Determinants of Perceived Corruption: A Cross-National Study

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Chapter 1: Introduction

In recent years, the study of corruption has gained momentum in the criminological domain, as researchers seek to understand its global presence. Corruption has ties to occupational crime, organized crime, and state crime, among others. While corruption has diverse meanings, an almost universal aspect of most definitions is the misuse of power by a public servant for personal gain. In other words, this occurs when a person in public office "deliberately or recklessly acts in a way that is contrary to his [or her] duty and is in breach of his [or her] position of public trust" (GIACC N.d.). Corrupt behaviors are almost always hidden or denied because they violate laws, norms, and/or mores. While corruption may be hidden, its effects may be significant. Due to the broad extent of many political and public officials' power, they have the capacity to harm the public they are meant to serve by engaging in corruption, especially in areas where corruption is a systemic problem, or an "integrated and essential aspect of the economic, social and political system" (Byrne 2007).

Corruption can be understood or defined in both legal and non-legal perspectives; within law, both criminal and civil law may demarcate and prohibit practices that would widely be seen as corrupt. Legal definitions can allow for relatively straightforward or shared ways to identify a meaning of corruption, and individuals who have participated in corrupt practices. Countries usually define actions that are deemed corrupt by outlining them in statutes and codes of law. It is important to note, however, that the scope of each country's code of law may vary in how it defines, alleges, and proves corruption (Heidenheimer and Johnston 2011). Common instances of corruption, especially public

corruption, may include bribery, fraud, extortion, influence peddling, perverting the course of justice, or kickbacks (Crime and Corruption Commission 2015).

Popular understanding of corruption is shaped by the opinions of the citizens of a country. These opinions may be more firmly rooted in ethics than in legal or academic standpoints. In their perspectives on what corruption is, ordinary citizens can reflect a common understanding of their expectations from government officials and how power and authority are being administered in their society, including at many different levels. The general public's opinion may or may not necessarily align with the country's laws about or policies toward corruption; if there is a clear distinction between the legal and popular definitions of corruption, it becomes more difficult to assess corruption's role in that society. Furthermore, "effective action against corruption becomes difficult or impossible if public opinion does not correspond" with the legal definition (Heidenheimer and Johnston 2011:32).

Corruption is also defined and studied diversely for academic purposes. The lack of one distinct or universal definition of democracy underscores the problem that researchers face when studying corruption. Corruption exists in some capacity in most, if not all, parts of the world, yet it is not possible to create a universal definition of the term. The high level of variation in how corruption can be defined makes it unwise to generalize across societies, and also makes this phenomenon difficult to precisely measure.

Despite obstacles in developing a universal definition, it is important that researchers continue to work towards a fuller understanding of corruption. One reason is the pervasive nature of corruption and its extensive consequences. For example,

corruption undermines political stability and jeopardizes the legitimacy of a government; in conjunction with this, trust in the institutions of a corrupt state is compromised (Montesh N.d.). Corruption impacts access to public resources depending on a person's gender, work situation, income level, or education level. From an economic standpoint, corruption prevents economic growth by discouraging investment, resulting in more corrupt countries having dramatically lower per capita incomes (Melese N.d.). Further research into these aspects of corruption could lead to the stabilization of the economy, improvements to citizens' lives, and approaches to prevent future corruption.

Because an adequate direct measure of corruption has yet to be realized, research on corruption includes a shift to an indirect measure. One of the foremost measures of corruption, including for social scientists, is the perception of corruption. Organizations like Transparency International and the World Bank have developed indices and ratings systems devoted to documenting levels of perceived corruption around the world. It is, however, essential to understand how different aspects of individual and social life influence the formation of these perceptions.

The goal of this thesis is to determine how sociodemographic, political, and economic variables impact perceptions of corruption by public servants. To account for diverse interpretations of the term "public servant," I will focus on a broad understanding that can refer to elected and appointed officials, career officials, and other government employees. The analysis will identify both individual-level and aggregate-level predictors of perceptions of corruption. These predictors – the independent variables of this study – are identified in large part based on a critical reading of previous studies on perceptions of corruption. This thesis will also examine whether these predictors have the same

degree of influence cross-nationally. Using the International Social Survey Programme (hereafter, ISSP) database, I will analyze and compare data from twenty-four countries.

Ultimately, the goal of this thesis is to reach a more nuanced understanding of what social, political, and economic contexts shape perceptions of corruption. The structure of the thesis is as follows. In the following section, Chapter 2, I will review past research on the factors that shape perceptions of corruption. Chapter 3 describes the database, variables, and methodology of my analysis. The fourth section presents the results. In the final section, Chapter 5, I discuss my conclusions and the implications of this thesis for future research.

Chapter 2: Literature Review

As noted, the concept of corruption cannot be defined universally. A broad definition of the term, however, would highlight the abuse of public office with the intention of making private gains, usually in violation of criminal law. All the components of this loose definition are open to contestation and debate; however, this definition, along with the perception of corruption measure, has given some researchers a foundation for their studies. It is to perceived corruption, and what variables might explain what makes people more or less likely to perceive corruption, that I now turn.

One of the most comprehensive studies on individual traits as predictors of perceived corruption was conducted by Melgar, Rossi, and Smith in 2010. The researchers used 2004 data from the ISSP to analyze the relationship between certain personal characteristics and perceived corruption in over thirty-five countries. They put forth that individual traits, such as age, gender, marital status, religion, education, etc., shape personal experiences and consequently the assessment of information and social rules. Inspired by the Melgar model, this thesis aims to follow this reasoning and explore how these variables, among others, shape how people perceive corruption to exist in their societies. The ways in which individual and societal traits influence perceived corruption are the central idea in the literature below.

Gender

The model created by Melgar et al. showed that there was a significant correlation between gender and perceived corruption, with women more likely to perceive a high level of corruption than men. The researchers suggest that this trend, which persisted

throughout all of their models, shows that gender influences the perspectives reported by respondents. A theoretical explanation for this correlation might be that a lower proportion of women than men believe that certain acts are justifiable; women might be more likely to interpret behaviors as corrupt, dishonest, or illicit. This notion is supported by a study conducted by Swamy, Knack, Lee, and Azfar (2001). The researchers' measure of involvement in bribery revealed that about one-fifth more men than women (27.6% vs. 22.7%) believe that bribe-taking can sometimes or always be justified (Swamy et al. 2001). This finding is underscored by the research of dos Santos, de Hoyos Guevara, and Amorim, who found that men were more willing to adopt unethical shortcuts to achieve personal goals (dos Santos et al. 2013). It can be argued that an individual who does not condone corruption will be more perceptive to its presence than someone who passively accepts it, since it may elicit a stronger moral or ethical reaction. Those who do not condone corruption are more likely to report its role in their society. Conversely, in a 2011 study, Tverdova finds that women are less likely to report perceiving corruption in their country; she theorizes that this is because women are less likely to encounter corruption directly. This may be due to a lack of equal representation in politics and business, leading to fewer reports of experience with corruption firsthand (Tverdova 2011). The discrepancies between these studies merit further research into how gender influences perception of corruption.

Marital Status

While the gender variable shows inconsistent trends in previous research, there is less debate over the role that marital status plays in perceiving corruption. Interestingly,

Melgar et al. noted a significant relationship between marital status and perceived corruption: married people tend to perceive a lower level of corruption, and the opposite is true for people who are divorced (Melgar et al. 2010). Citing Smith (1997), they explain that divorce strongly and negatively impacts how one shapes judgments, resulting in generally more cynical perspectives on life. Following this logic, personal characteristics and life events influence an individual's understanding of the society in which they live and dictate their social values and norms. Just as they shape thoughts, opinions, and moral codes, sociodemographic factors like gender, race, and years of education have the capacity to shape a person's perception of corruption, making them important variables to include in a study on perceived corruption.

Education and Trust (Institutional)

Though life events like marriage and divorce can transform how one makes sense of society, we must also take note of how other institutions and conditions (such as level of education) shape perception. The Melgar et al. study revealed that those who have completed at least a high school level of education are less likely to perceive high levels of corruption. The clear link between corruption and education is reinforced in a study by Glaeser and Saks (2006), who show that states with lower levels of educational attainment are more corrupt. Those with a higher level of education arguably tend to perceive lower levels of corruption because they have the opportunity to rely on more dependable sources of information and may process the information differently. They may have a more comprehensive understanding of society and are less likely to assume that corruption in their country is widespread. Melgar et al., however, could have more

accurately framed this trend by stating that more educated individuals are likely to perceive corruption more objectively.

A 2013 study by Ionescu delves deeper by explaining the complexities found in the relationship between education and perceived corruption. Ionescu's study provides insight into the relationship between an individual and the state, and how factors like years of education can enhance or weaken political trust. While Melgar et al. report a simple negative association between education and perceived corruption, Ionescu asserts that a higher level of education is associated with a boost in political trust. In other words, more education increases how much trust is placed in institutions, which lowers perceived corruption (Ionescu 2013). Ionescu notes that this trend occurs in countries with low levels of corruption.

While education enhances political trust in these countries, the opposite is true in countries with high levels of corruption. In their 2012 study, Hakhverdian and Mayne make it clear that in countries with high levels of corruption, political trust worsens as education improves for all levels of education, except the lowest level. This corrosive effect increases as individuals attain higher levels of education. These findings reinforce the notion that acquiring more education equips individuals to more objectively perceive the pervasiveness of corruption within their society.

Hakhverdian, Mayne, and Ionescu assert that perceived corruption is the by-product of a breakdown of trust in government administration, resulting in a "negative assessment of the functioning of institutions" (Ionescu 2013:140). This lack of institutional trust calls into question the baseline capacity of the respondents to trust in a more personal context.

Trust (Interpersonal)

A 2013 study conducted by Wroe, Allen, and Birch found that less trusting individuals are consistently more critical of politicians' misbehavior and are more likely to perceive the presence of corruption than their more trusting peers. Additionally, when the perceived level of corruption in a given situation declined, the researchers found that the mistrustful respondents were still relatively more critical than others, and at times even more so than originally recorded. Similar to how the role of gender on perceived corruption can be explained by the disapproval of illicit acts, Wroe et al. argue that a distrusting public is more likely to be morally offended by the misconduct of public officials and therefore more likely to find these acts scandalous (Wroe et al. 2013).

Loveless (2013) expands on this notion and looks at the relationship between trust, income, and individuals' perceptions of corruption. Loveless states (2013:485) that both income and social inequality are "strongly and independently predictive of individuals' levels of interpersonal trust," which suggests that higher levels of perceived inequality will correspond with higher levels of perceived corruption. Not only is suspicion of others increased, but mistrust and apathy toward the state is also increased. Lower levels of trust between subjects is tied to the perception that corruption is more pervasive. This may be due to a predisposition of citizens to assume that the actions of others are generally driven by immoral motives. A less trusting public will perceive its government as more corrupt. A sense of social solidarity among citizens would reduce the level of corruption perceived.

Income, Work, and Age

Loveless brings up an important factor regarding income. The relative economic standing of a person may affect his or her judgment, values, and overall perception of the social order. Tverdova (2011) addresses this issue and states that high-income individuals tend to report that corruption is less prevalent than low-income individuals. She makes a point of conveying that this trend seems to be related to access. She asserts that low-income individuals "disproportionately endure indirect costs of corruption due to their dependence on public goods and services" (Tverdova 2011:14). When confronted with bribery, for example, financially secure individuals are more likely to be able and willing to pay; meanwhile, financially unstable individuals are put at risk, which may lead to them forming the perception that the system is corrupt and unfair. These trends suggest that without the privilege of a high income, or arguably other protective factors like higher education, individuals have fewer resources and are more vulnerable to being exploited.

Tverdova puts forth that high-income individuals tend to believe that corruption is less widespread. Contrary to this, she then suggests the possibility that because high-income individuals are more willing to pay bribe-takers, they may actually encounter corruption more often in their everyday lives than low-income individuals. This idea echoes a 2008 study by Mocan, which demonstrates that high-income individuals are more likely to be targeted and asked to pay a bribe by a government employee.

Tverdova and Melgar et al. present their findings on other demographic factors of interest. For instance, Tverdova makes it clear that the income effect on perception of corruption is unrelated to employment status. That is, whether or not the respondent was

employed had no significant impact on the measure of perceived corruption. Whereas Tverdova found no association between work and corruption, the Melgar et al. study revealed significant trends tied not only to employment, but to work sector and self-employment as well. Melgar et al. find that unemployed individuals and those working in the private sector are more likely to perceive a higher level of corruption than those who are employed or who work in the public sector. Furthermore, they also found that being self-employed is positively related to perceived corruption, with self-employed individuals reporting more incidents of corrupt acts. Other studies have provided evidence that those who are self-employed, especially small business owners, may need to participate in corruption in order to operate their businesses. A 2013 study by Dreher and Gassebner on entrepreneurship found that fewer businesses were started in highly regulated countries, which had more required procedures and higher minimal capital requirements. Their analysis showed that circumventing regulations, or participating in "public corruption…increases private entrepreneurial activity significantly" (Dreher and Gassebner 2013:21). New business owners may engage in corruption to avoid costly regulations and policies.

The studies by Tverdova and Melgar et al. agree that the urbanicity of one's place of residence is not a significant predictor of perceived corruption, but they have contradictory findings on the question of age. Tverdova asserts that older people tend to perceive higher levels of corruption, while Melgar et al. state that age does not significantly affect perception. Tverdova's finding is supported by the results of a 2011 study by Adejumo and Ogbewe, in which they found that older individuals perceived more corruption. They provide a psychological explanation for this relationship, stating

that maturation and learning experiences enhance one's ability to recognize immoral practices like corruption (Adejumo and Ogbewe 2011). Each of these studies present compelling data on these demographic variables, making it all the more necessary to conduct further research. This thesis will aim to resolve these discrepancies by including these and other demographic variables in the analysis.

Religiosity

For most of the world, religion plays a substantial role in the formation of moral codes and how one perceives and assesses rules and laws. Personal experiences with religion shape not only how individuals conduct themselves in everyday situations, but also their perceptions and judgments of others. Melgar et al. incorporated religion as a variable in their study and found no significant differences between different religious and atheist groups. They do, however, find that degree of religiosity is a significant predictor of perceived corruption. By measuring the frequency with which respondents attended religious services, they found that a higher degree of religiosity reduces the level of perceived corruption (Melgar 2010). Lavena (2013) cites an earlier study by Melgar and Rossi on corruption permissiveness, or the willingness to justify corruption, which concluded that attending religious services more often is negatively correlated with permissiveness. Lavena provides a rationale for this trend, namely that "religion's function is to provide a sense of security and predictability in society," and that a sense of despair over pervasive corruption can be alleviated by religion (Lavena 2013:352). This suggests that those who are less permissive of corruption cope by attending religious

services more frequently. This study implies that there is a positive correlation between these variables, namely that religiosity is positively influenced by perceived corruption.

Political Ideology

Few studies have analyzed the correlation between political ideology and the perception of corruption. This area requires more attention from researchers as it can help to predict the extent to which voters across the political spectrum will perceive corruption. Partisan loyalty in Spain was studied by Anduiza, Gallego, and Muñoz in a 2013 study. These researchers found that corrupt acts were judged differently depending on whether the politician in question was a member of the respondents' political party, a member of the rival party, or of unknown affiliation. As hypothesized, the respondents reacted less critically when they were presented with corrupt members of their own party. When respondents were highly politically aware, however, the partisan bias disappeared. The authors note that greater political awareness means that respondents possess a more "sophisticated" political knowledge and process information more systematically than their less politically informed peers. Politically aware individuals rely less on stereotypes or assumptions (Anduiza 2013:1669). These findings demonstrate once again that more informed individuals, such as those with higher levels of education, are likely to use more objective rather than subjective assessments of corruption.

The role of party affiliation with regard to perceived corruption was also studied by Slomczynski and Shabad in 2011. These researchers determined whether perceptions of political party corruption in Poland impacted intention to vote for a particular party. They found that perceived corruption within a political party was negatively correlated

with votes for the corrupt party as well as the decision to vote at all. Neither of these studies directly examined whether ideology (or specific type of party) is related to varying levels of perceived corruption overall.

Income, trust, and the other variables I have discussed thus far are valuable factors to include in a study on perceived corruption; however, they operate on an individual level. A variable that may play a role in shaping perceptions on a larger scale is the degree of income inequality experienced by its citizens. I turn now to this aggregate-level variable, which is measured using Gini coefficients; these coefficients objectively reflect the relative equality or inequality in how income is distributed within a country.

Income Inequality

The relationship between income inequality and perception of corruption is the focal point in a study by Khagram and You (2005). These researchers conducted a cross-national study using averaged Gini coefficients juxtaposed with indices for perceived corruption. This study was the first to extensively theorize that high levels of income inequality are conducive to perceived corruption. By analyzing Gini data, the researchers found a strong association between high levels of inequality and perceived corruption. They argue that "income inequality increases the level of corruption through material and normative mechanisms" (Khagram and You 2005:138). Material mechanisms refer to the notion that wealth dictates one's motivation and ability to engage in corruption. The authors assert that the wealthy are more motivated and are presented with more opportunities to be corrupt than the poor. The normative mechanism refers to how

income inequality normalizes the navigation of corrupt institutions as an everyday necessity for those who use public services. The authors imply that in more democratic countries, such as the United States, income inequality cannot be maintained through oppression like an authoritarian regime. It is, however, maintained through the less overt normative and material mechanisms described above. This study helps explain perceived corruption by demonstrating how access to resources shapes one's experience with corruption, and therefore one's perceptions. This echoes the way in which Tverdova links income and perceived corruption. The authors assert that in some countries, those who have higher incomes (and therefore benefit from an unequal distribution of income) rely on corrupt approaches to obtain and maintain their wealth or status (Khagram and You 2005). For those who earn less (and therefore have more to gain from a more equitable distribution of income), corruption becomes normalized and accepted as a means of securing basic public services and may even be relied upon for survival. Meanwhile, the presence of corruption further underscores and reproduces existing inequality. Dincer and Gunalp (2012) also found strong evidence that an increase in corruption corresponds to an increase in income inequality. It can be concluded that the two forces facilitate each other by creating cycles of corruption and inequality within society. Dincer and Gunalp show how corruption impacts levels of inequality; Khagram and You demonstrate that a country's degree of income inequality is a strong and important determinant of perceived corruption.

The goal of Khagram and You was to establish the cyclical relationship between inequality and corruption. In doing so, they provided an important link between the ideas of income inequality and perceived corruption, adding to the research on how perceptions

vary by economic context. However, further research is necessary. While Khagram et al. and Dincer et al. greatly contribute to understanding the link between income inequality and perceived corruption, these studies focus purely on aggregate-level measures. Previous researchers searched for explanations at the macro-level as well, usually by comparing economic contexts cross-nationally.

For example, the 2010 study by Melgar et al. revealed factors that shape perception of corruption at both the micro- and macro-levels, making a cross-national comparison possible. As I have discussed earlier, the main focus of the Melgar et al. study is the exploration of individual traits influencing the perception of corruption. However, they also briefly studied country effects by comparing the national incomes of different countries. Over thirty-five countries were separated by national income level into a middle-income group and a high-income group. The analysis, along with previous research, revealed that the middle-income group (which included countries with slower economic growth) was correlated with higher levels of perceived corruption. Along with differing societal understandings of corruption, differences within economies play a role in shaping how corruption is perceived. Economic measures like a country's gross national income, gross domestic product, and income distribution shed light on how different financial contexts can make corruption more or less apparent to its citizens. Very few studies, however, have examined this relationship in the past decade while also melding both individual- and aggregate-level traits.

Perception of corruption results from a combination of personal and societal experiences along with the income distribution in one's country. This thesis will set itself apart from previous research by devoting more equal focus to both individual data and

aggregate data in understanding influences on perceived corruption. Furthermore, beyond research that has explored variables like individual income and work factors, research on economic factors within a country is limited to assessments of gross national income, gross domestic product, and standard of living. By examining the factor of income inequality in each country, this thesis will shed light on whether respondents in countries with a more equal distribution of income believe public servants in their countries are more transparent than those in countries with less equal income distributions. Unlike the Loveless study, I will discuss inequality by including Gini coefficients as an empirical measure of the countries' income distributions. This may reveal trends in how the presence of inequality can facilitate perception of corruption or vice versa. The thesis will more extensively explore this relationship, and it will do so by utilizing the most recent data available for cross-national comparison.

In addition, this thesis will introduce the variable of political ideology as well as revisit some of the sociodemographic factors addressed by previous research. Like any other personal trait, an individual's position on the political spectrum has the potential to shape the perception of corruption. This thesis will contribute to the research by assessing how political ideology relates to how one perceives corruption.

While previous research has largely focused on either individual characteristics or more aggregate-level country characteristics, this thesis will incorporate both levels. Finally, this research will contribute to the literature by examining whether the predictors of perceived corruption vary significantly across countries.

Chapter Three: Methods

Database

This thesis examines how perceptions of corruption are shaped by individual- and aggregate-level factors. The dependent variable is the extent of corruption among public servants as perceived by respondents. The independent variables are gender, marital status, educational attainment, age, political ideology, interpersonal trust, institutional trust, work status, work sector, type of employment, religiosity, place of residence, and the degree of income inequality in the respondent's country. The database that I use is the International Social Survey Programme. The ISSP was first fielded in 1985 to a handful of countries; today, the database includes fifty-three countries worldwide. The surveys are administered to national probability samples of adult respondents by professional survey research organizations in each participating nation, either by self-administered supplements to regular annual surveys or by stand-alone mail surveys, depending on the country and the year. The ISSP is a source of very high quality comparative data used by social scientists in several disciplines. Sample sizes are more than adequate to sustain multivariate analyses. Unlike omnibus social surveys such as the General Social Survey, ISSP surveys focus on a single topical area each year, with some topical modules replicated across years to render trend analyses possible. This thesis uses the 2014 module, which centers on the topic of citizenship (titled "Citizenship II" to reflect the fact that the 2014 module is a replication of the "Citizenship I" module that was fielded in 2004). Only data for the twenty-four countries included in the pre-release version of the Citizenship II module are currently available (see Table 1 for a list of the countries). The unavailability of the remaining countries, though unfortunate, is more than offset by the

fact that the module's data, collected in 2014, are the most recent available in the ISSP for studies of comparative perceptions of corruption.

The Gini coefficient in each country serves as the aggregate-level variable. The Gini index is an indicator of income inequality; this thesis uses coefficients estimated by the World Bank (Development Research Group 2013). The coefficients range from values of 0 to 100. A score of zero signifies perfect income equality among the residents of a country, and a score of one hundred indicates perfect income inequality. The use of this aggregate measure will allow me to examine whether the effects of the individual-level variables differ across countries.

Variables

The dependent variable (question 57, perceived level of corruption) is measured in the ISSP as follows: "How widespread do you think corruption is in the public service in (COUNTRY)?" The respondents chose from the following options:

Hardly anyone is involved 1
A small number of people are involved 2
A moderate number of people are involved 3
A lot of people are involved 4
Almost everyone is involved 5
Can't choose 8
No answer 9

Responses of "Can't choose" (8) or "No answer" (9) were declared as missing.[1]

Gender is referred to as "SEX" in the ISSP and is measured as either "female" (recoded 1) or "male" (recoded 0). Age ("AGE") is measured in years, with responses of "no answer" (999) declared as missing.

[1] Although this measure is a rank-order variable, I use it in my analysis as if it was continuous.

Marital status ("MARITAL") is measured as follows:

Married 1
Civil partnership 2
Separated from spouse/civil partner (still legally married) 3
Divorced from spouse/legally separated from civil partner 4
Widowed/civil partner died 5
Never married/never in a civil partnership (single) 6
Refused 7
No answer 9

Responses of "refused" (7) and "no answer" (9) were declared as missing. I created a series of dummy variables for marital status, designating "Divorced/Separated" (4) as the comparison group.

Education is an ordinal measure designed for international comparisons. Referred to as "DEGREE," this variable measures highest completed education level. The respondents chose from the following options:

No formal education 0
Primary school (elementary education) 1
Lower secondary 2
Upper secondary (programs that allow entry to university) 3
Post-secondary, non-tertiary 4
Lower level tertiary, first stage 5
Upper level tertiary (Master, Doctor) 6
No answer 9

Responses of "no answer" (9) were declared as missing. I created dummy variables for this measure, establishing "Lower level tertiary, first stage" (5) as the comparison group.[2]

Along with these sociodemographic variables, this study also includes the variables political ideology and trust. In the ISSP module, political views ("V48") are measured with the question: "In politics people sometimes talk of left and right. Where would you place yourself on a scale from 0 to 10 where 0 means the left and 10 means

[2] The 2014 ISSP pre-release data module does not include a standardized individual income variable that can be used for international comparisons.

the right?" The respondents located themselves on this 0 – 10 political spectrum. Responses of "Can't choose" (98) or "No answer" (99) were declared as missing.

Two measures of trust are utilized. Interpersonal trust is measured by question 48 in the Citizenship II module: "Generally speaking, would you say that people can be trusted or that you can't be too careful in dealing with people?" The respondents chose from the following options:

People can almost always be trusted 1
People can usually be trusted 2
You usually can't be too careful in dealing with people 3
You almost always can't be too careful in dealing with people 4
Can't choose 8
No answer 9

Responses of "Can't choose" (8) or "No answer" (9) were declared as missing.

Institutional trust is measured by question 45: "To what extent do you agree or disagree with the following statement? Most of the time we can trust people in government to do what is right." The respondents indicated their agreement or disagreement by choosing one of these options:

Strongly agree 1
Agree 2
Neither agree nor disagree 3
Disagree 4
Strongly disagree 5
Can't choose 8
No answer 9

Responses of "Can't choose" (8) or "No answer" (9) were declared as missing. Both the interpersonal and institutional trust variables were treated as continuous measures.

I include in the analysis a number of variables that describe the respondent's work. The first of these work variables is work status, listed in the ISSP module as

"MAINSTAT." The respondents chose one of the following statements to describe whether they were employed, unemployed, or other:

In paid work	1
Unemployed and looking for a job	2
In education	3
Apprentice or trainee	4
Permanently sick or disabled	5
Retired	6
Domestic work	7
In compulsory military service or community service	8
Other	9
No answer	99

For the purposes of this analysis, I created a dichotomous dummy variable, combining the responses of "Unemployed and looking for a job" (2) through "In compulsory military service or community service" (8) into an "unemployed" category, coded 1. A response of "In paid work" (1) indicates an employed respondent and was coded 0. Responses of "Other" (9) or "No answer" (99) were declared as missing.

The second work variable describes the type of organization for which employed respondents worked. For the variable "TYPORG2" in the dataset, the respondents indicated whether their organization was public or private by choosing from these responses:

Not applicable	0
Public	1
Private	2
Don't know	8
No answer	9

Responses of "Not applicable" (0), "Don't know" (8), and "No answer" (9) were declared as missing. I created a dichotomous dummy variable ("public" = 0, "private" = 1).

The final work variable included in the analysis indicates whether or not the respondent is self-employed. The variable is labeled "EMPREL" and provided the following choices to the respondents:

Not applicable 0
Employee 1
Self-employed without employees 2
Self-employed with employees 3
Working for own family's business 4
No answer 9

I created another dichotomous dummy variable for type of employment, combining the responses of "Self-employed without employees" (2) through "Working for own family's business" (4) into a "self-employed" category, coded 1. A response of "Employee" (1) was coded as 0, "not self-employed." Responses of "Not applicable" (0) or "No answer" (9) were declared as missing.

Another individual-level trait included in this analysis is the religiosity of the respondent. The ISSP's variable labeled "ATTEND" indicates how often the respondents attend religious services. The respondents described how frequently they attend with one of the following statements:

Several times a week or more, including every day 1
Once a week 2
Two or three times a month 3
Once a month 4
Several times a year 5
Once a year 6
Less frequently than once a year 7
Never 8
Refused to answer 97
Don't know 98
No answer 99

Cases in which the respondent refused to answer (97), didn't know (98), or did not answer (99) were declared as missing.

The respondents also described their place of residence, with responses ranging from urban to rural on the variable "URBRURAL." I included this variable as a measure of urbanicity. The respondents chose from these options:

A big city 1
Suburbs or outskirts of a big city 2
A town or small city 3
A country village 4
A farm or home in the country 5
Don't know 8
No answer 9

Cases in which the respondent didn't know (8) or did not answer (9) were declared as missing.

Income inequality, this study's aggregate-level measure, is the final independent variable and is reflected by each country's Gini coefficient. These coefficients were obtained through primary household survey data from government statistical agencies and World Bank country departments. The World Bank's estimate is the source for every country's coefficient with the exception of Taiwan. I retrieved the Taiwan data from the Standardized World Income Inequality Database. The countries included in this study are presented below with their corresponding Gini coefficients and the year for which the coefficients were calculated. The years listed are the most recent years for which Gini data is available.

Table 1 – Gini Coefficients of Countries

Country	Gini Index	Year
Chile	50.5	2013
Croatia	32.0	2011
Czech Republic	26.1	2012
Denmark	29.1	2012
Finland	27.1	2012
France	33.1	2012
Georgia	40.0	2013
Germany	30.1	2011
Hungary	30.6	2012
Iceland	26.9	2012
Israel	42.8	2010
Japan	32.1	2008
Lithuania	35.2	2012
Netherlands	28.0	2012
Norway	25.9	2012
Philippines	43.0	2012
Russia	41.6	2012
Slovak Republic	26.1	2012
Slovenia	25.6	2012
Spain	35.9	2012
Switzerland	31.6	2012
Taiwan	31.4	2012
United Kingdom	32.6	2012
United States	41.1	2013

Sources: World Bank (http://archive.data.worldbank.org/indicator/SI.POV.GINI), SWIID (http://fsolt.org/swiid/)

Hypotheses

Based on previous research, I hypothesize that the variables gender, education, trust, and income inequality will have significant effects on perceptions of corruption. Specifically, I expect that women will perceive more corruption than men; that respondents with more education will perceive less corruption than those with less education; that those with lower levels of interpersonal and institutional trust will perceive higher levels of corruption; and that respondents from countries with a more equal distribution of income will exhibit lower levels of perceived corruption.

Methodology

This study utilized SPSS software to conduct an ordinary least squares (OLS) multivariate regression analysis. I first regressed the dependent variable, perceived corruption, on the independent variables gender, marital status, education, age, political ideology, trust, work factors, religiosity, place of residence, and income inequality. I then conducted an interaction analysis to determine whether the effects of any of the independent variables on perceptions of corruption differ by country.

The results of the regression analysis are presented in the next section.

Chapter Four: Results

Table 2 presents the univariate statistics for all of this study's variables – the means, standard deviations, and minimum and maximum values. After eliminating cases with missing data on any variable, the total number of cases remaining for the regression analysis is 21,018 across the twenty-four countries included in the 2014 ISSP pre-release data. Table 1 shows that the mean estimation of the prevalence of corruption in public service across countries was 2.92, with a standard deviation of 1.066. In other words, the average respondent believes that "a moderate number" of people in public service are involved in corruption. The table also shows that about half of the respondents (48.6 percent) are women; 56.5 percent of respondents in the sample are married and 22.9 percent are single; about three quarters (75.2 percent) have attained at least an upper secondary level of education; and the average age of respondents is 49.7 years. The table indicates that the average respondent has moderate political views, falling in the center of the left-right continuum (5.28). Respondents have a slight tendency to believe that one usually cannot be too careful in dealing with people and to disagree with the notion that people in the government can be trusted to do what is right. About 38.5 percent of the respondents are in the unemployed category; about 67.6 percent of employed respondents work in the private sector; and about 14.6 percent of respondents are self-employed. Most respondents attend religious services at least once a year and live in a town or suburb of a big city. The average Gini coefficient for the countries included in the sample is 32.9, with a standard deviation of 6.376; these coefficients range from about 25 to 50.

Table 2 – Descriptive Statistics

Variable	Mean	Std. Deviation	Min.	Max.
Perceived corruption	2.920	1.066	1	5
Gender (1 = female)	0.486	0.499	0	1
Marital Status				
Married	0.565	0.495	0	1
Civil union	0.024	0.154	0	1
Separated	0.017	0.131	0	1
Divorced	0.083	0.277	0	1
Widowed	0.078	0.269	0	1
Single	0.229	0.421	0	1
Education				
No education	0.018	0.133	0	1
Primary school	0.033	0.178	0	1
Lower secondary	0.196	0.397	0	1
Upper secondary	0.240	0.427	0	1
Post-secondary	0.166	0.372	0	1
Lower tertiary	0.216	0.411	0	1
Upper tertiary	0.130	0.336	0	1
Age	49.710	16.461	16	99
Political views	5.280	2.347	0	10
Interpersonal trust	2.407	0.751	1	4
Institutional trust	2.790	1.052	1	5
Work status (1 = unemployed)	0.385	0.486	0	1
Work sector (1 = private)	0.676	0.467	0	1
Self-employed (1 = yes)	0.146	0.353	0	1
Religiosity	3.195	2.135	1	8
Urbanicity of place of residence	2.630	1.264	1	5
Gini coefficient	32.923	6.376	25.6	50.5

N = 21018

Table 3 presents the results of regressing perceptions of corruption on the independent variables. Both unstandardized and standardized coefficients are displayed. I note, first, that there is a significant gender difference. Specifically, net of the other predictors in the model, women scored 0.028 higher than men on the perception of corruption measure, indicating that they are more likely than men to perceive public servants as corrupt, as hypothesized ($p<.05$).

Other individual-level factors also significantly shape how a respondent perceives corruption in his or her country. For instance, both married (b=-0.094) and single, never married respondents (b=-0.143) reported perceiving significantly less corruption than divorced respondents ($p<.01$). Other types of personal relationships did not influence how a respondent perceives corruption, meaning that compared to divorced, being in a civil union, separated, or widowed does not have a significant effect on the respondents' perceptions of corruption.

Respondents with no formal education, a primary school education, or lower secondary education perceived more corruption than those who had completed at least the first stage of tertiary school, the equivalent of an undergraduate college education. However, perceptions of corruption begin to decrease among those at the upper secondary level, followed by the post-secondary and upper tertiary levels, with the latter respondents, i.e., those at the highest educational level, perceiving less corruption than those at the lower tertiary level (b=-0.111, $p<.01$). Thus, education and perceptions of corruption have a curvilinear relationship, with perceptions of corruption increasing through the lower secondary degree stage and decreasing thereafter.

Age is significantly and negatively correlated with perceived corruption. Younger individuals report perceiving slightly more corruption than older individuals (b=-0.003, p<.01).

Political views are not significantly associated with the perception of corruption (b=0.004). Trust, however, plays a significant role in shaping these perceptions. Both interpersonal trust and institutional trust have strong negative associations with perceived corruption (b=-0.259 and b=-0.264 respectively, p<.01). Thus, as both interpersonal and institutional trust increase, respondents' perceptions of corruption decrease. Less trusting individuals perceive more corruption.

The coefficients associated with work status, self-employment, and religiosity were not significant. However, a significant difference exists between respondents who work in the public sector and those who work in the private sector. Individuals with jobs in the private sector reported perceiving more corruption (b=0.059, p<.01).

As the urbanicity of respondents' place of residence decreases, i.e., tends more toward the rural end of the urban-rural continuum, perceptions of corruption also decrease (b=-0.035, p<.01). Those who live in urban and suburban cities and small towns report perceiving higher levels of corruption than those who reside in less urbanized areas.

Table 3 – Regression of Perceived Corruption on Social, Political, Trust, and Economic Variables, 2014 International Social Survey Programme[3]

Variable	b (unstandardized)	β (standardized)
Sociodemographic		
Female	.028* (.014)[4]	.013
Marital Status		
Married	-.094** (.024)	-.044
Civil union	-.051 (.048)	-.007
Separated	-.004 (.055)	-.001
Widowed	.001 (.034)	.000
Single, never married	-.143** (.028)	-.056
Education		
No formal education	.278** (.052)	.035
Primary school (elementary)	.326** (.040)	.055
Lower secondary	.375** (.021)	.140
Upper secondary	.307** (.020)	.123
Post-secondary	.078** (.022)	.027
Upper level tertiary (Master, Doctor)	-.111** (.023)	-.035
Age	-.003** (.001)	-.053

[3] Urbanicity of place of residence ranges from urban (1) to rural (5).

[4] Standard errors are indicated in the parentheses.

Political Views	.004 (.003)	.008
Trust		
Interpersonal trust	-.259** (.009)	-.183
Institutional trust	-.264** (.006)	-.261
Work		
Unemployed	-.010 (.016)	-.005
Private sector	.059** (.015)	.026
Self-employed	-.019 (.020)	-.006
Religiosity	.006 (.003)	.013
Urbanicity of place of residence	-.035** (.005)	-.041
Gini coefficient	.021** (.001)	.126
Intercept	3.682	
R-square	.207	
F-statistic	249.712	

*p<.05, **p<.01

Finally, on the aggregate level, income inequality is significantly and positively associated with perceptions of corruption. As Gini coefficients increase (indicating more income inequality), perceptions of corruption increase (b=0.021, p<.01). Respondents in countries with greater inequality are likely to perceive higher levels of corruption among their public servants.[5]

The results of the regression analysis described above reveal which variables significantly shape perceptions of corruption in the total sample – in other words, without regard to country of residence. An interesting question is whether the effects of the predictors vary across countries that are characterized by different degrees of income inequality. In the language of statistical analysis, this is the question of whether a main effects-only model adequately describes the effects of the independent variables on the dependent variable, as opposed to a fully-interactive model that tests for the possibility that these effects differ by country. If the interaction terms are significant the main effects of the predictors do not tell the whole story.

In order to address this possibility, I fit multiplicative terms representing the interactions between each country's Gini coefficient and all other predictor variables, for a total of twenty-one interactions. Significant interaction terms mean that the effect of the variable differs by country. Eleven of the twenty-one interaction terms are significant at the 0.05 level (results not shown in the table): lower secondary level of education, upper secondary level of education, post-secondary level of education, upper tertiary level of education, interpersonal trust, institutional trust, civil union, widowed, political ideology, work sector, and urbanicity of place of residence. In these cases, the effect of the

[5] Future research should model the aggregate effect using robust standard errors to account for the different level of measurement.

predictor variable on perceptions of corruption differs, depending on the respondent's country. Such interactions are theoretically important because they show how the independent variables affect the dependent variable across (in this instance) countries with differing degrees of income inequality. Although a full analysis of these interactions is beyond the scope of this thesis, future research in this area should further examine them.

In the next section, I address some implications of this study.

Chapter Five: Discussion

The results of the analysis are illuminating from both a sociological and criminological standpoint. They expose which social, political, and economic factors influence one's perception of corruption and whether these effects differ across countries.

Not only have we learned that women perceive higher levels of corruption, but also that the effect of gender is similar in every country. This suggests that women may experience corruption similarly across societies. Whether this has to do with a similar degree of exposure or with a baseline lack of tolerance for corrupt public servants (as some studies put forth), it is striking that gender seems to have a more universal effect on perception of corruption than other predictors.

In terms of education, my results differ from previous research in demonstrating a curvilinear rather than a linear relationship between education and perceived corruption. Moreover, this effect differs across countries. This finding illustrates the importance for future research to carefully examine the effects of education across countries.

My results align with the findings of others researchers on the question of marital status. This study not only gives further evidence that divorced individuals perceive higher levels of corruption, but also indicates that this effect holds steady across all twenty-four countries. Future research should investigate this trend further, especially given the countries' variations in laws and social norms for marriage and divorce.

Both interpersonal and institutional trust have significant effects that vary cross-nationally. The finding that less trusting individuals perceive higher levels of corruption supports previous research and presents an opportunity for future research to delve into how these effects differ by country. This might include an investigation into specific

regional differences into how much trust people place in others, both personally and bureaucratically.

Though this analysis did not demonstrate that political ideology is a significant predictor of perception of corruption, it did uncover a significant interaction between political ideology and country of residence. This means that while not significant on a global scale, political views may have strong effects on perceptions of corruption in certain countries. Further sociological and political science research is necessary to understand how political ideology influences perception cross-nationally.

Finally, my results show that work sector and urbanicity of place of residence both significantly impact perceptions of corruption, and that each variable interacts with country of residence. These findings support previous evidence that those who work in the private sector perceive higher levels of corruption, and that respondents living in more rural areas perceive lower levels. Further research into how these variables shape perceptions of corruption differently across countries is warranted.

The limitations of this study include the ambiguous nature of corruption as well as the varying definitions that different societies may have for what qualifies as a corrupt act. The ISSP question measuring the dependent variable, perceived corruption, helpfully brings respondents' attention to public service as the setting for corruption, but fails to define what corruption is, leaving considerable interpretative possibilities for respondents. Also, the analysis was restricted to the twenty-four countries that were included in the pre-release version of the 2014 ISSP Citizenship II module; a large portion of the countries were European, while South American, African, and Asian countries were not as well-represented. Finally, the lack of a standardized income

variable designed for international comparisons precluded a straightforward analysis of the relationship between a respondent's personal income and how this might shape their perception of corruption.

The contributions of this thesis are three-fold. Firstly, it has outlined which variables are significant predictors of the perception of corruption using recent survey data. This provides insight into how gender, marital status, education, age, trust, work sector, and urbanicity of place of residence shape one's perceptions of corruption. Next, it has combined these individual traits with the aggregate-level characteristic of income inequality. The thesis has confirmed that a country's income distribution is a significant influence on perception, which underscores the importance of examining ties between a country's degree of income inequality and its level of corruption. Finally, the analysis shows that not all predictors behave the same way cross-nationally. This finding provides a basis for future research, which can perhaps lead to better measures of corruption or even ways to ultimately combat corruption.

The interaction analysis presents interesting avenues for future research into the determinants of perceived corruption. It is beyond the purview of this thesis to examine why the effect of gender, for example, does not vary from country to country, while both interpersonal and institutional trust do. Future research should include a measure of respondent income along with additional macro-level variables for a more detailed look at the factors that shape perceptions of corruption. These variables provide an opportunity for social scientists to create and refine measures of corruption for even more comprehensive research. Ultimately, perceptions of corruption are a valuable tool that we

can use to better understand corruption around the world, as long as we are able to grasp the social, political, and economic factors that shape them.

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Appendix

Table 4 – Correlation Matrix

Variable	**1**	**2**	**3**	**4**	**5**	**6**	**7**
1. Female	1.000						
2. No formal education	-0.006	1.000					
3. Primary school	-0.016	-0.025	1.000				
4. Lower secondary	-0.021	-0.067	-0.091	1.000			
5. Upper secondary	0.010	-0.076	-0.104	-0.278	1.000		
6. Post-secondary	0.014	-0.061	-0.083	-0.221	-0.251	1.000	
7. Lower level tertiary	0.023	-0.071	-0.097	-0.026	-0.295	-0.235	1.000
8. Upper level tertiary	-0.020	-0.052	-0.071	-0.191	-0.217	-0.173	-0.203
9. Interpersonal trust	-0.017	-0.064	-0.073	-0.096	-0.102	0.039	0.091
10. Institutional trust	-0.015	0.026	0.004	-0.047	-0.067	0.036	0.055
11. Married	-0.075	0.010	0.018	-0.017	0.042	0.019	0.006
12. Civil union	-0.001	-0.017	-0.010	-0.005	-0.021	-0.017	0.035
13. Separated	0.009	0.007	0.000	0.016	0.002	0.010	-0.028
14. Divorced	0.060	-0.024	-0.024	0.026	0.020	-0.003	-0.013
15. Widowed	0.143	0.067	0.077	0.085	-0.140	-0.003	-0.067
16. Single/never married	-0.045	-0.035	-0.051	-0.055	0.052	-0.015	0.040
17. Gini	0.019	0.147	0.080	-0.076	0.093	-0.028	0.010
18. Political views	-0.050	0.031	0.023	0.007	0.013	0.003	-0.003
19. Age	0.002	0.086	0.141	0.129	-0.093	0.022	-0.106
20. Self-employed	-0.090	0.073	0.084	-0.013	0.012	-0.008	-0.037
21. Private sector	-0.159	0.050	0.064	0.056	0.076	-0.003	-0.082
22. Unemployed	0.079	0.056	0.118	0.135	-0.021	0.001	-0.090
23. Urbanicity	-0.016	0.046	0.040	0.100	-0.039	0.086	-0.074
24. Religiosity	0.084	0.080	0.072	-0.001	0.019	-0.024	-0.008

Table 4 presents the inter-item correlation matrix. All non-dichotomous variables are coded such that higher scores reflect more of the measured characteristic while lower scores reflect less of the characteristic.

Variable	8	9	10	11	12	13	14
1. Female							
2. No formal education							
3. Primary school							
4. Lower secondary							
5. Upper secondary							
6. Post-secondary							
7. Lower level tertiary							
8. Upper level tertiary	1.000						
9. Interpersonal trust	0.151	1.000					
10. Institutional trust	0.022	0.178	1.000				
11. Married	0.031	0.042	0.047	1.000			
12. Civil union	0.020	0.021	-0.014	-0.181	1.000		
13. Separated	0.000	-0.030	-0.010	-0.152	-0.021	1.000	
14. Divorced	-0.014	0.007	-0.013	-0.346	-0.048	-0.040	1.000
15. Widowed	-0.065	-0.059	0.001	-0.333	-0.046	-0.039	-0.088
16. Single/never married	0.007	-0.015	-0.038	-0.623	-0.086	-0.073	-0.165
17. Gini	-0.110	-0.257	0.034	-0.021	-0.086	0.072	-0.028
18. Political views	-0.049	-0.054	0.081	0.061	-0.032	-0.007	-0.024
19. Age	-0.038	0.030	0.042	0.205	-0.075	0.013	0.082
20. Self-employed	-0.019	-0.019	-0.003	0.071	-0.006	0.018	-0.013
21. Private sector	-0.114	-0.051	-0.062	-0.023	-0.015	0.014	-0.023
22. Unemployed	-0.109	-0.083	-0.009	-0.030	-0.046	-0.007	-0.007
23. Urbanicity	-0.113	-0.020	0.005	0.088	-0.011	-0.011	-0.036
24. Religiosity	-0.057	-0.114	0.054	0.093	-0.050	-0.004	-0.054

Variable	15	16	17	18	19	20	21
1. Female							
2. No formal education							
3. Primary school							
4. Lower secondary							
5. Upper secondary							
6. Post-secondary							
7. Lower level tertiary							
8. Upper level tertiary							
9. Interpersonal trust							
10. Institutional trust							
11. Married							
12. Civil union							
13. Separated							
14. Divorced							
15. Widowed	1.000						
16. Single/never married	-0.159	1.000					
17. Gini	0.046	0.023	1.000				
18. Political views	-0.011	-0.036	0.044	1.000			
19. Age	0.326	-0.480	-0.081	-0.002	1.000		
20. Self-employed	-0.004	-0.075	0.068	0.080	0.066	1.000	
21. Private sector	-0.079	0.094	0.092	0.075	-0.156	0.256	1.000
22. Unemployed	0.240	-0.095	0.013	-0.009	0.434	-0.074	-0.096
23. Urbanicity	0.019	-0.085	-0.094	0.016	0.066	0.050	-0.011
24. Religiosity	0.094	-0.114	0.226	0.173	0.077	0.076	-0.032

Variable	22	23
22. Unemployed	1.000	
23. Urbanicity	0.043	1.000
24. Religiosity	0.092	0.038