, Falk et al. (2018) explores differences in preferences for altruism, risk-taking, trust and reciprocity across countries.

For the current research, I focus specifically on the preference of altruistic behavior elicited through the GPS data, as altruistic behavior is the dimension that is most closely aligned with the compassion dimension of one's public service motivation, as suggested by Perry, Hondeghem and Wise (2010). In the GPS data, altruism is measured at the individual level by offering staircase choices for a hypothetical donation and questioning "how willing is one to give to a good cause without expecting anything in return" (Falk et al., 2016, p.23). Then this measure is aggregated to the country level, where for each country Falk et al. regress preferences on gender, age and its square, and subjective math skills and then evaluates patterns and differences across countries.

Falk et al. (2018) find that the social preferences, including preferences for altruistic behavior, exhibit significant heterogeneity across countries and that this variation is partly systematic and can be attributed to both individual-level characteristics and aggregate cultural endowments. Further I will refer to the preference for altruism aggregated on the country level as the national preferences for altruism.

Public service motivation is measured by aggregating two questions from the ISSP Work Orientations IV program. I use the measure suggested by Lewis and Frank (2002), which is constructed by aggregating respondents' valuations of two statements: "It is important for me to have a job useful to society" and "It is important to have a job that would help others". Lewis and Frank (2002) suggest that these two items both approximate one concept of public service motivation.

Peterson and Ruiz-Quintanilla (2003) suggest that a national culture that supports proactive work behavior influences the intrinsic motivation of the employees. Therefore, I expect people who exhibit higher levels of PSM, by showing altruistic traits such as having a job useful to society and finding helping other people important, to be more motivated to act on their values of public service motivation by sorting in the public sector if the national culture supports and encourages this kind of behavior. Thus, culture affects the relationship between individual's PSM values and one's choice of employment sector.

I hypothesize that, as cultural socialization serves as the basic determinant of all values (Wiener, 1982) and socialization determined by the national culture happens prior to the organizational socialization, cultural dimension of altruism affects the relation between the PSM and working in the public sector.

Hypothesis 1: *The relation between PSM and the choice to work in the public sector is stronger in countries with a high preference for altruism as compared to countries with a low preference for altruism.*

To further address whether cultural dimensions can moderate the effect of public service motivation on the choice of the employment sector, I make use of the dimensions of societal culture from the Global Leadership and Organizational Behavior (GLOBE) dataset presented by House, Javidan, Hanges, and Dorfman (2002). The GLOBE is a research program that focuses on culture and leadership in 61 nations. House et al. (2002) construct and explain the national culture in nine dimensions: uncertainty avoidance, performance orientation, humane orientation, gender egalitarianism, future orientation, assertiveness, power distance, in-group and institutional collectivism.

The majority of these dimensions are built based on the Hofstede (1980) framework of national culture. Smith (2006) addresses the limitations of Hofstede research. He discusses that Hofstede aggregated survey responses of the individuals to the level of nations to obtain a representation of the values and opinions that were widely shared within the sample from each country. However, Javidan, House, Dorfman, Hanges and De Luque (2006) et al. provide a valid claim that in order to make such aggregations, the data must be examined to evaluate whether cross-country variation exceeds the intra-country variability to a sufficient level. Nevertheless, the legacy of Hofstede's research served as a guiding framework in the cross-cultural research, such that subsequent contributors started to operationalize culture by aggregating the self-descriptive individuals' responses drawn from a set of different national samples.

The GLOBE researchers share Hofstede's assumption for data aggregation, but they adopt a different approach for conceptualizing culture. It is done in terms of the perceptions of the respondents of their national contexts instead of self-reported values. Javidan and House (2001) define culture as "shared motives, values, beliefs, identities and interpretations of significant events that result from common experiences of members of collectives", where these experiences are likely to be transmitted across generations (p. 293). This definition was used by the GLOBE study, as the project measures the culture through the commonality of values and practices (Javidan & Dastmalchian, 2009). Practices are measured by the items assessing "what are" the common behaviors, while values are measured by the indicators that assess what these common behaviors

“should be”. An example of these difference can be seen in two statements that respondents are asked to rate: “The economic system in this society is designed to maximize collective interests” (item assessing practices) versus “I believe that the economic system in this society should be designed to maximize collective interests” (item assessing values). However, the “should be” items were criticized by Hofstede (2006), for adding an extra level of abstraction and thus decreasing the validity of the measure.

Smith (2006) suggests that GLOBE measures of societal practices come close to the manner in which prior research has normally studied stereotyping, in the sense that the measures comprise statements of behaviors that respondents perceive to be emphasized or to be widespread in their own society. Therefore, the current research utilizes the “as is” practices measures of the GLOBE project. Throughout the paper, these practices might be addressed as “cultural values” or “preferences”, but in terms of the GLOBE dataset they are operationalized as “practices”.

As the GLOBE cultural practices dimensions could prove useful in studying choices of across the nations (Smith, 2006), I make use of the cultural dimension from the GLOBE dataset that is most aligned with the measure of altruism. More specifically, as an alternative measure of the nation preference for altruistic behavior from the GPS dataset (Falk et al., 2016), this paper uses the dimension from the GLOBE dataset called humane orientation. Humane orientation refers to the degree to which “a collective encourages and rewards individuals for being altruistic, fair, friendly, generous and kind to other” (House et al., 2002, p.6). This dimension is measured by asking respondents to evaluate a set of statements such as “this society, people are generally very concerned about others/ very sensitive toward others/ very friendly/ very tolerant of mistakes/ very generous” as opposed to not being concerned about others at all, not being sensitive toward others at all and etc.

Therefore, using the GLOBE dimension of humane orientation, I hypothesize that within the nations that score high on humane orientation, individuals with high level of PSM would be more likely to act on their altruistic values and choose public sector to work as compared to the individuals from the countries with low score for humane orientation.

Hypothesis 2. *The relation between PSM and the choice to work in the public sector is stronger in countries with a high level of humane orientation as compared to countries with a low level of humane orientation values.*

Hence, if the nation believes that being “humane oriented” is the defining feature of their societal culture, within that nation individuals with higher level of public service motivation are more likely to choose public sector as opposed to individuals where being “humane oriented” is not considered a virtue.

Data

This paper uses individual-level data from the International Social Survey Programme (ISSP). This cross-national collaboration program conducts annual surveys on a diverse set of societal topics. ISSP follows multi-stage stratified random sampling for the collection of data. Surveys for ISSP were presented in form of standardized questionnaires administered by mail, written, or orally. The answers for the survey questions on preferences and values are given on the Likert scale. The scale was recoded such that on the scale from 1 to 5 (or alternatively, from 1 to 7), one represents lowest intensity (“Not important at all”) and five (or alternatively, seven) represents the highest intensity (“Very important”). As ISSP was not initially designed to measure PSM, following previous literature I use questions from Work Orientation IV module to construct a measure of PSM.

ISSP Work Orientation module (2015)

ISSP Work Orientation IV surveys were conducted in 37 countries in the time span from 2015 to 2017. The current study uses only the data for the individuals currently or previously employed in the public or private sector. Moreover, as the combined data from other utilized datasets has some missing observations that are present in the ISSP data, in order to create a more balanced dataset I limit the data to 27,757 cases from 23 countries (for the list of countries see Appendix, Table 1). The Work Orientation module includes respondents’ attitudes towards work, work conditions, work organizations and private life (Jutz, Scholz, Braun, & Hadler, 2018).

Furthermore, in order to evaluate representativeness of the sample, I compare the data from ISSP survey for the share of employees working in the public sector with the data from the International Labour Organization statistic for 2015. Values for Venezuela and Georgia that are presented in the ISSP sample seem to be outliers. Thus, in the ISSP sample, employees that work in the public sector make up 82% of the sample, as opposed to the 29% of public workers as a share of employed individuals presented in the official statistics of the ILO dataset. Similarly, for Georgia the ISSP

sample has 79.9% of public employees which is not representative to the factual data from the ILO dataset (17%). Thus, these two countries are also excluded from the dataset, which limits the final sample to 21 countries and 22,236 observations.

Lewis and Frank (2002) and Houston (2011) use two specific items to construct PSM in previous waves of ISSP. These two questions are: “How important to you is a job that is useful to society?” and “How important to you is a job that allows someone to help other people?”. The answers to both items are offered on the Likert scale from one to five and recoded as described above. For the current research, this measure is constructed based on the data from the fourth wave of the ISSP Work Orientations (2015) survey. Cronbach’s alpha for these two items is 0.79 which exceeds the minimum of 0.70 suggested by Nunally (1978) and signalizes the internal consistency of the items to measure PSM.

The descriptive statistics for the individual-level variables from the ISSP Work Orientation IV survey is presented in Table 2. Public sector employees on average have a higher level of public service motivation, represented more by women and more likely to have a master or doctor degree. As addressed by Perry (2000), control variables include age, gender, number of children, relationship status, level of education and frequency of attending the religious services. Similar set of control variables was used in studies on sorting into public sector.

For the categorical variable attendance of religious services, the categories were aggregated as follows: set of categories “less than once a year”, “once a year”, and “several times a year – twice or so” was aggregated together and labeled as “Rarely attending religious services”. Further, categories “once a month” and “two-three times a month” were aggregated together and labeled as “Regularly attending religious services”. Lastly, “once a week” and “several times a week or more often” were merged together and labeled as “Often”. This was done to ease the interpretation and to avoid having dummy variables with a small number of observations.

Table 2. Descriptive statistics based on ISSP Work Orientation IV module.

	Public	Private	Total
Measure of Public Service Motivation			
Mean	8.16	7.89	7.96
Standard deviation	1.5	1.63	1.59
Personally important: help other people			
Mean	4.04	3.92	3.95

Standard deviation	0.83	0.89	0.88
Personally important: a job useful to society			
Mean	4.12	3.97	4.01
Standard deviation	0.8	0.9	0.87
Gender: % female			
Mean	0.6	0.49	0.52
Standard deviation	0.49	0.5	0.5
Age			
Mean	51.98	47.75	48.97
Standard deviation	16.45	16.57	16.65
Number of children			
Mean	0.62	0.72	0.69
Standard deviation	1.04	1.12	1.09
Relationship status: % type			
Married	57.61	54.44	55.36
Civil partnership	1.47	1.04	1.16
Divorced/Separated	11.69	10.65	10.95
Widowed	10.71	7.14	8.17
Never married/ never in a partnership	18.53	26.72	24.36
Education: % level			
No formal education	2.38	4.32	3.76
Primary school (elementary education)	4.85	7.27	6.57
Lower secondary	19.45	24.89	23.32
Upper secondary (allows entry to university)	24.08	27.14	26.25
Post-secondary, non-tertiary	14.01	14.75	14.54
Lower level tertiary, first stage (university, technical schools)	19.28	14.03	15.54
Upper level tertiary (Master, Doctor)	15.94	7.6	10.01
Attendance of religious services (frequency, %)			
Never	32.89	31.81	32.12
Rarely	36.72	37.69	37.41
Regularly	13.98	14.18	14.13
Often	16.41	16.32	16.35
Observations	6416	15820	22236

Note: Data is presented for 21 country; 22,236 observations in total. Column “Public” corresponds to the share of employees working in the public sector. Column “Private” corresponds to the share of employees working in the private sector. Source of data is ISSP Work Orientations (2015).

Correlation matrix between the individual level variables of interest and control variables is presented in Table 3. Around one third of the respondents in the sample is employed in the public sector. Furthermore, choice of sector of employment is strongly positively correlated with the level of public service motivation, age and gender.

Table 3. Correlation matrix of the individual level controls

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Working in public sector	1.000							
(2) PSM	0.078*	1.000						
(3) Age	0.115*	-0.016	1.000					
(4) Female (%)	0.107*	0.087*	0.000	1.000				
(5) Nr. Of children	-0.039*	0.058*	-0.325*	0.034*	1.000			
(6) Attendance of Religious services	-0.005	0.146*	0.048*	0.071*	0.156*	1.000		
(7) Marital status	-0.051*	0.002	-0.263*	0.042*	-0.151*	-0.052*	1.000	
(8) Level of education	0.148*	0.002	-0.150*	0.022*	-0.025*	-0.109*	-0.035*	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; Number of observations: 22,236;

Figure 1 illustrates share of employees working in the public sector per country. Blue points describe the share of the people working in the public sector based on the ISSP Work Orientations IV 2015 dataset, which represents my sample. Size of public sector per country is based on the aggregated self-reported surveys. Red points show the factual data for the share of employment in the public sector taken from the International Labor Organization (ILO) 2015 database. The correlation between sample statistics and official statistics is 0.77, with a statistical significance of $p=0.000$. The strong positive correlation coefficient suggests that there is sufficient ground to assume the validity of the derived results for the majority of the countries.

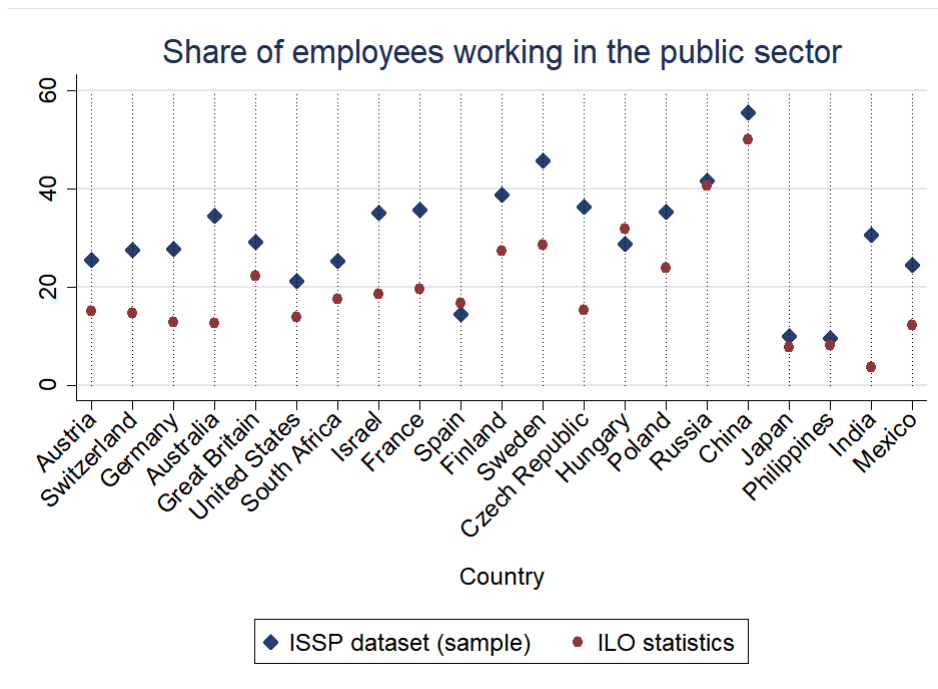


Figure 1: Share of employment in the public sector (in percentage).

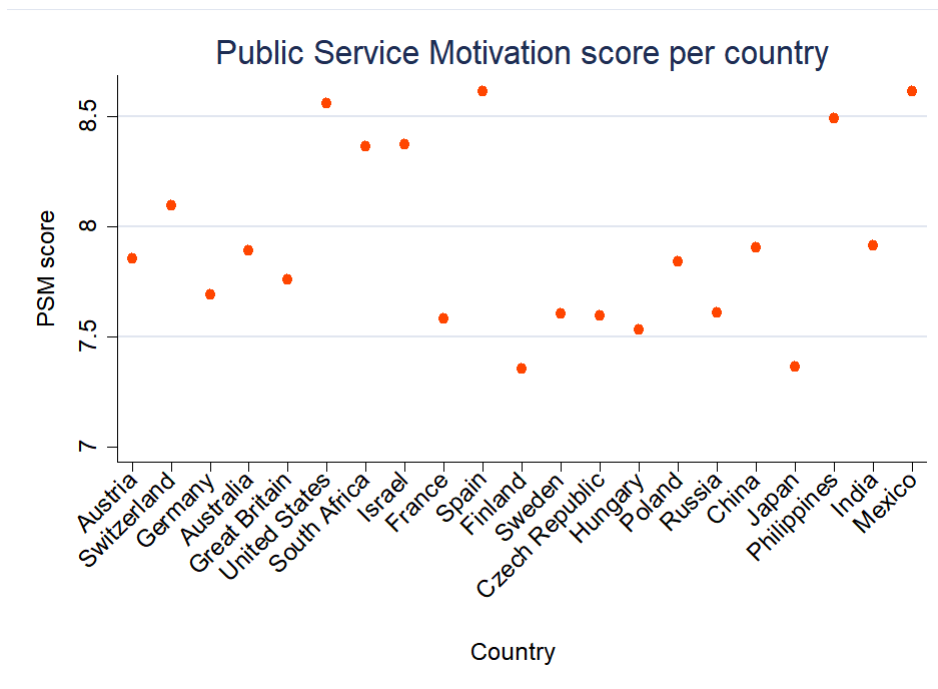


Figure 2: Private service motivation score per country based on ISSP Work Orientations IV dataset.

According to Figure 1 and the data from the sample I employ, the largest public sector is found in China, while one of the smallest public sectors is found in Spain, Japan and Philippines. Public service motivation scores presented on Figure 2 also display a significant variation across the nations. Surprisingly, the highest PSM scores is found to be in Spain. Japan and Finland exhibit the lowest PSM scores in the sample.

Global Preferences Survey (2018)

For the country-level data on cultural values this study uses two datasets: Global Preferences Survey (GPS) collected by Falk et al. (2018) and Global Leadership and Organizational Behavior Effectiveness (GLOBE) Project data collected by House et al. (2004). These datasets are publicly available and contain variables that can describe dimensions of national culture for the range of countries.

The Global Preferences Survey (GPS) is a large dataset on risk and time preferences, positive and negative reciprocity, altruism, and trust. It is considered globally representative as preference data was collected from 80,000 individuals, drawn as representative samples from 76 countries around the world. According to Falk et al. (2018), the GPS data represents 90 percent of both the world's population and global income. In this research, we use two country-level aggregated preference variables which are preferences for altruism and preferences for trust.

Altruism was measured through a combination of one qualitative and one quantitative item. Quantitative item asked about willingness to donate money, presenting a staircase choice, its weight in the final aggregated measure was 0.635. This scenario depicted a hypothetical situation where the respondent unexpectedly received 1000 euros. Further, this item asked the respondents how much of this amount they would donate. Qualitative item asked how willing the respondent is to give to a good cause without expecting anything in return", the answers were given on a Likert scale from 0 to 10, where 0 meant that individual is completely unwilling to share and a 10 meant that individual was "very willing to share". The weight of this item in the final measure was 0.365 (Falk et al., 2016). Figure 3 represents the distribution of the altruism variable across countries.

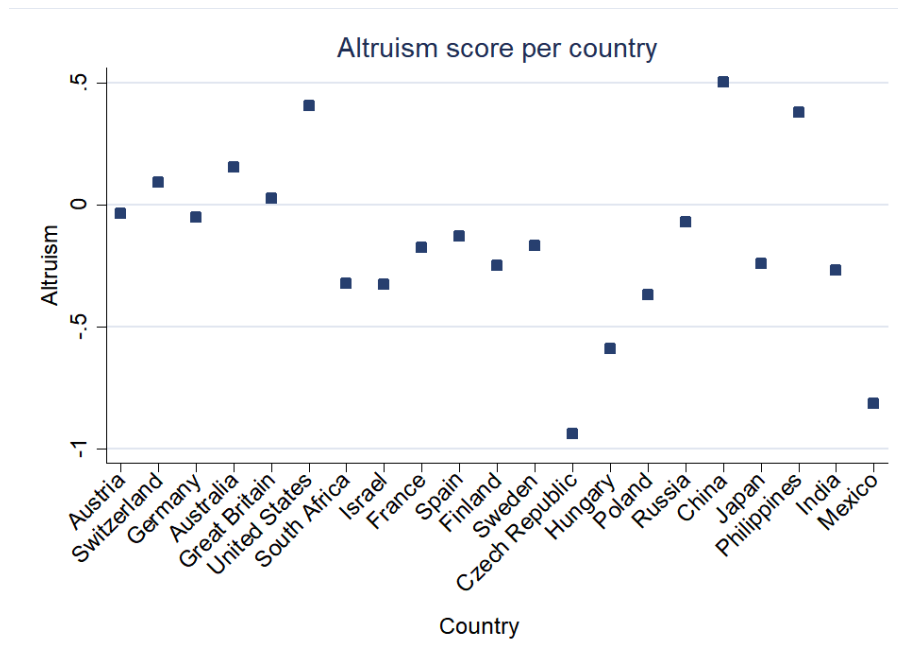


Figure 3: Distribution of altruism variable taken from the GPS dataset

Global Leadership and Organizational Behavior Effectiveness (2002)

The GLOBE research program develops nine cultural dimensions. The phase of 2002 included 17,000 middle managers in 62 countries who participated in the study to develop and measure cultural practices in each country. Hofstede (2006) pointed out that the cultural dimensions developed in the GLOBE project to a large extent reflect the original cultural dimensions of Hofstede (2003). The GLOBE dimension that I focus on is ‘‘Humane orientation’’, which is defined as the degree to which a collective encourages and rewards individuals for being fair, altruistic, generous, caring and kind to others (House et al. 2002). Individuals were asked to rate five statements such as ‘‘In this society, people are generally concerned about others’’, ‘‘In this society, people are generally sensitive toward others’’, ‘‘In this society, people are generally friendly’’, ‘‘In this society, people are generally tolerant of mistakes’’, and ‘‘In this society, people are generally generous’’. The answers were given on a Likert scale from 1 to 7, where 1 stands for ‘‘not at all’’ and 7 for ‘‘very much so’’. To create a societal culture scale, the answers to these five questions were averaged. The distribution of this variable is represented in Figure 3.

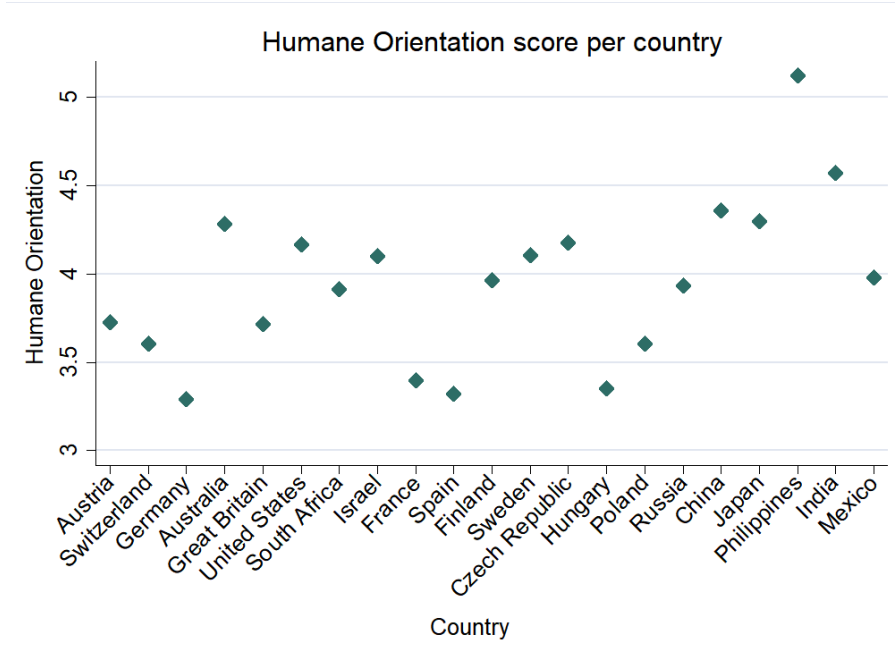


Figure 4: Distribution of Humane Orientation variable, the GLOBE dataset

Furthermore, as there is a strong relationship between culture and economic development (House et al. 2004; Houston, 2011), I use a macro-economic indicator of gross domestic product (GDP) per capita in 2015 taken from the International Labor Organization dataset (ILO). GDP per capita is presented in purchasing power parities per US dollar.

A summary of descriptive statistics for the variables that display cultural dimensions utilized in the paper is presented in Table 4.

Table 4. Descriptive Statistics for country-variables and continuous individual variables.

Variable	Mean	Std. Dev.	Min	Max
Working in public sector	0.29	0.453	0	1
Public Service Motivation	7.965	1.59	2	10
Altruism	-0.161	0.341	-.94	0.505
Humane Orientation	3.896	0.44	3.291	5.12
Female (%)	0.519	0.5	0	1
Age	48.969	16.648	15	89
GDP per capita	69700.812	26156.036	16727.936	112110.68

Note: Number of observations: 22,236

Table 5 presents correlation between the key dependent and independent variables. Individual level of public service motivation is strongly and positively correlated with one's choice of employment sector. Furthermore, altruism and humane orientation are also positively and significantly correlated with each other. Both variables are positively correlated with individual level of public service motivation and with the sector of employment.

Table 5. Pairwise correlations of the key variables of interest.

Variables	(1)	(2)	(3)	(4)	(5)
(1) Works in Public Sector	1.000				
(2) Public Service Motivation (PSM)	0.078*	1.000			
(3) Altruism	0.030*	0.064*	1.000		
(4) Humane Orientation	0.032*	0.036*	0.217*	1.000	
(5) GDP per capita (2015)	-0.010	-0.039*	0.169*	-0.510*	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; Number of observations is 22,236; The reported data covers 21 countries;

"Works on public sector" is a dichotomous variable that takes value of 1 when individual is working for the public sector and takes value of 0 when individual is working for the private sector. PSM is a measure constructed from two questions from the ISSP Work Orientation IV dataset.

To control for the common unobservable characteristics between some of the counties, I group countries in clusters. Countries are grouped based on the clusters suggested by House et al. (2002). Gupta, Hanges, and Dorfman (2002) provide a detailed description of the approach used by House et al. (2002). The authors identify ten cultural clusters first analyzing previous literature and demographic characteristics of the nation, where forces that serve as basis for grouping countries include religious and linguistic commonality, ethnic social capital, geographic proximity and social and psychological variables such as values and attitudes (Furnham, Kirkcaldy, & Lynn, 1994; Cattell, 1950; Ronen & Shenkar, 1985; Portes & Zhou, 1994). After the data collection, Gupta et al. (2002) provided support to the existence of the initial clusters by applying discriminant analysis.

Out of ten clusters, only eight are present in the current sample. These clusters and the corresponding countries are *Anglo-Saxon* (Australia, Great Britain, United States and South Africa); *Germanic Europe* (Austria, Switzerland, Germany); *Confucian Asia* (China, Japan); *Eastern Europe* (Czech Republic, Hungary, Poland, Russian); *Nordic Europe* (Finland and Sweden); *Latin Europe* (Spain, France and Israel); *Latin America* (Mexico); *Southern Asia* (Philippines, India).

Figure 5 offers a visual representation of aggregated scores per cluster for my key variables. Size of the public sector, which is presented as the percentage of the sample respondents that are employed in the public sector, and levels of public service motivation show a similar pattern across clusters. It is important to notice that I do not use aggregated scores in Figure 5 in the regression analysis. However, the figure provides an argument for using clusters as set of control dummy variables.

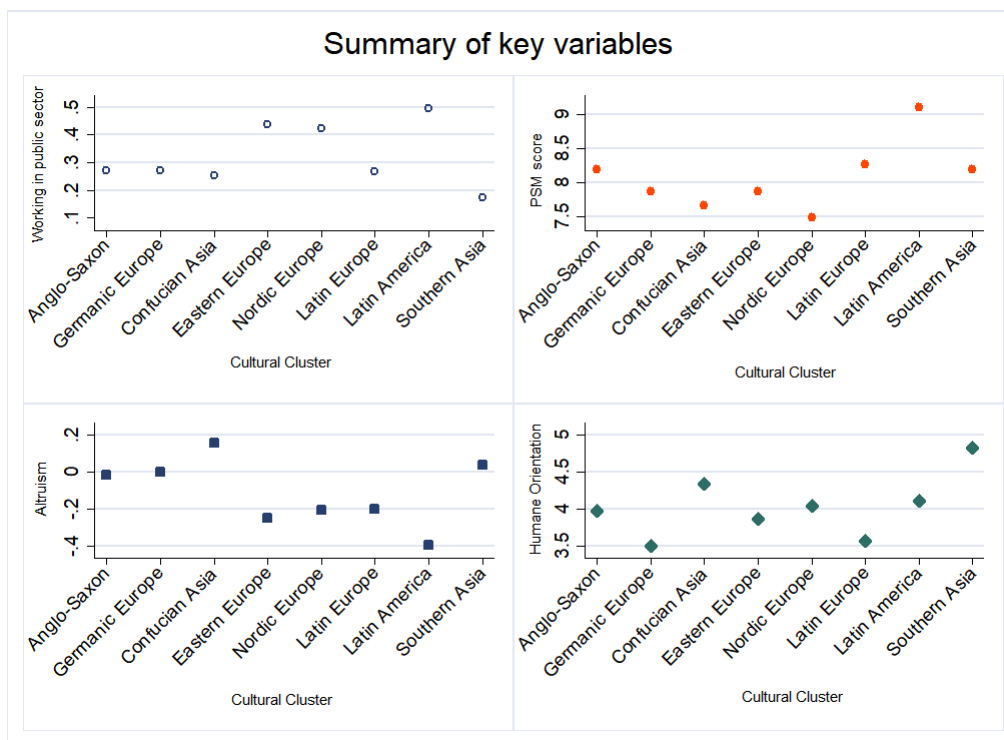


Figure 5. Summary of the variables of interest (share of employees working in the public sector, public service motivation score, altruism and humane orientation) per cultural cluster.

Methodology

The dependent variable of this study shows whether an individual works for the public sector (then, the value of the variable ‘Public’ is equal to one) or for the private sector (then, the value of the variable ‘Public’ is equal to zero). Therefore, as the dependent variable of the study is binary, this necessitates the use of either a linear probability model (LPM) or of models such as logit or

probit. Compared to the linear probability model, a logit regression and interaction effects are more difficult to interpret, as logit uses maximum likelihood estimation and provides results in log-odds which are not intuitive for interpretation. A logit model solves the LPM problem of possibly getting a predicted probability that is higher than one or lower than zero. However, the logit model provides marginal effects that are different, depending on the values of independent variables. This is a good choice to ensure the robustness of the results but adds to the interpretation challenge.

Aldrich and Nelson (1984) argue that, in a linear regression with a binary dependent variable, the parameter estimates are unbiased. Pindyck and Rubinfeld (1981) state that the relative magnitude of the parameters that are obtained through LPM are, as a rule, similar or identical to the maximum likelihood logit estimators. However, it is commonly argued that significance tests in such regressions with binary variables might not be accurate. It is important to note that when the same LPM models were run in a logit regression, the same significant results appeared for the independent and control variables. Therefore, the regression results that are reported later are Linear Probability Model regression results.

In order to account for the heteroskedasticity, robust standard errors that are clustered at the country level will be utilized. To provide additional rationalization for the use of LPM, I rely on the argument of Cohen and Cohen (1983) and Pedhazur (1982) who describe that LPM can indeed be considered a good modelling technique for the case with the binary dependent variable.

Furthermore, some of the independent variables are categorical and ordinal (i.e. original questions that were used to construct PSM measure, where answers were given on a Likert scale). Previous literature suggests that, when looking at the preference variables most respondents understand, the difference between responses of 1 and 2 is similar to the difference between responses of 2 and 3, and so on (Westover, 2008). For the categorical variables where this intuition might not apply (for instance, frequency of attendance of religious services or level of education), these categorical variables will be transformed in a set of dummies.

For each hypothesis, I will run three LPM models. The first model includes two key variables of interest – PSM score and a measure of national culture, to explore whether a one-unit change in these variables leads to a significant increase of the probability of working in the public sector. The second model will include an interaction between the individual level of PSM and the measure

of national culture. The third model will additionally include all individual-level and country-level control variables. The full model is presented below:

$$Public_{ij} = \beta_0 + \beta_1 PSM_{ij} + \beta_2 PSM_{ij} \times National\ Culture_j + \sum_{a=3}^{23} \beta_a X_{aij} + \beta_{24} National\ Culture_j + \beta_{25} GDP_j + \sum_{a=26}^n \beta_a X_{aij} + \varepsilon_{ij},$$

Where $Public_{ij}$ is a binary variable that has the value of 1 for individual i working in the public sector β_1 can be interpreted as the change in the probability that an individual i from the country j will work in the public sector if her PSM score increases, while holding the other regressors constant. The coefficient β_2 represents the coefficient of the interaction effect between one's level of public service motivation and the coefficient of national culture of her country. Therefore, in this analysis, I aim to estimate whether the effect of individuals' PSM on sorting into the public sector is stronger when the coefficient of national culture is high, while controlling for individual characteristics and the country's GDP.

Coefficients β_3 to β_{23} represent a set of control variables at the individual level, including three continuous variables such as one's age, number of children, and number of hours worked per week, as well as a binary variable for gender. Moreover, this range of coefficients also includes a set of dummy variables for each categorical variable: marital status (rearranged in four dummy variables with one reference category), level of education and attendance of religious services (presented as six dummies with one reference category).

The country level variables for the *National culture* variable are altruism (from the GPS dataset for Hypothesis 1) and humane orientation (from the GLOBE dataset for Hypothesis 2). The control variables on the country level are the GDP per capita and a set of dummies for the country clusters. The country clusters are presented in Table 1 (in the Appendix). This grouping is presented by Hofstede (1980) and then further validated by House et al. (2002) as countries within clusters are proven to have a set of cultural features in common (for instance, shared language or shared history).

Results

Using linear probability model, I run three models for each hypothesis as discussed in the previous section. These results are presented in Table 6 and Table 7. Table 6 also includes the null model, with only PSM as the dependent variable.

Altruism

For the first hypothesis, I evaluate whether in countries with high preferences for altruistic behavior, the relation between PSM and the choice to work in public sector is stronger compared to the countries where preference for altruism is low. I hypothesized that when being altruistic is considered a virtue, society will reward aspirations of individuals who are altruistic and this result in a relatively larger public sector.

According to Table 6, the null model suggests that an increase in the individual PSM score by 1 is associated with an increase of estimated probability of being in the public sector by 0.022 percentage points, holding everything else constant. The effect of PSM on the probability of being in the public sector is similar in magnitude across all four models and is significant at 1% level. In turn, increase of the PSM score by 1 corresponds to an individual rating statements as “I value a job that is useful to society” and “I find important a job that allows me to help other people” more positively.

Looking at Model 2, for individuals with PSM equal to zero, across countries the relation between probability of working in the public sector and national altruism is negative. As individuals have higher PSM, this relation becomes less negative, and changes into positive if $PSM > 0.146/0.0341$, which corresponds to $PSM > 4.28$.

Coefficient of Altruism changes sign, magnitude and loses significance from Model 2 to Model 3. One theoretical explanation for the change of sign might be the correlation between altruism and included controls. Based on the set of controls that I utilize, the dummy variables for country clusters have the potential to highly correlate with the measure of altruism. When individual-level controls are included but the country cluster dummies are dropped from the regression model, coefficient of altruism is also negative, yet interaction effect between PSM and altruism remains significant, positive and of a similar magnitude.

Model 3 also presents a significant positive effect of an increase in PSM on probability of being in the public sector. The interaction effect of individual's PSM and cultural dimension of altruism on a societal level is significant, has a positive sign and comparable in magnitude with the effect of PSM. Therefore, the effect of individual's level of PSM is not limited to the coefficient β_1 , but it also depends on the value of the altruism variable in the country of residence of that individual.

Comparing two similar individuals that have the same age, identical education, identical levels of public service motivation and have other individual-level characteristics equal, but come from the different countries even within one cultural cluster (e.g. one individual comes from China, where altruism score is 0.505 and the other individual comes from Japan, where the altruism score is -0.241 ; both countries are part of the Confucian Asia cluster), an increase in the PSM by 1 increases the estimated probability of being in the public sector by $0.0131 * (0.505 - (-0.241)) \approx 0.01$ percentage points more for people in China than in Japan (not including the direct effect of the public service motivation, that is 0.028 percentage points). Hence, there is evidence that the relation between PSM and the choice to work in the public sector is stronger in countries with a high preference for altruism as compared to countries with a low preference for altruism. Therefore, Hypothesis 1 is not rejected.

Table 6. Regression output for the test of Hypothesis 1.

	Model 0	Model 1	Model 2	Model 3
PSM	0.0223*** (0.0018)	0.0229*** (0.0018)	0.0229*** (0.0020)	0.0285*** (0.0020)
Altruism	-	0.0563*** (0.009)	-0.1460** (0.0489)	0.0457 (0.0479)
PSM x Altruism	-	-	0.0341** (0.0057)	0.0131** (0.0057)
Age	-	-	-	0.0036*** (0.0002)
Female	-	-	-	0.0775*** (0.006)
Individual controls	-	-	-	Yes
Country controls	-	-	-	Yes
Constant	0.111*** (0.0145)	0.099*** (0.0146)	0.099*** (0.0167)	-0.0390 (0.0293)

N	22236	22236	22236	22236
R-squared	0.006	0.007	0.0073	0.1148

Note: Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dependent variable states whether the individual works in the public sector; Model 3 includes a set of individual and country control variables. Individual controls include age, gender, number of children, frequency of attendance of religious services, marital status and level of education. Country controls include GDP per capita and dummy variables for the country clusters, which are Germanic Europe, Anglo-Saxon, Latin Europe, Nordic Europe, Eastern Europe, Confucian Asia, Southern Asia and Latin America.

Humane Orientation

For the second hypothesis I used data from the GLOBE study. I hypothesized that the relation between PSM and the choice to work in the public sector is stronger in countries with a high level of humane orientation as compared to countries with a low preference for humane orientation values.

Based on Table 7, Model 1 shows that an increase in the individual PSM score by 1 is associated with an increase of estimated probability of being in the public sector by 0.023 percentage points, holding everything else constant. In order to test the second hypothesis, I use an alternative measure of the altruistic national culture. Nevertheless, the magnitude of the PSM coefficient in Model 1 is very similar to the one presented in Table 6.

However, Model 2 overall yields different results. The coefficient of humane orientation is positive, but the coefficient of interaction between humane orientation and public service motivation has a negative sign. After adding individual-level and country-level control variables, Model 3 also suggests that Humane Orientation as a cultural dimension has a strong and significant effect on individual working in the public sector.

Javidan and Dastmalchian (2009) suggest that in countries with high level of Humane Orientation (such as Philippines), human relations and support for others is highly valued. Thus, people care for the well-being of others and belongingness to a certain group is valued. In turn, countries that scored low on Humane Orientation (for instance, Germany or Spain) put more emphasis on material possessions, independence and power. This approach might aid in explanation of the positive and highly significant coefficient of humane orientation in Model 2 and Model 3. If

individuals in countries with high humane orientation indeed value sympathy for others, this might facilitate the formation of a relatively large public sector. As such, the individuals who do not have a particularly high level of public service motivation might still be interested in a job in the public sector due to the prevailing societal attitudes. Nevertheless, the direct effect of the Humane Orientation on the individual choice of work sector must be interpreted with caution, as Humane Orientation is a country-level variable, the direct effect rather represents a cross-country correlation between Humane Orientation and the size of public sector among 21 countries.

The interaction effect between one's level of PSM and level of humane orientation is statistically significant but has a negative magnitude, which goes against the second hypothesis. Comparing two similar individuals that are of the same age, have identical education, identical levels of public service motivation and have other individual-level characteristics equal, but come from the different countries even within one cultural cluster (e.g. one individual comes from Germany, where humane orientation score is 3.291 and the other individual comes from Austria, where the humane orientation score is 3.723, both countries are part of the Germanic Europe cluster), an increase in the PSM by 1 decreases the estimated probability of being in the public sector by $-0.0176 * (3.723 - 3.291) \approx 0.008$ percentage points more for people in Austria than in Germany (not including the direct effect of the public service motivation, that is 0.0920 percentage points). Hence, there is evidence that the relation between PSM and the choice to work in the public sector is weaker in countries with a high humane orientation as compared to countries with a low humane orientation score. Therefore, Hypothesis 2 is rejected.

Table 7. Regression output for the test of Hypothesis 2.

	Model 1	Model 2	Model 3
PSM	0.0226*** (0.0018)	0.0958*** (0.0159)	0.0920*** (0.0160)
Humane Orientation (HO)	-0.0357** (0.0062)	0.118*** (0.0334)	0.209*** (0.0352)
PSM x HO	-	-0.0189*** (0.0041)	-0.0176*** (0.0041)
Age	-	-	0.0036*** (0.0002)
Female	-	-	0.0783*** (0.0059)
Individual controls	-	-	Yes
Country controls	-	-	Yes
Constant	0.248*** (0.0275)	-0.347** (0.130)	-0.845*** (0.139)
N	22236	22236	22236
R-squared	0.0073	0.0080	0.0904

Note: Standard errors in parentheses; *p<0.05, **p<0.01, ***p<0.001; Dependent variable states whether the individual works in the public sector; Model 3 includes a set of individual and country control variables. Individual controls include age, gender, number of children, frequency of attendance of religious services, marital status and level of education. Country controls include GDP per capita and dummy variables for the country clusters, which are Germanic Europe, Anglo cluster, Latin Europe, Nordic Europe, Eastern Europe, Confucian Asia, Southern Asia and Latin America.

Discussion and Conclusion

The goal of this research was two-fold: first, to evaluate the influence of public service motivation on the probability of working in the public sector using relatively new data of the ISSP Work Orientations 2015 wave. Secondly and most importantly, I aimed to investigate how dimensions of national culture influence the relation between individual values and their choice of sector of employment.

The results are partly in line with the previous research. This paper used a measure of public service motivation suggested by Lewis and Frank (2002) that most closely reflects the compassion and

self-sacrifice dimension of PSM as outlined by Perry (2000). If PSM increases by 1, the probability that this individual is working in the public sector increases by 0.03 percentage points (using the more conservative estimates from Table 6, Model 3), all else being equal and without the inclusion of the interaction effect. An increase in PSM by 1 corresponds to an individual rating the two statements “I value a job that is useful to society” and “I find important a job that allows me to help other people” as “very important” instead of “important”.

Moreover, societal preference for altruistic behavior adopted from the Global Preference Survey is found to affect the relation between individual public service motivation and their choice of where to work. Thus, this paper presents evidence in support of the first hypothesis which stated that in countries with high preferences for altruism, the relation between PSM and the choice to work in the public sector is stronger, as compared to the countries where preference for altruism is low.

This paper also utilized an alternative measure of national culture aligned with the altruistic behavior: Humane Orientation from the GLOBE dataset. However, this measure did not yield evidence in support of the second hypothesis as the sign of the interaction effect was negative. Therefore, in countries with high level of humane orientation, the relation between PSM and choosing the public sector is weaker as compared to the countries with low level of humane orientation. One possible explanation of that can reside in the point addressed by Javidan and Dastmalchian (2009): people in countries with high scores of Humane Orientation value empathy for the well-being of others. Hence, individuals in such countries might already be more prone to choose public sector as a sector of employment. However, if these individuals also have a high level of public service motivation, in country with high scores of humane orientation, they possibly might have more opportunities to realize their aspirations for public service in private sector as compared to the public sector, since humane orientation is considered a virtue across society.

Further in this section I present limitations of the current research, outline theoretical and practical contribution of the paper and offer several suggestions for the future research based on the defined limitations.

Limitations of the research

Despite of the partially significant results, there are several limitations to the conducted study. First and foremost, it is crucial to address potential threats to internal validity of the study. Conceptualization of such terms as “altruism”, “humanness” or “national culture” has long been a topic of discussion in the previous literature, as I briefly addressed in the theoretical framework. Furthermore, operationalization of these terms is also particularly challenging. I operationalized the concepts of public service motivation, altruism and humane orientation based on the prior literature and available data.

However, while there is not a lot of criticism towards the Global Preference Survey collected by Falk et al. (2016) and the national preferences it elicits, the GLOBE project was discussed and criticized in detail. Hofstede (2010) commented on the GLOBE study and stated that individual respondents might not have been able to accurately portray their national culture, as they do not have a frame of reference. For instance, if the respondents have never been abroad or did not have any international experience, their representation of in-country culture may be biased. Additionally, cross-national research necessitates a consistent measure of public service motivation. ISSP dataset, as the majority of global collection data studies use the method of within-country random sampling. Nevertheless, in different countries the questionnaire is offered in different languages, which might introduce additional errors in the data.

Secondly, it is important to address confounding variables and possible omitted variable bias. Disentangling unobservable characteristics of cultural dimensions such as altruism or humane orientation from the historic context of the country is challenging. Public service motivation and perception of the national culture can be influenced by measurement mistakes, level of corruption and subsequent trust in government, type of the government and so on. Furthermore, as the cultural dimensions vary at the national level, the study runs a large risk of omitted variable bias.

Thirdly, data to test each hypothesis comes from three different datasets, where one dataset is a source of individual level data and the other datasets present the country-level data. While linear probability model as a method has its benefits that were outlined in the methods section, one can make a choice for a better methodological model. This would be multilevel (hierarchical) logistic regression, that would account for individual-level characteristics and country-level characteristics

and the binary dependent variable. This method of modelling was not applied due to its long running time and difficulty of interpretation; however, it has the potential to yield more precise statistical results.

Fourthly, even though ISSP Work Orientations IV dataset provided a sufficiently large number of observations it was not originally designed to study public service motivation. The main deficiency is limited framework to construct the measure of PSM, hence I only had data to construct a PSM measure that is aligned with the compassion dimension. Another crucial deficiency of the data is the fact that respondents are asked about their motivations after they have entered public or private sector. A better approach would have been to collect a dataset with the sample of individuals prior of them choosing the sector of employment and taking into account all the dimensions of public service motivations discussed by Perry and Wise (2000).

Lastly, despite the plethora of research that exhibits persistent differences between the public and private sectors (Hugree, Penissat, & Spire, 2015), nowadays the private sector offers job opportunities that allow for an individual to both maintain a higher quality of life and express their predisposition to helping others, being altruistic and fulfilling public service motives. Moreover, the private sector even offers ample opportunity for policy-oriented employment (Meadowcroft, 2007), even though the attraction to policymaking is typically considered a dimension of PSM that can rather be satisfied by the public sector, as defined by Perry (2000).

Therefore, for the future research, it would be sensible to directly compare not only the sector of employment, but also similar occupations within differing sectors of employment in order to examine variations of public service motivation within and across the nations. Thus, bringing analysis to a more specific level where one compares private and public employees within one focus of employment might offer more meaningful results.

Implications

Theoretical implications of this paper reside in bringing a perspective of the national cultures into motivational and behavioral aspects of choosing sector of employment. Besides offering a starting point in cross-cultural research for sorting, the current research adds to the motivation theory by highlighting the importance of socio-cultural context for the decision of choosing sector of employment.

Regarding the practical implications of the paper, it offers an insight for attracting employees with high altruistic motivations to the public sector. Thus, the local government bodies that aim to forward the employment in the public sector, might consider a campaign that disseminates humane oriented values and presents caring for others as a societal virtue. Furthermore, officials that attempt to attract individuals to the public sector should be mindful of cultural perceptions and highlight the societal impact of the vacancies taking into consideration already existing societal perceptions and attitudes on this matter.

In conclusion, the research goal of the paper aimed to determine to what extent do attributes of national culture have the potential to influence the effect of individual level of public service motivation on the probability of working in the public sector. The results suggest that if individuals within a country consider altruism a virtue, this will lead to a relatively bigger public sector: individuals who have high public service motivation are more likely to act on their values and obtain a job in the public sector as opposed to the private sector. For the future research, I suggest examining historical data of the public sector within each cluster in order to combine both empirical and qualitative approach.

References

- Ahlstrom, D., & Bruton, G. D. (2002). An institutional perspective on the role of culture in shaping strategic actions by technology-focused entrepreneurial firms in China. *Entrepreneurship Theory and Practice*, 26(4), 53-68.
- Aldrich, J. H., Nelson, F. D., & Adler, E. S. (1984). *Linear probability, logit, and probit models* (No. 45). Sage.
- Anderfuhren-Biget, S. (2012). Profiles of public service-motivated civil servants: Evidence from a multicultural country. *International Journal of Public Administration*, 35(1), 5-18.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of social and clinical psychology*, 4(3), 359-373.
- Batson, C. D., & Shaw, L. L. (1991). Evidence for altruism: Toward a pluralism of prosocial motives. *Psychological inquiry*, 2(2), 107-122.
- Bellante, D., & Link, A. N. (1981). Are public sector workers more risk averse than private sector workers?. *ILR Review*, 34(3), 408-412.
- Besley, T., & Ghatak, M. (2005). Competition and incentives with motivated agents. *American economic review*, 95(3), 616-636.
- Bouckaert, G., Peters, B. G., & Verhoest, K. (2016). *Coordination of public sector organizations*. London: Palgrave Macmillan.
- Bouckaert, G., Peters, B. G., & Verhoest, K. (2016). *Coordination of public sector organizations*. London: Palgrave Macmillan.
- Bozeman, B., & Su, X. (2015). Public service motivation concepts and theory: A critique. *Public Administration Review*, 75(5), 700-710.
- Brewer, G. A. (2003). Building social capital: Civic attitudes and behavior of public servants. *Journal of Public Administration Research and Theory*, 13(1), 5-26.

Brewer, G. A., Ritz, A., & Vandenabeele, W. (2012). Introduction to a symposium on public service motivation: An international sampling of research.

Bright, L. (2008). Does public service motivation really make a difference on the job satisfaction and turnover intentions of public employees?. *The American Review of Public Administration*, 38(2), 149-166.

Buurman, M., Delfgaauw, J., Dur, R., & Van den Bossche, S. (2012). Public sector employees: Risk averse and altruistic?. *Journal of Economic Behavior & Organization*, 83(3), 279-291.

Christensen, R. K., Wright, B. E., & Isett, K. R. (2013). Motivated to adapt? The role of public service motivation as employees face organizational change. *Public Administration Review*, 73(5), 738-747.

Cohen, A. (1983). Comparing regression coefficients across subsamples: A study of the statistical test. *Sociological Methods & Research*, 12(1), 77-94.

Crewson, P. E. (1997). Public-service motivation: Building empirical evidence of incidence and effect. *Journal of public administration research and theory*, 7(4), 499-518.

Deci, E. L., & Ryan, R. M. (2005). Intrinsic motivation inventory (IMI). Retrieved July, 23, 2006.

Deci, E. L., & Ryan, R. M. (Eds.). (2004). *Handbook of self-determination research*. University Rochester Press.

Delfgaauw, J., & Dur, R. (2007). Signaling and screening of workers' motivation. *Journal of Economic Behavior & Organization*, 62(4), 605-624.

Dur, R., & Zoutenbier, R. (2014). Working for a good cause. *Public Administration Review*, 74(2), 144-155.

Falk, A., Becker, A., Dohmen, T. J., Huffman, D., & Sunde, U. (2016). The preference survey module: A validated instrument for measuring risk, time, and social preferences.

Falk, A., Becker, A., Dohmen, T., Enke, B., Huffman, D., & Sunde, U. (2018). Global evidence on economic preferences. *The Quarterly Journal of Economics*, 133(4), 1645-1692.

- Fukuyama, M. F. (2000). *Social capital and civil society*. International Monetary Fund.
- Furnham, A., Kirkcaldy, B. D., & Lynn, R. (1994). National attitudes to competitiveness, money, and work among young people: First, second, and third world differences. *Human Relations*, 47(1), 119-132.
- Georgellis, Y., & Tabvuma, V. (2010). Does public service motivation adapt?. *Kyklos*, 63(2), 176-191.
- Gerring, J. (1999). What makes a concept good? A criterial framework for understanding concept formation in the social sciences. *Polity*, 31(3), 357-393.
- Gupta, V., Hanges, P. J., & Dorfman, P. (2002). Cultural clusters: Methodology and findings. *Journal of world business*, 37(1), 11-15.
- Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, 10(4), 15-41.
- Hofstede, G. (2006). What did GLOBE really measure? Researchers' minds versus respondents' minds. *Journal of international business studies*, 37(6), 882-896.
- Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies*, 41(8), 1339-1346.
- Hofstede, G., & Minkov, M. (2010). Long-versus short-term orientation: new perspectives. *Asia Pacific business review*, 16(4), 493-504.
- Hofstede, G., Garibaldi de Hilal, A. V., Malvezzi, S., Tanure, B., & Vinken, H. (2010). Comparing regional cultures within a country: Lessons from Brazil. *Journal of Cross-Cultural Psychology*, 41(3), 336-352.
- House, R. J. (2004). An overview of the GLOBE research program. *Transformative Organizations: A Global Perspective*, 483.

- House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE. *Journal of world business*, 37(1), 3-10.
- Houston, D. J. (2006). "Walking the walk" of public service motivation: Public employees and charitable gifts of time, blood, and money. *Journal of Public Administration Research and Theory*, 16(1), 67-86.
- Houston, D. J. (2011). Implications of occupational locus and focus for public service motivation: Attitudes toward work motives across nations. *Public Administration Review*, 71(5), 761-771.
- Houston, D. J., & Cartwright, K. E. (2007). Spirituality and public service. *Public Administration Review*, 67(1), 88-102.
- Hugrée, C., Penissat, É., Spire, A., & Matthews, T. (2015). Differences between public and private sectors employees following the managerial turn in European States. *Revue française de sociologie*, 56(1), 47-73.
- ISSP Research Group (2017): *International Social Survey Programme: Work Orientations IV - ISSP 2015*. GESIS Data Archive, Cologne. ZA6770 Data file Version 2.1.0, [doi:10.4232/1.12848](https://doi.org/10.4232/1.12848)
- Javidan, M., House, R. J., Dorfman, P. W., Hanges, P. J., & De Luque, M. S. (2006). Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches. *Journal of international business studies*, 37(6), 897-914.
- Jutz, R., Scholz, E., Braun, M., & Hadler, M. (2018). The ISSP 2015 Work Orientations IV Module.
- Kauzya, J., & Niland, E. (2020, June). *The role of public service and public servants during the COVID-19 pandemic* (Issue Brief No.79). United Nations, Department of Economic and Social Affairs. https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/PB_79.pdf
- Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government?. *Public administration review*, 62(4), 395-404.

Luechinger, S., Stutzer, A., & Winkelmann, R. (2007). The happiness gains from sorting and matching in the labor market.

March, J. G., & Olsen, J. P. (1989). *The organizational basis of politics*. Free.

Meadowcroft, J. (2007). Democracy and accountability: the challenge for cross-sectoral partnerships. *Partnerships, governance and sustainable development: reflections on theory and practice*, 194-213.

Nunally, J. C., & Bernstein, I. H. (1978). Psychometric theory.

Pandey, S. K., & Stazyk, E. C. (2008). Antecedents and correlates of public service motivation. *Motivation in public management: The call of public service*, 101-117.

Pandey, S. K., Wright, B. E., & Moynihan, D. P. (2008). Public service motivation and interpersonal citizenship behavior in public organizations: Testing a preliminary model. *International public management journal*, 11(1), 89-108.

Pearce, J. L. (1983). Job attitude and motivation differences between volunteers and employees from comparable organizations. *Journal of applied psychology*, 68(4), 646.

Pedhazur, E. J. (1984). Sense and nonsense in hierarchical regression analysis: Comment on Smyth.

Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of public administration research and theory*, 6(1), 5-22.

Perry, J. L. (1997). Antecedents of public service motivation. *Journal of public administration research and theory*, 7(2), 181-197.

Perry, J. L. (2000). Bringing society in: Toward a theory of public-service motivation. *Journal of public administration research and theory*, 10(2), 471-488.

Perry, J. L., & Hondeghem, A. (2008). Building theory and empirical evidence about public service motivation. *International public management journal*, 11(1), 3-12.

- Perry, J. L., & Hondeghem, A. (Eds.). (2008). *Motivation in public management: The call of public service*. Oxford University Press on Demand.
- Perry, J. L., & Porter, L. W. (1982). Factors affecting the context for motivation in public organizations. *Academy of management review*, 7(1), 89-98.
- Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public administration review*, 367-373.
- Perry, J. L., Hondeghem, A., & Wise, L. R. (2010). Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future. *Public administration review*, 70(5), 681-690.
- Peterson, M. F., & Ruiz-Quintanilla, S. A. (2003). Cultural socialization as a source of intrinsic work motivation. *Group & Organization Management*, 28(2), 188-216.
- Pindyck, R. S., & Rubinfeld, D. C. (1981). *Econometric models and Econometric factors* 2nd ed McGraw/Hill book Co. New York.
- Portes, A., & Zhou, M. (1994). The new second generation [Special issue]. *International Migration Review*, 28(4).
- Rainey, H. G. (1983). Public agencies and private firms: Incentive structures, goals, and individual roles. *Administration & Society*, 15(2), 207-242.
- Rainey, H. G., & Steinbauer, P. (1999). Galloping elephants: Developing elements of a theory of effective government organizations. *Journal of public administration research and theory*, 9(1), 1-32.
- Ritz, A., & Brewer, G. A. (2013). Does societal culture affect public service motivation? Evidence of sub-national differences in Switzerland. *International Public Management Journal*, 16(2), 224-251.
- Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *Academy of management Review*, 10(3), 435-454.

- Shamir, B. (1991). Meaning, self and motivation in organizations. *Organization studies*, 12(3), 405-424.
- Smith, P. B. (2006). When elephants fight, the grass gets trampled: The GLOBE and Hofstede projects. *Journal of international business studies*, 37(6), 915-921.
- Staats, E. B. (1988). Public service and the public interest. *Public Administration Review*, 601-ii.
- Taylor, J. (2010). Public service motivation, civic attitudes and actions of public, nonprofit and private sector employees. *Public administration*, 88(4), 1083-1098.
- Van Oorschot, W., Arts, W., & Halman, L. (2005). Welfare state effects on social capital and informal solidarity in the European Union: evidence from the 1999/2000 European Values Study. *Policy & Politics*, 33(1), 33-54.
- Vandenabeele, W. (2007). Toward a public administration theory of public service motivation: An institutional approach. *Public management review*, 9(4), 545-556.
- Vandenabeele, W., & Van de Walle, S. (2008). International differences in public service motivation: Comparing regions across the world. *Motivation in public management: The call of public service*, 223-244.
- Westover, J. H. (2016, August). The international political economy of worker satisfaction: a cross-national HLM analysis. In *Evidence-based HRM: A Global Forum for Empirical Scholarship*. Emerald Group Publishing Limited.
- Westover, J. H., & Taylor, J. (2010). International differences in job satisfaction. *International Journal of Productivity and Performance Management*.

Appendix

Table 1. List of countries and data for national culture.

Cluster	Country	N	Mean (public)	Altruism	HO	GDP per capita 2015
Germanic Europe	AT-Austria	953	0.255	-0.035	3.723	90944.58
	CH-Switzerland	1185	0.276	0.095	3.603	103602.6
	DE-Germany	1572	0.277	-0.051	3.291	88563.62
Anglo-Saxon	AU-Australia	1076	0.345	0.155	4.28	88736.66
	GB-Great Britain	1742	0.292	0.028	3.716	80114.55
	US-United States	1393	0.212	0.406	4.166	112110.7
Latin Europe	ZA-South Africa	1952	0.254	-0.321	3.913	42157.77
	ES-Spain	1597	0.146	-0.129	3.32	83413.03
	FR-France	1125	0.357	-0.175	3.395	93364.73
Nordic Europe	IL-Israel	1146	0.351	-0.326	4.101	73240.91
	FI-Finland	1136	0.388	-0.25	3.962	87666.04
	SE-Sweden	1071	0.458	-0.167	4.103	93280.07
Eastern Europe	CZ-Czech Republic	1287	0.364	-0.94	4.173	63686.36
	GE-Georgia	1131	0.799	0.628	4.176	19217.84
	HU-Hungary	944	0.288	-0.591	3.348	57369.78
Confucian Asia	PL-Poland	1647	0.353	-0.37	3.606	56743.25
	RU-Russia	1353	0.416	-0.069	3.935	49871.59
	CN-China	707	0.554	0.505	4.36	24802.66
Southern Asia	JP-Japan	1402	0.101	-0.241	4.297	75034.78
	PH-Philippines	1084	0.097	0.381	5.12	16769.5
	IN-India	634	0.306	-0.268	4.571	16727.94
Latin America	VE-Venezuela	698	0.828	0.08	4.249	38564.58
	MX-Mexico	922	0.245	-0.813	3.98	41586.96
Total		27757	0.319	-0.131	3.986	64093.66

Note: HO stands for Humane Orientation; Mean public score is calculated based on ISSP Work Orientation IV module dataset (2015).