A Comparative Study on Adolescent Political Development: The Relationship of Personal and Contextual Factors to Expected Political Participation in 34 Countries

By

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ABSTRACT

This dissertation originated from two inquiries about political development, which is defined as the development of an individual's political qualities such as knowledge, beliefs, attitudes, and behaviors. Previous studies have found numerous personal and contextual factors related to political development (political development factors). The first inquiry was whether political development factors would carry the same importance in different social contexts. Based on the political socialization theory, political development can be modeled in terms of micro and macro level processes. At the micro level, a person develops political qualities through interactions with human and environmental factors in diverse proximal contexts such as family and school. At the macro level, remote contexts such as social and national contexts regulate the distribution of resources that people can use and intervene in the micro-level process. In short, macro context affects the function of micro-level factors in the political development process.

The second inquiry was whether political development would vary across different types of political participation. Research in the field of civic engagement has shown that people's political behaviors are different for different modes of political activism. People who are willing to vote do not necessarily like to speak out on controversial issues. The money, time, and volition necessary for an individual to vote will be different from those necessary for that person to participate in a public protest. Therefore, it is not unreasonable to think that political development may differ according to the mode of political activism.

Based on this notion, I examined the relationships between political development factors and adolescents' expected political participation (political development relationships) in different national contexts. I also explored the influence of two modes of political activism, electoral and informal participation, on political development relationships. While I expected to find differences in political development relationships across countries and between different modes of political activism, I also anticipated that some factors might be significant to political development regardless of the national context or the mode of political activism.

For this dissertation study, I drew on data from the International Civic and Citizenship Education Study (ICCS). ICCS provided rich data about 14-year-old adolescents and their schools in 38 countries, which allowed me to test the link between national context, the mode of political activism, and political development relationship. Among the 38 ICCS-participation countries, I analyzed data from 34 countries using hierarchical linear modeling (HLM).

In this comparative study, it was important to preserve the distinct national contexts of each country. To do so, I employed the following analytic procedures. First, I conducted HLM for each country. Second, I simplified and classified the HLM results into three relationship categories—a positive relationship, a non-significant, and a negative relationship. Third, I determined whether a predictor had consistent or inconsistent relationships with adolescents' expected political participation across countries. After that, I compared the cross-national relationships for expected electoral participation and the cross-national relationships for expected informal political participation. Then, as an extra task, I attempted to identify national contexts that might be related to cross-national relationships in countries falling into the same relationship category.

The cross-national political development relationships I found can be broadly categorized into four patterns. First, some factors such as political interest had consistent relationships with expected political participation regardless of the national context. The cross-nationally consistent relationships for expected electoral participation were almost the same as the cross-nationally consistent relationships for expected informal participation. Second, some factors such as political discussions outside of school showed consistent relationships with the outcome variables regardless of the national context. However, the cross-nationally consistent relationships for expected electoral participation were different from the cross-nationally consistent relationships for expected informal participation. Third, some factors (e.g., civic knowledge) had cross-nationally consistent relationships with one type of political participation, but cross-nationally inconsistent relationships with another type. Lastly, political development relationships varied across different countries. The majority of predictors belong to this pattern.

To summarize, I found differences in political development relationships across countries. That is, micro-level political development is influenced by macro contexts. Therefore, successful democratic citizenship education should be tailored to the multilevel contexts in which students are situated. I also found that political development relationships were different according to the mode of political activism. This result implies that democratic citizenship education should be thoughtfully planned and implemented according to its goal—that is, its target outcomes. But, at the same time, I found that some factors such as political interest were influential regardless of the national context and the type of political participation. It is possible that citizenship education promoting these factors contributes to an increase in adolescents' willingness to participate in multiple modes of political activism in diverse social and national contexts. Finally, I found a few national contexts that might be related to some of the cross-national relationships observed in this study.

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CHAPTER 1

INTRODUCTION

For the last few decades, there has been a notable expansion of democracy around the world. Over 20 democracies have emerged since the collapse of communism in Eastern Europe and the Soviet Union. People in developing countries—in particular, in Latin America—have striven to establish and consolidate both democratic institutions and substantive democracy (Schulz, Fraillon, Ainley, Losito, & Kerr, 2008). The world has also witnessed pro-democracy uprisings in the Arab world. It is certain that democracy as a political regime is expanding its territory around the world. However, when we question whether, in the past decade, our world has constantly evolved into a more democratic place, it is difficult to say yes without hesitation. International reports indicate that the progress of democracy has stagnated around the world (The Economy Intelligence Unit, 2008, 2010, 2012). Political indices such as civil liberty and press freedom have fluctuated or even declined not only in authoritarian countries and fledgling democracies but also in some stable democracies (see Freedom House Index, http://www.freedomhouse.org; The Economy Intelligence Unit, 2010, 2012).

In short, although the world has more democratic regimes, it cannot be declared that we are living in a more democratic world. The latest report by The Economy Intelligence Unit (2012) describes the global state of democracy well: "Although almost one-half of the world's countries can be considered to be democracies, in our index the number of 'full democracies' is low, at only 25 countries; 54 countries are rated as 'flawed democracies'. Of the remaining 88 countries in our index, 51 are authoritarian and 37 are considered to be 'hybrid regimes'" (p. 3). This implies that obtaining democracy and promoting democracy are separate tasks and that institutional democracy is not necessarily substantive democracy. In particular, the acute

situation in the Middle East demonstrates that even democracy gained through painful struggle and great sacrifice is very vulnerable and can easily deteriorate. This reality tells us that promoting democracy is as challenging as obtaining a democratic regime and that substantive democracy can only be achieved through long-term, painstaking efforts.

That is, a full-fledged democracy cannot be achieved by the establishment of democratic institutions and procedures alone. As Schmitter and Karl (1991) asserted, "[institutional] procedures alone do not define democracy, but their presence is indispensable to its persistence. In essence, they are necessary but not sufficient conditions for its existence...[P]rocedural norms help us to specify what democracy is, but they do not tell us much about how it actually functions" (pp. 81-82). The function of democracy hinges on the citizens' consciousness of what democracy looks like and their use of social institutions and political procedures (i.e., political participation) based on that consciousness. Even though citizen participation is not always the most efficient or effective way to solve public issues, active citizen participation is both the manifestation of the democratic principle of sovereignty of the people and the evidence of a healthy democracy (Dahl, 1998).

Therefore, for democracy to be functional and substantive, the rights of citizens to participate in government must be guaranteed, and citizens must take active roles in civic and political affairs. As Diamond (2008) argues, "For a country to be a democracy, it must have more than regular, multiparty elections under civilian constitutional order" (p. 39). Even the election, the hallmark of democratic society, cannot be considered a truly democratic process unless all citizens can influence political decisions by freely and fairly casting their votes and unless citizens' voices are appropriately protected, valued, and responded (Dahl, 1998; Diamond, 2008). Furthermore, political participation is a powerful way to advance human rights and democracy. History proves that when citizens actively and persistently voice their collective will, they can force substantive social change; for example, through civil disobedience and other forms of active engagement, citizens in democracies world-wide have accomplished the expansion and guarantee of citizenship status for women and people of color. In a nutshell, political participation is normatively and pragmatically important for maintaining and promoting democracy. Active, effective political participation is the foundation of a strong democracy (Barber, 1989), and the level of political participation in a society is parallel with its democratization level.

However, research has shown low or decreased political participation and increased political apathy and cynicism in democratic countries. For example, in the past few years, political participation, such as voting and lawful demonstrations, has declined in many longestablished democracies, and levels of political participation remain low in many countries in Latin America and Eastern Europe (The Economy Intelligence Unit, 2010, 2012). This downward trend seems prominent especially among youth and young adults. Youth are less interested in following the news and participating in organized groups than in the past (Levine, 2007). Voter turnout has declined in most democratic countries since the mid-1980s, and young people were less likely to register to vote or cast a ballot than were older voters in both emerging and developed democracies (Pintor & Gratschew, 2002). Over the past several decades, political trust has declined in advanced industrial democracies such as the United States, Germany, and Sweden, and the erosion of political trust occurred most rapidly for the youngest generation (Dalton, 2004). In a recent report, the approval rating of the US Congress has plummeted across generations in the past decade, and just 30% of Millennials (born between 1981 and 1996) responded in 2014 that they had a favorable view of Congress, compared to 68% in 2004 (Pew

Research Center, 2014). Among US Millennials, trust in government has fallen from 44% in 2004 to 26% in 2011; in contrast, 51% of Millenials in 2011 said that the government was usually inefficient and wasteful, up from 31% in 2003 (Pew Research Center, 2011). Given that participation in community and political issues is a keystone of a healthy civil society, the precondition of democracy and democratization, and an important part of positive youth development (Lerner, Dowling, & Anderson, 2003; Putnam, 1995), this worrisome trend needs to be reversed. This task should begin with a proper understanding of how an individual develops political qualities such as political knowledge, beliefs, attitudes, and behaviors (hereafter, political development) and which factors play a critical role in the political development process.

With respect to this concern, scholars and educators have stressed that adolescents should be granted diverse opportunities for quality civic engagement (Flanagan & Wray-Lake, 2011). While political participation refers to activities in the political domain intended to influence governmental decisions and achieve targeted political outcomes, civic engagement is a broad concept that includes participation in community affairs as a responsible member of a community such as a school, church, or neighborhood as well as activities related to politics. Through civic engagement, people face and deliberate about practical issues, shape positive self and community identities, develop democratic beliefs and attitudes, such as political trust and norms of reciprocity and cooperation, and increase their sense of empowerment by drawing public officials' attention to citizens' various civic and political needs (Sobieraj & White, 2007). Quality civic engagement experiences enable adolescents to develop the knowledge, skills, beliefs, attitudes, and behavioral intention necessary for active and effective political participation. In this respect, civic engagement experiences during adolescence function as an important reference in the interpretation, understanding, acceptance, and internalization of later social and political participation. Civic engagement experiences in adolescence are formative and have a long-lasting influence on one's political life (Levine, 2007).

Along with civic engagement experience, research on political socialization and civic engagement found that numerous personal attributes (e.g., gender and immigrant background) and contextual factors (e.g., parental effect, school climate, and community resources) influence individuals' political development (Flanagan & Wray-Lake, 2011; Owen, 2008; Pasek, Feldman, Romer, & Jamieson, 2008; Torney-Purta, Amadeo, & Andolina, 2010). Based on political socialization theory, the roles of these personal and contextual factors (hereafter, political development factors) in political development can be modeled in terms of micro and macro level processes (Sapiro, 2004). At the micro level, a person develops political knowledge, beliefs, attitudes, and behaviors through interactions with human and environmental factors in diverse immediate contexts such as family, school, and neighborhood. At the macro level, remote contexts such as larger social agents (e.g., families, schools, local community organizations) can use and intervene in the micro-level political development process by affecting the function of human and environmental factors in micro contexts.

In fact, given the ecological nature of human development (Bronfenbrenner & Morris, 2006; Bronfenbrenner, 1994), it seems natural that political development is a contextually specific process in which political development factors may have varying influence on individuals' civic and political outcomes, such as civic knowledge, attitudes, and behavior, in different social contexts. For example, female students who live in a society with greater gender inequality may participate in politics at lower rates than their male counterparts and in extreme cases may not be allowed to speak out at all (e.g., Pakistani student Malala Yousafzai). In this

type of society, gender is a crucial factor of political development because it regulates the civic engagement experience(s) of male and female students. Providing more participatory opportunities for female students should be an important goal of democratic citizenship education in societies with high levels of gender inequality. On the other hand, both male and female adolescents who are raised in a politically engaged community with a high level of gender equality are more likely allowed to participate in diverse community and political affairs. In this environment, increasing participatory opportunities for female students might not need to be the primary goal of democratic citizenship education. The democratic citizenship education programs in a society like this can focus less on increasing participatory opportunities and gender equality at the community level and more on different topics and broader-scope issues such as environmental justice and social inequality at the national and international levels.

Given the contextual specificity of political development, a comparative understanding of political development in diverse macro contexts is important to the planning and implementation of effective and inclusive democratic citizenship education programs, for example, in a multi-cultural/racial/ethnic society. However, although a plethora of studies have discovered important political development factors, there are still some gaps in our understanding of how these factors operate in the adolescent political development process under diverse social and national contexts. Most political socialization research has focused on established democracies such as the United States and Western European countries (Sapiro, 2004). In particular, less attention has been paid to comparative studies on adolescent political development (Amnå & Zetterberg, 2010). Based on this notion, this study explored adolescent political development in diverse countries as a macro-level setting.

In addition, this study accounted for the influence of the mode of political activism on the political development process. Different types of political activities may require different kinds and amounts of psychological, material, and social resources. For example, the money, time, and civic skills necessary for voting are not the same as the money, time, and civic skills necessary for political discussions or protests. Therefore, it is not unreasonable to assume that the function of each political development factor would vary in the political development process according to the mode of political activism. Hence, this study investigated and compared two different forms of adolescents' expected political participation (or adolescents' willingness to participate in politics in the future): expected electoral participation in adulthood (e.g., voting in local and national elections) and expected informal political participation as youth, which refers to participation in less system-driven and more voluntary and active forms of political activity in the next few years (e.g., political discussions and joining an organization for a political or social cause).

In short, this study examined the relationship between political development factors (predictors) and adolescents' expected electoral and informal political participation across different national contexts and made comparisons between the cross-national relationships for expected electoral participation and the cross-national relationships for expected informal political participation. To this end, this study performed hierarchical linear modeling to analyze data of 114,068 14-year old adolescents in 34 countries derived from the International Civic and Citizenship Education Study (ICCS).

Overview of the Study

This section begins with the operational definitions of key concepts in this study that I utilized to devise the conceptual model of political development and to understand the relationships between political development factors and adolescents' expected political participation. Next, I describe the purpose of the study and illustrate the analytic framework. Lastly, I present the research questions and significance of this study.

Operational Definitions of Concepts

Civic engagement and political participation

In recent literature, no solid consensus has been reached regarding a conceptual distinction between civic engagement and political participation. The terms *civic engagement* and *political participation* (and similar combinations, *civic participation* and *political engagement*) are used in a number of different ways—they are treated as broadly synonymous concepts in some studies, as distinct concepts in others, or as hierarchically relational concepts in still others. For example, Verba, Schlozman, and Brady (1995) defined political participation as "activity that has the intent or effect of influencing government action—either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies" (p. 38). In their conceptualization, political participation embraces not only political activity but also non-political activity that is potentially or indirectly political. Political participation includes individual and collective actions and joining civic and political associations that might be somehow involved in or relevant to the political decision-making process and government action either in the present or in the future (e.g., working informally with others in the neighborhood to deal with community issues and joining non-

political organizations such as churches and charities). In effect, Verba et al. placed civic engagement under political participation as long as it is somehow related to the political domain.

Ekman and Amnå (2012) provided a thoughtful discussion on the conceptual distinction between political participation and civic engagement. The authors reviewed literature on political participation and civic engagement and developed a new typology for the two concepts. They categorized political participation into latent and manifest forms. According to Ekman and Amnå (2012), manifest political participation refers to "all actions directed towards influencing governmental decisions and political outcomes...It is observable and can be measured straightforwardly. It has to do with the wishes of ordinary citizens to influence politics and political outcomes in society, or the decisions that affect public affairs" (p. 289). In their conceptualization, latent political participation refers to "the kind of engagement that may be regarded 'pre-political' or on 'standby'. This notion of latency is based on the simple observation that citizens actually do a lot of things that may not be directly or unequivocally classified as 'political participation', but at the same time could be of great significance for future political activities of a more conventional type" (pp. 287-288). Latent political participation is again subdivided into social involvement and civic engagement. While social involvement includes attentiveness to and interest in social and political issues, a sense of belonging, and a group identity, civic engagement is *actions* that are not directly related to the political domain but may have political undertones, such as working collaboratively to solve problems or improving living conditions in the community. Based on Ekman and Amnå's typology, Verba et al.'s concept of political participation clearly embraces civic engagement. Ekman and Amnå (2012) asserted that civic engagement can boost political participation in the future, but it is not a sufficient condition for political participation. Therefore, sufficient personal resources or appropriate contextual

support are necessary for previous civic engagement experience to be connected to actual political participation in the future.

On the other hand, in his book *Bowling Alone*, Putnam (2000) addressed civic engagement as a umbrella concept including a wide range of activities from community volunteerism to non-profit organization activities to political activism and discussed civic participation and political participation as subsets of civic engagement. Similarly, in his work *The Future of Democracy*, Levine (2007) characterizes political participation as a subset of civic engagement. He defined civic engagement as "any action that affects legitimately public matters (even if selfishly motivated) as long as the actor pays appropriate attention to the consequences of his behavior for the underlying political system" (p. 13). Levine (2007) elaborated,

Civic engagement encompasses behavior that involves the state as well as that which occurs in civic society. Such behavior includes direct and personal involvement in the government itself (for example, running for and holding an elected office, serving as a juror, serving on an official board, and working as a civil servant). Political participation also includes efforts to influence the state by, for example, voting, organizing or persuading other people to vote, petitioning or lobbying the government, and suing for changes in policy. Finally, political participation includes open-ended efforts to influence the state by, for example, organizing public deliberations or educating young people to be effective participants. (pp. 48-49)

In fact, the term *civic engagement* has often been used as a concept covering all activities relevant to civic and political phenomena, although some scholars distinguish civic engagement, which includes voluntary activities aimed at solving community issues and helping others, from

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political engagement, which refers to involvement in activities related to formal institutions and government processes (e.g., Owen, 2008; Torney-Purta & Richardson, 2004).

To avoid conceptual confusion, in this study, the distinction between civic engagement and political participation was based on Levine's (2007) definition. Although Ekman and Amnå's (2012) typology is a strong conceptual framework for political participation research, Levine's conceptualization was a more practical choice for my study because it aligns more closely with the variables and concepts I adopted from the ICCS study. Moreover, Levine's concept of political participation emphasizes the role of deliberation and education in political development. In this study, *civic engagement* is defined as all individual and collective actions related to community and political affairs and issues. As a subdivision of civic engagement, *political participation* is defined as the actions that citizens take to learn about and influence law, government, and/or policy at the local, state, and/or national levels.

Micro context and macro context

In this study, I explored adolescent political development in hierarchical context structures in which immediate contexts are placed within and influenced by remote contexts. To illustrate the hierarchical context structure, this study tapped into Bronfenbrenner's (1994) ecological theory of human development. Describing an ecological environment as "a set of nested structures, each inside the other like a set of Russian dolls" (Bronfenbrenner, 1994, p. 1645), Bronfenbrenner hierarchically distinguished environmental structures as contexts of development into micro-, meso-, exo-, macro-, and chronosystems. From these categories, my study borrowed the concepts of micro- and macrosystems to describe the political development process. A microsystem is a pattern of activities, social roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit, engagement in sustained, progressively more complex interaction with, and activity in the immediate environment. Examples include such settings as family, school, peer group, and workplace (Bronfenbrenner, 1994, p. 1645).

The macrosystem consists of the overarching pattern of micro-, meso-, and exosystems¹ characteristic of a given culture or subculture, with particular reference to the belief systems, bodies of knowledge, material resources, customs, life-styles, opportunity structures, hazards, and life course options that are embedded in each of these broader systems. The macrosystem may be thought of as a societal blueprint for a particular culture or subculture" (Bronfenbrenner, 1994, pp. 1645-1646).

Using these concepts, I defined *micro context* as the proximal or immediate context—put more simply, the face-to-face setting—in which and with which an individual directly interacts on a regular basis and *macro context* as the overarching context embracing individuals (adolescents) and micro contexts. This study addressed families, schools, peer groups, and local communities as the micro context and countries as the macro context. From the ecological perspective, this study examined how microsystems contribute to adolescent political development in different

¹ A mesosystem refers to "the linkages and processes taking place between two and more settings containing the developing person (e.g., the relations between home and school, school and workplace, etc.). In other words, a mesosystem is a system of microsystems", and an exosystem refers to "the linkages and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which events occur that indirectly influence processes within the immediate setting in which the developing person lives (e.g., for a child, the relation between the home and the parents' workplace; for a parent, the relation between the school and the neighborhood peer group)" (Bronfenbrenner, 1994, p. 1645).

macrosystems. In other words, this study investigated variations in the relationships between individuals and micro contexts across different macro contexts.

Political development factors and political development relationship

As mentioned earlier, in this study, political development describes the development of an individual's political knowledge, beliefs, attitudes, and behaviors. Factors characterizing micro contexts, such as family socioeconomic status (SES), democratic school climate, and community resources, are collectively called *micro-contextual factors*. The term *political development factors* (or *micro-level political development factors*) refers to the personal (e.g., individuals' demographic characteristics such as gender and an immigrant background, personal civic experience such as civic participation at school and political discussions outside of school, psychological motivation such as political interest and political efficacy) and micro-contextual factors that influence political development. The relationship between political development factors and political outcomes (in this study, expected electoral and informal political participation) is simply called the *political development relationship* (or *micro-level political development relationship*) (see Figure 1-1).



Figure 1-1. Political development relationship

Purpose of the Study

The primary goal of this study was to gain a better understanding of the link between the macro (national) context and micro-level political development and the function of political development factors in association with different modes of political activism (expected electoral and informal political participation). By doing so, this study pursued a meaningful contribution to designing and implementing successful democratic citizenship education for adolescents who are faced with diverse social and political conditions.

To this end, I first reviewed the literature in various disciplines so as to select political development factors that might be significant across different macro contexts. Research has documented that political development and civic engagement are significantly influenced by diverse personal factors such as gender (e.g., Kawashima-Ginsberg & Thomas, 2013; Schlozman, Burns, & Verba, 1994), an immigrant background (e.g., Jensen, 2010; Schildkraut, 2005), civic knowledge (e.g., Maiello, Oser, & Biedermann, 2003; Solhaug, 2006), psychological motivations such as political interest and political efficacy (e.g., Beaumont, 2011; A. Cohen, Vigoda, & Samorly, 2001; Verba et al., 1995), and prior civic engagement experience (e.g., Metz & Youniss, 2003; Thomas & McFarland, 2010). Scholars have also revealed the substantial influence of multiple micro contexts, such as families (e.g., Hart, Atkins, Markey, & Youniss, 2004; Jennings, Stoker, & Bowers, 2009), schools (e.g., Gniewosz & Noack, 2008; Larson & Keiper, 2002; Pasek et al., 2008), peer groups (e.g., Harris, 2010; Jencks & Mayer, 1990) and local community (e.g., D. E. Campbell, 2006; Putnam, 2000), on adolescent social and political development. Drawing from previous research, this study included a wide range of personal and micro-contextual factors, each of which seems to be related to adolescent political development.

The next step for this study was to situate micro-level political development in different macro contexts. National contexts influence adolescent political development by regulating and limiting the socioeconomic and institutional resources necessary for micro-level political development and by guiding and steering the direction, content, and method of citizenship education (e.g., Schulz, Ainley, Fraillon, Kerr, & Losito, 2010). Comparative studies have shown that national contexts, such as the level of economic development, the level of democratization, and the type of political system, affect political development and civic engagement (Amnå & Zetterberg, 2010; Dalton, 2004; Norris, 2002). Different countries may emphasize different aspects of citizenship (e.g., democratic or patriotic) and civic engagement (e.g., the value of community service in the United States and willingness to protest against injustice in some societies) (Torney-Purta & Richardson, 2004).

For this reason, this study addressed the country as a macro-level setting which affects the function of personal and micro-level contextual factors in the political development process—a nation-as-context approach (Kohn, 1989). To do so, I analyzed data from the International Civic and Citizenship Education Study 2009 (ICCS), which is the largest international study related to adolescent political development, civic engagement, and citizenship education to date. ICCS provided a great deal of information on students (approximately 14 years old) and multiple contexts (e.g., family, school, local community) in 38 countries. Using the ICCS data, this study examined the relationship between political development factors and adolescents' expected political participation across 34 countries.² To preserve the distinct national contexts of each country, I analyzed each country's data separately instead of analyzing

 $^{^{2}}$ Four ICCS participating countries were excluded from this study for lack of appropriate data. Details are discussed in the Methodology chapter (Chapter 3).

pooled data. Then, I simplified and classified the analysis results into three relationship categories: a positive relationship, a not-significant relationship, and a negative relationship. I anticipated that political development relationships would differ across countries (a crossnationally inconsistent relationship). However, I also expected that some factors might have consistent relationships with expected political participation regardless of the national context (a cross-nationally consistent relationship).

In addition to the national context, this study took into account another conditional difference related to political development: the mode of political activism. Based on the ecological systems theory, human development is considerably influenced by the characteristics of the developmental outcomes under consideration (Bronfenbrenner, 1994). This implies that various political qualities, each of which has distinct characteristics, would have different relationships with personal and contextual factors in the process of political development. In fact, research has demonstrated that people's political behaviors can differ based on the mode of political activism and that political development factors have varying relationships with different forms of political participation. For example, Verba et al. (1995) found that political interest was positively associated with voting, political contributions, and political discussion while political efficacy had a significant relationship with voting but not with political contribution and political discussion. It should be noted that, as Norris (2002) argued, the repertoires of political activism-defined as "the ways in which people choose to express themselves politically"-have become diversified in recent decades. Adolescents also have various repertoires of civic engagement, some of which, such as online discussions, have become more common (Flanagan & Levine, 2010; Flanagan & Wray-Lake, 2011; Levine, 2007; Putnam, 2000). Therefore, in order to draw a complete picture of adolescent political development, we should look into

political development relationships regarding the diverse modes of political activism as well as the influence of national contexts.

Therefore, my study adopted two different modes of expected political participation as an outcome variable: adolescents' expected electoral participation and informal political participation. Adolescents' expected electoral participation (or electoral participation) indicates adolescents' willingness to participate in electoral politics as adults through such actions as voting in local and national elections and getting information about candidates. Adolescents' expected informal political participation (or informal participation) describes adolescents' willingness to participate in less system-driven and more direct/active forms of political activity as youth (during the next few years), including political discussions on- and offline, writing to a newspaper about political and social issues, and joining social organizations. Expected electoral participation represents a behavioral intention to participate in an institutional type of political activity in adulthood, and expected informal political participation represents a behavioral intention to participate in a more likely voluntary type of political activity during adolescence. Given that adolescents are prohibited from engaging in some forms and levels of engagement (e.g. electoral proceedings) (Torney-Purta & Richardson, 2004), it is essential to investigate the informal political activities in which minors can participate in order to fully understand adolescent political development. I expected that the political development relationships would differ between these two different modes of political activism. But, as in the national context, I also expected that some factors might show similar cross-national relationships regardless of the mode of political activism.

Although this study focused on identifying cross-national political development relationships and comparing expected electoral and expected informal political participation,

revealing which national contextual factor(s) may be involved in the differences or similarities in these relationships is an interesting and important mission as well. I anticipated that all or some countries falling into the same category of political development relationship (a positive, a nonsignificant, or a negative relationship) might have common national contexts. I attempted to discern which national contexts were related to the patterns in cross-national political development relationships using numerous national context indicators such as gender inequality, economic inequality, democratization level, and so on. However, it should be noted that this was not a central focus of this study, but instead, an additional task that could provide an interesting avenue for future study.

To summarize, this study investigated the relationships between a wide range of political development factors and adolescents' expected political participation (electoral and informal participation) in 34 countries. Figure 1-2 illustrates the analytic framework of this study. First, I analyzed the relationships between predictors and outcome variables for each country. Second, I simplified and classified the relationships into three categories: positive, non-significant, and negative relationships. Third, I determined whether each predictor had consistent or inconsistent relationships with adolescents' expected electoral and informal participation across countries. In this study, I considered a pattern to be "consistent" when more than 75% of the countries fell into one category, I considered the pattern "inconsistent". Fourth, after this procedure, I drew comparisons between the cross-national relationships for electoral participation and the cross-national relationships for informal participation. As an extra task, I attempted to find common national contexts among those countries belonging to the same relationship category (e.g., the global region, the level of economic development, and the level of democratization).



Figure 1-2. Analytic framework

Research Questions

This study examined how (micro-level) political development relationships differed across diverse countries (as a macro context) and depending on the mode of political activism (as developmental outcomes under consideration). Specifically, the research questions of this study were as follows:

RQ 1. What relationship do personal political development factors (i.e., students' demographic characteristics, civic knowledge, civic engagement experience, and psychological motivation) have adolescents' expected electoral participation across the 34 countries—a positive, a negative, or a non-significant relationship? Does each

predictor have cross-nationally consistent or inconsistent relationships with the outcome variable?

RQ 2. What relationship do contextual political development factors (i.e., family context, peer effects, school context, and local community) have adolescents' expected electoral participation across the 34 countries—a positive, a negative, or a non-significant relationship? Does each predictor have cross-nationally consistent or inconsistent relationships with the outcome variable?

RQ 3. What relationship do personal political development factors (i.e., students' demographic characteristics, civic knowledge, civic engagement experience, and psychological motivation) have adolescents' expected informal political participation across the 34 countries—a positive, a negative, or a non-significant relationship? Does each predictor have cross-nationally consistent or inconsistent relationships with the outcome variable?

RQ 4. What relationship do contextual political development factors (i.e., family context, peer effects, school context, and local community) have adolescents' expected informal political participation across the 34 countries—a positive, a negative, or a non-significant relationship? Does each predictor have cross-nationally consistent or inconsistent relationships with the outcome variable?

RQ 5. Are there any noteworthy differences or similarities between the cross-national relationships for expected electoral participation and the cross-national relationships for expected informal participation?

As an additional task, I attempted to detect the national contextual factor(s) that all or a group of countries falling into the same relationship category for each predictor may possess in common. These extra research questions were as follows:

RQ X1. With regard to expected electoral participation, do all or some countries falling into the same relationship category for a predictor—a positive, a negative, or a non-significant relationship—have one or more common national context(s) (e.g., economic development, gender inequality, democratization level)?

RQ X2. With regard to expected informal political participation, do all or some countries falling into the same relationship category for a predictor—a positive, a negative, or a non-significant relationship—have one or more common national context(s) (e.g., economic development, gender inequality, democratization level)?

Significance of the Study

Scholarship on political socialization has shown the need for studies (1) to consider diverse and multilevel contexts simultaneously rather than one context at a time; (2) to address multiple forms of political participation to gain a more complete understanding of political behaviors; and (3) to pay attention to the effect of social context on the process of political socialization as well as civic outcomes (Amnå, Ekström, Kerr, & Stattin, 2009; Dudley & Gitelson, 2002; Flanagan & Sherrod, 1998; Flanagan, 2004; Sapiro, 2004; Torney-Purta et al., 2010). Moreover, political socialization research has focused primarily on political development in advanced industrial democracies; therefore, we know little about political socialization in diverse national contexts. My study responds to this need by investigating the roles of multiple micro contexts (family, school, peers, and local community) in the development of different political behaviors (electoral and informal participation) across diverse national contexts, each of which has idiosyncratic historical, cultural, and political conditions (Flanagan, Stoppa, Syvertsen, & Stout, 2010; Hahn & Alviar-Martin, 2008; Sapiro, 2004).

In particular, this comparative study adds new knowledge to scholarship on adolescent political development by exploring political development in various countries possessing distinct national contexts ranging from European to Asian countries, from economically developed (e.g., Norway) to developing countries (e.g., Indonesia), and from established (e.g., England (the United Kingdom)) to fledgling democracies (e.g., Paraguay). Comparative research on the influence of different macro contexts can be useful for citizenship education in other countries as well as the target countries (Hahn, 2010) because all countries consist of groups of people with diverse social, cultural, and historical roots. This study can contribute to the planning and enactment of successful citizenship education for adolescents in diverse and volatile social and cultural contexts.

Finally, it is also expected that the conceptual and analytic framework of this study could be used for future comparative studies and that the findings from this study could be a starting point both for case studies on countries showing unique political development relationships and for in-depth investigations of a group of countries showing the similar political development relationships.

It should be noted that this study focused on the intention of future political participation, not behavior itself. Nevertheless, given adolescents' limited opportunities to fully engage in politics, it is meaningful to examine adolescents' willingness to participate in politics as a precursor to political participation in adulthood.

Organization of Chapters

This dissertation is organized into the following chapters. I begin Chapter 2 by discussing scholarship on political socialization, political participation, and democratic citizenship education to construct a conceptual model of political development. Next, I review literature relevant to the effects of personal factors and micro contexts on political development. Specifically, I address personal factors including demographic characteristics, civic knowledge, civic engagement experience, and psychological motivation. Family, school, peers, and local community are discussed as micro contexts conducive to adolescents' political development. Lastly, I explain how the current study is influenced by and aligned with previous comparative research on civic engagement. In Chapter 3, the methodology chapter, I start with an overview of ICCS that provided the data for this dissertation. Then, I present the analytic data, measures, and analytic strategy of this study. In Chapter 4, I present results from descriptive analyses, multilevel analyses, and cross-national comparisons. In Chapter 5, I summarize and discuss the findings. A few relationships between national contexts and political development relationships are also discussed in this chapter. The Conclusion (Chapter 6) provides suggestions and implications for educators, policy makers, and researchers.

CHAPTER 2

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Drawing on political socialization theory, this study focused on the link between national context, the mode of political activism, and political development relationship. This chapter begins with a discussion of theoretical and empirical arguments about political socialization, political participation, and democratic citizenship education. Then, I present the conceptual model of political development which underlies this study. Next, I review previous research on personal and micro-contextual factors related to adolescent political development. Lastly, I introduce comparative studies on political socialization and civic engagement that influence the current study.

Theoretical Framework

Political Socialization

Political socialization is the process through which individuals "are incorporated as full members of the polity or public sphere of society" (Flanagan, 2004, p.721). While early political socialization theory regarded developing adolescents as passive recipients who simply accept and internalize rules and norms from socialization agencies, contemporary theory emphasizes that adolescents are potential active agents and can play active roles in negotiating and changing their political reality (Flanagan & Sherrod, 1998). Contemporary political socialization research has tried to explain not only how to socialize people into a set of values, attitudes, and behaviors that correspond with the existing social order but also "how…people who have learned to live in one system…help shape an entirely new one" (Sapiro, 2004, p. 1). In fact, some scholars have even disapproved the use of the term 'political socialization' because it implies "a top-down

process of indoctrination and fail[s] to attend to issues of power and to discrimination in the everyday lives of young people" (Torney-Purta et al., 2010, p. 500). In short, contemporary political socialization theory describes political socialization as the development of an individual's political qualities such as political disposition, knowledge, attitudes, and behaviors through enduring *interaction* with human, social, cultural, and political environments rather than a unilateral *inculcation* of existing social and political values.

Then, we need to ask, what kinds of interactions are involved in the political socialization process? How do these interactions contribute to adolescent political development? With respect to these questions, McIntosh and Youniss (2010) proposed that "situated learning, adult scaffolding, and perspective taking" are the rudiments of a "political-developmental framework for understanding the political socialization of youth" (p. 30).

Situated learning theory stresses learning by doing within a coherent context. Meaningful "political socialization occurs in real-life settings where youth cooperate with others in meaningful work toward common ends and deliberate with competing interest" (McIntosh & Youniss, 2010, p. 32). This implies that adolescents engage more in public/collective work relevant to their lives, which in turn increases their chances of learning from the engagement experience. Therefore, the concept of situated learning is useful not only to understand adolescents' political practice and development, but also to design, implement, and evaluate youth civic engagement programs. Participation in political discussions and involvement in prosocial groups are good examples of situated learning activities that contribute to positive political development.

However, even if adolescents have opportunities to be involved in various civic practices, it is highly unlikely that they will obtain meaningful civic engagement experience without adult support (or scaffolding). Because of their limited resources and legal rights, it is not easy for adolescents to gain meaningful political practices in real-world settings. Moreover, adolescence is a transition period during which an individual's social identities are shaped and s/he recognizes and experiences wider, more varied contexts. Therefore, it is not easy for adolescents by themselves to understand complex social and political phenomena or to properly interpret personal and collective experiences related to these phenomena. Adolescents must receive scaffolding from adults, experts, or experienced individuals in order to gain meaningful civic engagement experience in the political development process. According to McIntosh and Youniss (2010), scaffolding in youth political development involves at least three major components: training designed to provide "the knowledge needed for newcomer participation in a political system," access to a political system, and support while participating in that system (p.32).

Lastly, perspective taking is a key ability for social interaction in both competitive and cooperative circumstances (Wu & Keysar, 2007). Political participation is an expression of one's own standpoint about a public agenda which is naturally accompanied by direct and indirect relationships with others. Standing up for one side nearly always involves collaborating with those who share one's viewpoint and competing against those whose views differ. Conflict, controversy, deliberation, negotiation, collaboration, and mutual consent are inevitable procedures in social interaction and collective resolution of public issues. Therefore, in democratic societies where diversity is respected, citizens need to develop "the abilities to see and understand an issue from a perspective different from one's own" (McIntosh & Youniss, 2010, p. 33). Acknowledging diversity and accepting difference are the starting point of democratic relationships and deliberation.
In short, situated learning, scaffolding, and perspective taking are core elements of the political development process. Thus, developmental interactions occurring with and within any socialization agent, including families, schools, and community-based organization, are related to these elements to a greater or lesser degree. However, it should be noted that each socialization agent has limitations of its own in terms of youth political development because it seeks different goals and operates in particular circumstances (McIntosh & Youniss, 2010). For example, families may avoid engaging in complex political and community issues. In general, community organizations and interest groups may not pursue positive youth development as their goal nor be held accountable for doing so. Accordingly, promoting youth civic engagement requires a deep understanding of how different socialization agents make distinctive contributions to political development.

With regard to understanding of the role of socialization agents in political development, Lave and Wenger's (1991) concept of a community of practice is quite useful for explaining learning and development in diverse contexts. A community of practice is defined as a "[group] of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger, 2006, <u>http://www.ewenger.com/theory/</u>). When a novice joins a community of practice, s/he moves from peripheral to central participation with the support of experienced and skilled members (e.g., apprenticeship). This process is called *legitimate peripheral participation* (Lave & Wenger, 1991). Here, participation, which is a process of learning and of knowing, "refers not just to local events of engagement in certain activities with certain people but to a more encompassing process of being active participants in the practices of social communities and constructing identities in relation to these communities... Such participation shapes not only what we do, but also who we are and how we interpret what we do" (Wenger, 1998, pp. 4-5). By participating in cultural practices in a community of practice, new members can understand the meaning of experiences had in the community and the meaning of concepts and skills related to that experience, obtain opportunities for action in the present and practice for action in the future, and develop an identity as a member of the community (Torney-Purta et al., 2010).

Torney-Purta and her colleagues (2010) asserted that youth political development also occurs through participation and sociocultural experience in diverse communities of practice. In the course of and as a result of political socialization and civic engagement, adolescents come to understand the meaning of their civic experience, to form civic identities, to develop efficacy and a sense of empowerment, and to be involved in civic practices in diverse domains. Based on this notion, the authors propose a framework for political socialization research and civic engagement assessment (see Torney-Purta et al., 2010, p. 504) in which meaning, identity, agency/efficacy (motivation), and practice/action are independent variables (i.e., the result of political development).

Torney-Purta et al. (2010) complete their conceptual framework by referring to Wentzel's (2006) classification of research problems and questions.

[H]uman development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as *proximal processes*...[T]he form, power, content, and direction of the proximal processes effecting development vary systematically as a joint function of the characteristics of the

developing person; of the environment [or context]—both immediate and more remote in which the processes are taking place; and the nature of the developmental outcomes

under consideration. (Bronfenbrenner, 1994, p. 1644; italics in original) Tapping into the *person-process-context model* from Bronfenbrenner's early work,³ Wentzel (2006) categorized variables influencing educational outcomes and development into three groups: person, context, and process. Wentzel asserted that deliberation on person, process, and context with regard to an educational phenomenon and development allows us to create meaningful and fresh research questions and variables. Extending this idea, Torney-Purta et al. (2010) proposed that independent variables in youth civic engagement research can also be grouped into person, context, and process variables. They assert that in order to accurately understand the mechanisms of political development and civic engagement, we need to pay more attention to context (e.g., family, school, neighborhood) and process variables (e.g., observational learning, apprenticeship, adult scaffolding) as well as person variables (e.g., gender and socioeconomic status). Considering that all social and cultural groups possess their idiosyncrasies, research on context and process is an important step in explaining political socialization and providing meaningful civic engagement experience to adolescents in particular groups. Research has demonstrated that the aspects of political development and civic engagement vary across different social and national groups (e.g., Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998; Hahn, 1998; Norris, 2002; Schlozman et al., 1994).

It should be noted that people belong to various communities of practices (or multiple contexts), such as families, classrooms, and workplaces, at the same time (Wenger, 1998).

³ In his late work, Bronfenbrenner established the bioecological model of human development grounded in the process-person-context-time (PPCT) model in which he further develops his argument about process and introduces

Depending on the circumstances, identities shaped from participation in diverse communities of practice either function harmoniously in the intrapersonal development process or contribute to intrapersonal conflict. From this perspective, adolescents are politically socialized along different vectors under different proximal contexts; therefore, adolescent political development can be rightly understood when multiple contexts surrounding developing adolescents are considered simultaneously.

Political Participation

By definition, democracy builds on citizens' political participation. Political participation "is at the heart of democracy. Indeed, democracy is unthinkable without the ability of citizens to participate freely in the governing process" (Verba, Schlozman, & Brady, 1995, p. 1). How much citizens can and do participate in public affairs represents the democratization level of a society. Moreover, historically, citizens' perseverance and active participation have fueled the expansion of civil rights. Promoting political participation is a powerful, fundamental way of strengthening democracy:

[I]f democracy is to sustain itself, a richer conception of citizenship is required that meets the test of what may be called *strong democracy*. Strong democracy is not simply a system whereby people elect those who govern them, but a system in which every member of the community participates in self-governance. It entails not merely voting and overseeing representatives but ongoing engagement in the affairs of the civic community at the local and national levels. (Barber, 1989, p. 355; italics in original)

a concept of time (Bronfenbrenner & Morris, 2006). However, many studies still refer to Bronfenbrenner's early model and concepts (Tudge, Mokrova, Hatfield, & Karnik, 2009).

Moreover, in many cases political participation is the most effective way (often the only way, especially for the underrepresented) for citizens to meet their social and political needs because "while policymakers are not necessarily equally sensitive to all constituents, they are sensitive to citizen input" (Verba et al., 1995, p. 30). In a nutshell, active political participation by citizens is the foundation for the realization of greater equality in a society and the transformation of an institutional democracy into a substantive democracy.

McIntosh and Youniss (2010) posited that political participation (the authors call it political engagement) is different from other types of human activities because of its distinguishable characteristics: it is *public*, it requires *collaboration*, it involves *conflict*, and it is *voluntary*. First, politics is a matter of human relationships; therefore, political participation is public in nature. As McIntosh and Youniss (2010) explained, "the private and isolated individual, no matter how mature his or her reasoning, often falls short of being able to participate in the political domain. This is because that domain is, by definition, public and social, or collective....[*P*]*olitical* [italics in original] connotes 'public''' (pp. 26-27). Interactions with and consideration of others are unavoidable in addressing political issues.

Second, collaboration is a key element of effective political participation. Political voices are meaningful only if they are heard by others, and political actions are efficacious only if they stimulate others. Collective voices are far more likely than single voices to be heard and to stimulate social change (McIntosh & Youniss, 2010). Collective action is the most effective and often the only way to accomplish community and political goals; these goals cannot be achieved by individuals acting alone in a democracy (Flanagan, Martinez, Cumsille, & Ngomane, 2011). Deliberation, persuasion, negotiation, and consent are indispensable in generating a collective will. For this reason, the civic qualities needed for democratic collaboration, such as

social/political trust and interpersonal skills, have been emphasized in civic engagement and citizenship education literature (Flanagan et al., 2010; Hahn, 1998; Newton, 2007; Putnam, 2000).

Third, political participation always involves some degree of conflict with others. Political issues impact a multitude of people who have diverse personal and social tastes and concerns, and "collective action does not imply the absence of diverse perspectives" in a democratic society (Flanagan et al., 2011, p. 97). In fact, almost all social and political decisions result from debates, discussions, and deliberations among citizens and groups with varied interests (McIntosh & Youniss, 2010), and unanimous decisions are very rare even in a collaborative environment. Therefore, people who accept and deal with conflicts with others well are more likely than those who evade conflicts to participate in politics. However, people are generally averse to interpersonal and public conflict. Attempting to preserve amicable personal relationships and maintain an agreeable public atmosphere, most people choose to avoid conflict and conceal their opinions during heated debates (e.g., Hayes, Scheufele, & Huge, 2006; Merelman, 1990). This conflict-aversion may prevent all voices from being heard equally and diminish the merit of deliberation. To foster a democratic environment open to diverse opinions, citizens must be tolerant of dissent or wiling to acknowledge the basic rights and liberties of persons and groups whose views differ from their own (Avery, 2001). Thus, citizenship education in a democracy should enable adolescents to develop this virtue.

Fourth, voluntariness is an essential aspect of active political participation. Citizens' active and persistent participation requires strong willingness to participate in politics of their own volition. Therefore, increasing citizens' willingness to participate in politics is an important task in a democratic society. A body of literature asserts that people more willingly participate in

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civic and political issues when they are "persuaded that participation in the political system is in some way relevant to their lives" (McIntosh & Youniss, 2010, p. 29). Psychological motivations such as political interest and political efficacy are also strong forces that encourage people to voluntarily participate in politics. In an effort to develop adolescents' civic willingness, many educators posit the necessity of mandated community service, which has been enacted in many places. Although it is somewhat counterintuitive to suggest that a mandate will encourage voluntary action, evidence shows that mandated school-based community service is positively associated with adolescents' willingness to participate in voluntary service (Metz & Youniss, 2003) and with electoral participation as adults (Hart, Donnelly, Youniss, & Atkins, 2007).

As Barber (1989) asserted, "if students are to become actively engaged in public forms of thinking and participate thoughtfully in the whole spectrum of civic activities, then civic education and social studies programs require a strong element of practical civic experience real participation and empowerment" (p. 355). Considering McIntosh and Youniss's (2010) discussion of the distinctive characteristics of political participation, practical civic experience includes participating in democratic decision-making processes affecting their lives, working collaboratively with peers and adults, and deliberating about important local-, national-, and global-level social issues (Hess, 2008a; Levine, 2007). In short, diverse civic engagement experience during adolescence is important to the development of democratic civic competence. Empirical studies have demonstrated that civic engagement experience in youth is significantly associated with the acquisition of democratic knowledge, skills, and attitudes as well as with civic engagement in the future (Flanagan & Wray-Lake, 2011; Levine, 2007). Therefore, education for democratic citizenship should provide adolescents with quality hands-on civic engagement opportunities.

Democratic Citizenship Education

While adolescents need to have quality civic engagement experience, it should be noted that civic engagement opportunities are not equally available to all adolescents. Just as all adults are supposed to be politically equal, so too should all adolescents be equal to each other in civic and political arenas. Civic learning and empowerment opportunities should be equally accessible to adolescents from all social and cultural backgrounds. But, socioeconomically and culturally disadvantaged adolescents suffer from the unequal distribution of social, economic, and political resources. Considering that these resources are a key factor in social and political involvement (Bourdieu, 1984; Verba et al., 1995), disadvantaged adolescents do not have fair and equal civic learning opportunities. Therefore, democratic citizenship education should seek ways to provide *all* adolescents with meaningful civic engagement experience.

Then, what does democratic citizenship education look like? To answer this question, first, it needs to be recognized that citizenship education is not synonymous with democratic education. Hess (2009) stated:

I use the term "democratic education" instead of civic education. I do so deliberately because the label "civic education" suggests "fitting in" to society as it currently operates, whereas my deliberate use of "democratic" highlights the dynamic and contested dimensions inherent in a democracy...In a nutshell, democratic education is a form of civic education that purposely teaches young people how to *do* democracy. It stands at the crossroads of authenticity and transformation. In other words, democratic education both honestly addresses the political world outside of school and represents that political realm as dynamic, thereby emphasizing the ongoing transformation of society. (pp. 14-15; italics in original)

Citizenship education exists in any society, but democratic citizenship education does not sometimes even in democracies. While citizenship education nurtures conformity to beliefs and values which a society regards as desirable, the purpose of democratic citizenship education is to teach students to internalize and act on democratic beliefs, values, and attitudes. Citizenship education may support the status quo, but democratic citizenship education aims at producing an ever more democratic society by allowing students to critique the existing social and political order and by encouraging them to take part in social transformation.

That is to say, not all forms of citizenship are democratic. Citizenship education does not always contribute to democratic citizenship (Kahne & Westheimer, 2003). Westheimer and Kahne (2004) articulated the features of democratic citizenship education. The authors categorized models of good citizens into three types: personally responsible citizens, who act "responsibly in his or her community by, for example, picking up litter, giving blood, recycling, obeying laws, and staying out of debt" (Westheimer & Kahne, 2004, p. 241); participatory citizens, who actively participate in the civic and political affairs of the community at the local, state, or national level; and *justice-oriented citizens*, who recognize matters of injustice, understand the importance of pursuing social justice, and participate in collective action to address injustices they observe. As an example of these categories, "If participatory citizens are organizing the food drive and personally responsible citizens are donating food, justice oriented citizens are asking why people are hungry and acting on what they discover" (Westheimer & Kahne, 2004, p. 242). Westheimer and Kahne argued that the personally responsible citizen is not necessarily an effective citizen in a democratic society because the defining attributes of the personally responsible citizen-obedience, patriotism, honesty, and good neighborliness-are not innately conducive to democracy. Therefore, education for democratic citizenship should

provide opportunities for students to think about and participate in community and politics, to perceive the importance of planning and participating in organized efforts, and to consider (and if possible, be part of) social movement, system change, and social justice (Westheimer & Kahne, 2004). Democratic citizenship education allows students to *do* democracy by encouraging them to confront the real world and join social transformation. In such citizenship education, adolescents are offered opportunities to deliberate on important public issues and social justice, shape their understanding and perceptions of their reality, do meaningful work to improve their community, and participate in social and political affairs to varying degrees. Adolescents are treated as meaning-makers and potential transformers of their reality, not passive recipients of political socialization. Providing these opportunities allows students to develop civic skills and attitudes that surpass those required for faithful citizenry and enables adolescents to gain a sense of empowerment.

It seems obvious that participatory citizenship and justice-oriented citizenship should be a major goal of citizenship education for democracy. However, educational and civic opportunities to develop such citizenship are neither equally distributed nor equally functioning among all adolescents in a capitalist society. Due to the disproportional distribution of social, economic, and cultural resources, adolescents from underrepresented backgrounds do not have adequate educational opportunities. Moreover, they are often pressed to accept knowledge and practices which are chosen and embellished by "authoritarian populists who are powerful in education and in other areas of politics and social and cultural policy" (Apple, 2000, p. xxv). As a result, educational inequality can be solidified and even worsened in an educational system driven by the mainstream (Apple, 2006). In addition, students from disadvantaged backgrounds often experience inequality in school learning as well as educational opportunities. [M]iddle-class children have a distinct advantage in schools. While learning the dominant discourses of schooling requires extending existing discourses for all children, middle-class children have had constant opportunities to acquire ways of being and thinking that are highly similar to the discourses they encounter in schools. Children from poor and racially diverse backgrounds often do not share this advantage and are required to "learn" these school-based discourses when they arrive at school. (Compton-Lilly, 2007, p. 86)

Consequently, underrepresented adolescents are urged to assume identities that are different from—more likely in competition with—those established within their own social and cultural contexts, which makes it difficult for them to satisfy the academic and social standards defined by the mainstream (e.g., Valenzuela, 2005). Likewise, "Social class disparities in civic participation that begin in the pre-adult year are exacerbated by unequal opportunities for gaining civic practices...Besides disparities in opportunities between and within schools, providing civic practices for children growing up in disadvantaged communities offers numerous challenges" (Flanagan & Levine, 2010, p. 166). Marginalized students suffer from dual civic inequalities: lack of civic opportunities and unfair practices disconnected from their reality.

Then, how can we distribute opportunities for democratic civic engagement fairly to all adolescents—in particular, to those in disadvantaged positions such as females, immigrants, and the poor? How can we allow all adolescents to enjoy the outcomes that democratic citizenship education values (Beane & Apple, 2007)? Although relying on schools to offer fair civic learning opportunities is an imperfect solution (see Kahne & Middaugh, 2008), it seems that schools are the most affordable and accessible conduit through which adolescents obtain positive and well-designed civic and political opportunities regardless of their social background.

School-based democratic citizenship education

Schools occupy a unique position with respect to civic engagement in adolescence. In democracies, public education is provided as a civil right, and some countries even ordain public education as a civic duty through compulsory education laws. An individual spends a significant portion of his/her adolescent years in school, and during this period, much of his/her identity, beliefs, attitudes, and behavior are formed (Erikson, 1968).Being a student is almost equivalent to being a captive audience to values and narratives supported in his/her society or sponsored by the authorities. Moreover, a school is an official socialization agent which guides adolescent development through planned (e.g., curriculum, school rules) and unplanned vehicles (e.g., student composition, peer groups).

A school is deeply involved in adolescent development in diverse ways. For example, a school directly instructs adolescents; adolescents interact with others with different backgrounds and purposes such as teachers and classmates in school; and a school transfers, reinforces, or sometimes contradicts family and community values. Viewed through the lens of the ecological systems theory (Bronfenbrenner, 1994), a school is a major microsystem and an important part of multiple mesosystems and exosystems in youth development. Moreover, schools might be the best place in which adolescents can be taught about democracy through fruitful hands-on experience. School can provide adolescents with various thoughtfully-designed participation experiences and expose them to diverse perspectives on a regular basis. In addition, civic practices at school can boost active participation in different and wider contexts. A great deal of empirical research has documented that a democratic school climate and school-based/sponsored civic engagement experience have a significant effect on students' positive political development and their political lives in adulthood (e.g., Flanagan & Stout, 2010; N. J. Lee, Shah, & McLeod,

2013; Linimon & Joslyn, 2002; Pasek et al., 2008; Schulz et al., 2010; Torney-Purta, Barber, & Wilkenfeld, 2007).

A school is also a very important institution in light of its universal accessibility and farreaching inclusiveness (Flanagan et al., 2010). In this respect, democratic citizenship education at school should be based on the fundamental principle that "pupils have the right to have their views heard and taken into account, a right both enshrined in principle and encouraged in practice" (Trafford, 2008, p. 411). Adolescents should be given substantive opportunities to be heard, to hear others, and to work collaboratively in order to develop democratic civic competence (Flanagan et al., 2010). A school should provide purposeful democratic civic learning opportunities—voluntary and/or mandated—to all students including those who are prone to remain disengaged or even alienated without external support (Galston, 2004; McLellan & Youniss, 2003; Metz & Youniss, 2003).

Conceptual Model of Political Development

As aforementioned, political socialization takes place through interactions between individuals and various elements in multilevel contexts. Sapiro (2004) succinctly described the multilevel nature of political development:

Political socialization as a field can be defined by a pair of interlocked macro- and microlevel phenomena. At the macro level, political socialization frames research on how polities and other political societies and systems inculcate appropriate norms and practices in citizens, residents, or members...At the micro level, political socialization frames research on the patterns and processes by which individuals engage in political development and learning, constructing their particular relationships to the political contexts in which they live. (pp. 2-3)

That is, a person is politically socialized in hierarchical contexts. Political development research at the micro level is about how an individual develops political qualities through interactions with proximal contexts (e.g., family, school, local community); and at the macro level, it is about how remote contexts (e.g., social and national contexts) influence micro-level political development by regulating the way in which an individual interacts with immediate contexts.

At the micro level, political development can be modeled as the process in which an individual forms political knowledge, beliefs, attitudes, and behaviors through enduring interactions with human and environmental elements in diverse proximal contexts in which s/he is directly or indirectly engaged on a regular basis. Proposing the civic voluntarism model, Verba et al. (1995) asserted that one's civic engagement is determined by three components: resources (e.g., time, money, civic skills), engagement (e.g., political interest, political efficacy), and recruitment networks (e.g., friends, relatives, and acquaintances who invite to civic engagement). When people do not actively participate in public issues, it is "because they can't; because they don't want to; or nobody asked" (Verba et al., 1995, p. 269). There is no doubt that voluntary and effective participation cannot be expected without basic resources and abilities. Psychological engagement (or motivation) is an inner force that drives individuals to willingly mobilize their resources and skills in support of social or political causes. Recruitment networks such as churches and workplaces provide the information necessary for civic engagement, contribute to developing civic skills, and prompt people to act out individual or collectively-held beliefs regarding specific issues (Putnam, 2000). Flanagan and Wray-Lake (2011) asserted that these three components (resources, organizations and institutions that provide recruitment and civic engagement opportunities, and motivation or the desire to be engaged) are determinants of adolescents' civic engagement as well as adults' civic engagement. With regard to these three

components, previous research has identified numerous personal (e.g., demographic characteristics, psychological motivation) and micro contextual factors (e.g., family resources, peer group, community organizations) that are closely related to political development.

In macro-level political development, remote/larger contexts (e.g., national economic conditions, political systems, culture and history) directly and indirectly influence the microlevel political development process by regulating the functions of personal and micro-contextual factors. Norris's (2002) conceptual framework for explaining patterns of political participation outlines this multilevel structure of political development well. Norris asserted that one's political activism is influenced at the micro-, meso-, and macro levels. First, at the micro level, civic resources (time, money, civic skills) and motivational attitudes (e.g., internal political efficacy, political interest, political cynicism) significantly influence individuals' political activism. Second, at the meso level, *mobilizing agencies* and social networks such as political parties, churches, and voluntary associations play important roles in facilitating the civic engagement of social members. Third, at the macro level, societal modernization (i.e., levels of socioeconomic development marked, for example, by rising standards of living and expanding educational opportunities) and state structure (e.g., electoral laws, party system, constitutional structures) regulate and expand citizens' civic engagement. In Norris's (2002) framework, these five components at three levels independently and jointly contribute to the development of an individual's behaviors in diverse modes of political activism. Therefore, the mechanism of political development—especially, in specific social and cultural groups—can be revealed when the macro contexts within which micro-level political development occurs are properly taken into account. The influence of the macro context (i.e., the social, cultural, and national contexts in which people and micro-level socialization agents are situated) on political participation in

specific groups has been identified by numerous studies. For example, young people from marginalized groups tend to be skeptical of system-driven forms of political activism but show more interest in more active and direct forms of involvement (C. Cohen, 2006; Junn, 1999; Middaugh & Kahne, 2008).

In short, adolescents' development is influenced by multiple contexts and interrelations among those contexts (Lerner, 2011). All relations between individuals and contexts and between contexts "are embedded within a particular community, society, and culture" (Lerner & Castellino, 2002, p. 127). That is, adolescents develop within hierarchically structured contexts. Consequently, understanding adolescent political development requires an integrative view of the relationships among individuals, micro contexts, and macro contexts.

As discussed earlier, the ecological systems theory postulates that the form, power, content, and direction of the proximal processes are determined by *the nature of the developmental outcomes under consideration* as well as the developing person and the environment (Bronfenbrenner, 1994). Likewise, political development relationships may differ across different modes of political activism. In fact, different modes of political activism require different kinds and amounts of resources and are governed by different social rules. Therefore, one mode of political activism cannot represent all modes of political activism (Dudley & Gitelson, 2002; Verba et al., 1995), and a trend in one form of political participation cannot be assumed to be identical to trends in other forms of political participation. Moreover, technological advancement has enabled citizens to create new kinds of social networks and communication methods and to mobilize their resources in new and various ways which have not been seriously investigated in the conventional scholarship on political participation (Flanagan & Wray-Lake, 2011; Levine, 2007; Norris, 2002). For this reason, scholars have consistently

highlighted the necessity for a distinction between different modes of political activism and an analytic framework considering various forms of political behaviors (Dalton & Klingemann, 2007). Comparative studies have documented that political development and civic engagement vary not only across countries (i.e., macro context) but also by the mode of political activism (i.e., civic outcomes under consideration) (Schulz et al., 2010; Torney-Purta, Lehmann, Oswald, & Schulz, 2001). That is, political development is significantly related to target civic outcomes and macro contexts. For this reason, I examined adolescents' willingness to participate in two different modes of political activism across different national contexts.



Figure 2. Conceptual model

Figure 2 illustrates the conceptual model of the political development process that I developed for this study. The (micro-level) political development relationship indicates the relationship between personal and micro-contextual factors and adolescents' expected political participation. The political development relationship may differ by the mode of political activism. This whole process occurs within a macro context—in this study, the national context.

Literature Review

This section reviews previous research on important factors related to adolescent political development and provides an overview of the comparative studies on political socialization and civic engagement that influenced this study.

Personal Factors in Political Development

Gender and immigrant background

A large body of literature has demonstrated the significant effects of gender on civic engagement. Schlozman, Burns, and Verba (1994) examined the gender difference in civic engagement and the relationship between the gender difference and resources (money, time, civic skills). Based on telephone interviews conducted on a random sample of 2,517 American adults, the researchers found that although male adults are more active in politics than female adults in general, gender differences vary according to the participation types. For example, while males more actively contacted government officials and participated in community activity, there is no gender difference in protest participation. An important finding of this study is that women generally had lower income and therefore less money to spend on political participation compared to men. That is, the gender difference in political participation is, in part, the result of economic disparity. Schlozman et al. identified that the difference in political participation between males and females was greatly reduced when financial inequality was accounted for. This result implies that macro contextual factors such as gender inequality in economic and political domains need to be taken into account when examining the effect of gender on political development.

Research has also revealed that gender differences in civic participation differ by form of civic engagement and across countries. While males have more interest in conventional forms of political activism, female adolescents participated more in voluntary community engagement. It seems that political discussion and expected political participation among female adolescents are significantly related to the national level of political equality (Flanagan & Wray-Lake, 2011). Using data collected from AmeriCorps participants, Hyman and Levine (2007) found that the gender effect is associated with the form of civic engagement. Women tend more toward volunteering and voting while men are more active in persuading people to vote and donating money to candidates.

The impact of an immigrant background on civic and educational outcomes has been a serious issue in ethnically/racially heterogeneous societies and is becoming more pronounced in many countries as globalization continues to accelerate. A significant relationship between immigrant background (or citizenship status) and political participation has been consistently identified in political science and civic engagement research, even after controlling for other personal variables such as political interest, political resources, and SES. Further, it has been shown that the relationship of immigrant background to political participation differs by mode of political activism (e.g., Brady, Verba, & Schlozman, 1995; Verba et al., 1995). Torney-Purta et al.'s (2007) study illustrates the influence of an immigrant background on adolescent political development. The authors investigated gaps in civic outcomes between Latino/a and non-

Latino/a adolescents drawing on the U.S. sample from the International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study. Their multilevel analysis found that Latino/a ethnicity had a significant relationship with more positive attitudes toward immigrants and a marginally significant relationship with lower civic knowledge. Torney-Purta et al. also found that schools with more Latino/a students had a lower school average of civic knowledge compared to schools with fewer Latino/a students.

In a study of 1,736 Latino/a U.S. citizens conducted in 2001, Schildkraut (2005) revealed that not only ethnicity, but also ethnic identity, may influence political development. More specifically, Schildkraut investigated the effect of self-identification and perceived discrimination on electoral participation and political trust. Overall, those who identified themselves as Latinos/as tended to participate less in electoral participation and have lower political trust (defined as trust in politicians and government). It is interesting that when respondents who identified themselves as Latino/a had a stronger perception of discrimination, they were more likely to participate in electoral activity; on the other hand, Latino/a citizens who identified themselves as Americans participated less when they perceived discrimination.

In sum, the effects of gender and immigrant background on civic engagement are significant, but not consistent by the form of political participation for either adults or adolescents. Nor are the effects consistent across macro/national context. For this reason, I examined the effects of adolescents' gender and immigrant background across different macro (national) contexts regarding two different modes of political activism.⁴

⁴ I did not include student age as an independent variable because almost all students in the analytic sample are the same age (13-14 years of age). See Chapter 3.

Civic knowledge

Sophisticated deliberation and effective political participation must be based on information/knowledge of public issues, and an informed citizenry is the foundation for promoting democracy in a society (Diamond, 1997). In fact, without basic knowledge about what to do, where to do it, and how to do it, the likelihood that an individual will be interested in or participate in public affairs is very low (Levine, 2007). Citizens with appropriate civic knowledge hold democratic values, see the importance of political participation, recognize their own political needs, seek more knowledge and greater understanding of public issues, and make reasonable decisions by reflecting on their own opinion and listening carefully to others' opinions on community and political issues (Galston, 2001, 2004).

Research has identified the significant effect of civic knowledge on positive civic attitudes and engagement. For example, Wells and Dudash's (2007) qualitative study of 117 young U.S. citizens showed that greater knowledge is related to higher political efficacy and greater possibility of political participation even though gaining knowledge does not always lead to actual electoral participation. In their investigation of the relationships between political information, political information efficacy, and voting tendencies, Kaid, McKinney, and Tedesco (2007) distinguished political information efficacy as a distinct dimension of political efficacy which is "closely related to internal efficacy but differs in that it focuses solely on the voter's confidence in his or her own political knowledge and its sufficiency to engage the political process (to vote)" (p. 1096). Using the 1996, 2000, 2002, and 2004 National Election Studies conducted at the University of Michigan, the researchers found that exposure to political information (e.g., campaign messages, presidential debates) had a positive influence on young people's political information efficacy and that the political information efficacy of voters was

higher than the efficacy of non-voters. These studies suggest that civic knowledge has a positive impact on civic engagement in direct and indirect ways.

However, as in Wells and Dudash's study, civic knowledge does not have a positive effect on all kinds of political activities. Some studies found different relationships between civic knowledge and civic engagement. Hart et al.'s (2007) study revealed that civic knowledge in 12th grade was significantly related to electoral participation (local and presidential voting); on the other hand, it was not related to civic volunteering and was even negatively related to involvement in youth organizations in young adulthood. Likewise, Schulz's (2005) comparative study using IEA Civic Education Study data identified varying relationships between civic knowledge and different civic outcomes across 10 countries. In his study, civic knowledge had positive relationships with internal efficacy in some countries. On the contrary, civic knowledge had not-significant or even negative relationships with external efficacy in all 10 countries. Schulz also found that civic knowledge had positive relationships with expected electoral participation (voting and getting informed prior to elections) in all countries; however, civic knowledge had negative relationships with expected active forms of participation (writing letters to newspapers, joining a party, and running for office—'expected political activities' in the author's terminology) in a number of countries.

The inconsistent effects of civic knowledge on different modes of political participation are disclosed in the ICCS report and in secondary analyses of the ICCS data as well. The ICCS report demonstrated that civic knowledge was positively related to expected electoral participation (voting in local and national elections and getting information about candidates) in all 38 countries; however, it was negatively associated with expected active political participation as adults (helping a candidate or party during an election campaign, joining a political party, joining a trade union, and standing as a candidate in local elections) in all countries (Schulz et al., 2010). Schulz and Fraillon (2012) obtained similar results from path analyses of 36 ICCS-participating countries. Civic knowledge is positively related to expected electoral participation in 35 countries but negatively or not significantly related to expected active political participation as adults in 36 countries. Hooghe and Quintelier's (2011) multilevel analysis of the pooled ICCS data found that civic knowledge has positive relationships with willingness to engage in legal protest in the future (writing a letter to a newspaper, wearing a badge or t-shirt expressing an opinion on a social issue, contacting an elected representative, participating in a peaceful march or rally, collecting signatures for a petition, and boycotting) and expected electoral participation; however, it has negative relationships with expected active participation as adults and expected informal political participation (political discussions offline or online, writing to a newspaper, and joining social organizations).

In sum, civic knowledge has varying influence on different modes of political activism and different aspects of civic qualities, and national context has an impact on the role of civic knowledge in the political development process.

Civic engagement experience

The importance of civic engagement during adolescence in the political development process is well documented in civic engagement scholarship. Civic engagement experience at and outside of school (e.g., student council, extracurricular activities or clubs, community volunteerism, political discussion) enables adolescents to form civic identities, to develop political beliefs and attitudes, and to gain civic knowledge and skills (Flanagan & Wray-Lake, 2011; Levine, 2007). School-sponsored and community-based organizations can function as

recruitment networks inviting adolescents into civic and political domains (Putnam, 2000; Verba et al., 1995).

Students who belong to school organizations are more likely to have stronger willingness to participate in voluntary service (Metz & Youniss, 2003). In addition, involvement in organized activities at school has a significant effect on the formation of political identity as well as active civic engagement as adults. Thomas and McFarland (2010) examined the influence of adolescents' involvement in extracurricular activities including student council and a wide variety of school clubs on voting in their early adulthood drawing on two nationally representative datasets: the National Educational Longitudinal Study (NELS) conducted between 1988 and 2000 (8th grade to young adulthood) and the National Longitudinal Study of Adolescent Health (Add Health) performed between 1994 (7th to 12th grade) and 2002 (18 to 26 years old). The authors found that involvement in school clubs had a positive influence on turnout in presidential elections in general although some sports club activities such as basketball and volleyball discouraged it. Involvement in some organized activities had a significant impact on political ideology (ranging from very conservative to very liberal) and party identification (e.g., democrat, republican, independent). Students who participated in religious service and a few sports clubs were more likely to have conservative ideology and republican identification while membership of academic clubs, drama clubs, and honor society tended to direct students to liberal ideology and democrat identification in their early adulthood. This result suggests that not only involvement in organized activities at school but also the characteristics of the activities in which adolescents participate can impact adolescents' political development.

School curriculum can provide students with meaningful civic engagement experience as well. Feldman, Pasek, Romer, and Jamieson's (2007) study on the Student Voices curriculum

showed the positive effect of a school curriculum that provides diverse civic engagement experiences on adolescent political development. They analyzed data from students in 22 Philadelphia high schools that implemented the Student Voices program during the 2002-2003 school year. The Student Voices curriculum included Internet use for information collection and opinion exchange, classroom discussion, and various field experiences. Students who participated in the Student Voices program were more likely than those taught with the regular civics curriculum to follow and discuss politics. Students in the program also showed higher levels of political knowledge and political efficacy. Additionally, Linimon and Joslyn (2002) found that a school curriculum which includes hands-on participatory experience and substantive parental involvement can increase adolescents' electoral participation as adults. This study suggests that school curricula can have a long-term effect on political development.

Moreover, Beaumont's (2011) study demonstrated that well-designed civic education programs can reduce the inequality in youth political development. Beaumont stressed that a person gains political efficacy not only by possessing material and civic resources, but also through observation of and interaction with others and environmental factors contained in the sociopolitical context in which s/he is situated—a sociopolitical learning model. Drawing on survey data collected from 595 undergraduates participating in 27 political learning programs, Beaumont examined how four kinds of sociopolitical learning mechanisms (experiences in a politically active community, acquiring skills for political action, engaging in political discourse, and inclusion in collaborative pluralist contexts) influence the development of political efficacy. Beaumont found that participation in learning programs that emphasize political action skills is positively related to internal political efficacy. Moreover, experiences in a politically active community, learning political action skills (marginally significant), and exposure to more racially pluralist contexts could reduce the gaps in initial levels of internal political efficacy among students. Beaumont also demonstrated that participation in programs emphasizing experiences in a politically active community, learning political action skills (marginally significant), or discussion of current events could mitigate the effect of home political discussion on internal political efficacy development. Given the SES effect on political discussions with parents and political efficacy (Verba et al., 1995), Beaumont's findings present the potential of civic engagement programs to reduce disparities in political development caused by socioeconomic inequality. In addition, Beaumont's study, like Thomas and McFarland's (2010) study, implies that there is no one-size-fits-all civic learning program for positive political development and the characteristics of programs are important in citizenship education. Therefore, successful citizenship education should provide diverse civic learning opportunities tailored to the characteristics of the developmental (civic) outcomes under consideration—that is, the specific civic qualities that the education seeks to develop, such as civic knowledge, political efficacy, willingness to participate in different modes of political activism, and so on.

With regard to school-based civic education, an interesting topic is whether or not students should be required to do service, for example, as a requirement for high school graduation. Studies have presented mixed results with respect to the influence of mandated civic service on adolescents' development. Hart et al. (2007) investigated the differences in five civic outcomes (local/presidential elections, volunteering in community service/youth organizations, and civic knowledge) between the no service and the voluntary service group, between the no service and the school-required service group, and between the no service and the mixed group (voluntary + required) drawing on NELS data. Hart found that respondents who participated in both voluntary and required service were better at achieving all five civic outcomes than the no service group; that people who were involved in voluntary service during adolescence participated more in local/presidential elections, volunteered more in youth organizations, and had more civic knowledge than those who were not involved in any service; and that schoolrequired service was positively related to voting in local/presidential elections and civic knowledge. Horn's (2012) study showed that service through humanitarian organizations is positively related to the adoption of prosocial values (helping others in the community) regardless of whether the service was voluntary or mandated (court, class, or other reason) although adolescents who voluntarily participate in service work showed more prosocial value orientation than those whose service was institutionally mandated. Metz and Youniss (2003) also found that students' intentions to engage in future voluntary service were positively associated with school-required community service and that meeting the school's requirement (40-hours minimum), not just joining school-required service projects, was particularly important. Overall, it seems that both mandated and voluntary service affects positive political development. Although mandated service might contribute less to the development of prosocial attitudes than voluntary service, it is at least better for students' development than doing nothing.

Advocates of democratic education maintain that student participation in school governance is not only an important way to develop adolescents' civic competence but also an element of democratic schools. Trafford (2008) claimed,

The school has to value its council as both a practical and a symbolic demonstration of respect for the pupil voice. If the school has a philosophy of engaging with its students, harnessing their energy and enthusiasm, and giving children responsibility for their lives and learning, the school council will be in harmony with the school ethos. The more the students are given opportunities to demonstrate how much their participation can

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contribute to the well-being and development of the school, the more that democratic engagement will strengthen the school ethos. (p. 417)

This experience with a democratic school ethos contributes to the development of students' sense of empowerment. Given that civic engagement experience at school can be transmitted to civic engagement in different and expanding contexts, it is expected that effective participation in school governance will strengthen adolescents' confidence in democratic participation and social change. Moreover, students can acquire qualities necessary for civic engagement through participation in school governance (see Carnegie Corporation of New York & The Center for Information and Research on Civic Learning and Engagement (CIRCLE)., 2003; Levine, 2007). For example, Battistoni (2008) explored the impact of Project 540, a civic education program emphasizing "democratic school practice," on students' civic outcomes. Under Project 540, students were allowed a voice in issues that pertained to their school and community and were encouraged to take action to address those issues. The author found that participation in school governance made a positive contribution to the development of adolescents' civic motivation and civic competencies. Comparative studies also reported the positive relationship of participation in student government to the development of adolescents' civic knowledge and skills and willingness to participation in politics (e.g., Hahn, 1998; Torney-Purta et al., 2001).

Advocates of democratic education have also acknowledged discussions about public issues as an important and effective way of encouraging positive political development. Democratic discussions allow participants to acquire knowledge about general democratic procedure, learn more about issues, make more valid and reasonable decisions, and develop interpersonal skills and democratic beliefs and attitudes (Hess, 2008b, 2009). In Wells and Dudash's (2007) study, college students obtained information in many different ways (e.g., Internet, news media), but political conversations with others was their most frequently cited source of political knowledge. Gastil and Xenos (2010) investigated the relationship between civic/political behaviors (e.g., voting and political talk) and civic/political attitudes (e.g., civic pride, defined as "confidence that one takes one's community and civic responsibilities seriously, as opposed to believing that one has no civic duties or fulfills them only out of reluctant obligation" (p. 323)). The researchers found that discussion of community and political issues has a positive relationship with internal efficacy and a reciprocal relationship with civic pride.

Lee et al.'s (2013) study affirms that classroom discussion has direct and indirect effects on adolescents' civic engagement beyond a school. The authors examined the relationships among classroom deliberation, news consumption, political discussion in the community, and civic/political participation⁵ using structural equation modeling to analyze data from a national panel survey of adolescents (ages 12-17) and their parents conducted in 2008. They found that classroom deliberation had positive relationships with face-to-face discussions (conversations about news and current events with friends), online political communication, news consumption (TV, newspaper, and online), and political participation although classroom deliberation did not have a direct relationship with civic participation. Face-to-face discussion was positively related to civic participation while online political communication was positively related to political participation. Vercellotti and Matto's (2010) quasi-experimental study revealed that classroom discussion and family discussion on the same political information complemented each other and were positively related to adolescents' political knowledge and internal political efficacy.

⁵ Lee et al. (2013) sub-conceptualized civic engagement into civic participation and political participation. The researchers measured civic participation by asking respondents "the frequency with which they engaged in charity work, volunteering, and community projects" and political participation by asking respondents whether or not they had participated in electoral campaign through "monetary contributions, event attendance, campaign volunteerism, and political displays" (p. 677)

In conclusion, civic engagement experience at and outside of school is associated with positive adolescent political development. The more civic engagement opportunities adolescents have, the stronger the civic competencies they can acquire. However, given that civic engagement experience in adolescence is a powerful predictor of civic engagement in adulthood (Flanagan & Wray-Lake, 2011), it is important to allow adolescents to gain quality civic engagement experience beyond providing diverse engagement opportunities.

Psychological motivation

It is widely acknowledged that a learner's motivation is a strong predictor of his/her educational outcomes (Nicholls, 1979). Likewise, psychological motivation plays a decisive role in an individual's active participation in politics (Flanagan & Wray-Lake, 2011; Verba et al., 1995). This dissertation focuses on political interest and political efficacy, which have received consistent attention as powerful factors determining political participation in the field of political science and civic education.

Since Dewey (1913) emphasized the importance of interest in academic tasks, studies in psychology and education have documented the relationship between interest and academic achievement (Eccles & Wigfield, 2002; Hidi & Renninger, 2006; Schiefele, 1991; Wigfield & Cambria, 2010). Interest as a motivational factor "refers to the psychological state of engaging or the predisposition to reengage with particular classes of objects, events, or ideas over time. Here, these classes of objects, events, or ideas are termed content" (Hidi & Renninger, 2006, p. 112). Interest is a content-specific factor that is generated through an individual's interactions with the environment surrounding him/her (Hidi & Harackiewicz, 2000; Renninger & Hidi, 2002; Schiefele, 2009). It is known that higher levels of academic interest are associated with greater engagement in academic activities and improved academic performance regardless of grade level, subject area, and national context (e.g., Harackiewicz, Durik, Barron, Linnenbrink-Garcia, & Tauer, 2008; Shin, Lee, & Kim, 2009; Van de gaer, Pustjens, Van Damme, & De Munter, 2009).

Similarly, interest in politics has a strong positive relationship with diverse forms of civic engagement such as voting, campaign support and political contributions, contacting elected and nonelected officials, political discussions, organization activity, and protest (Ulbig & Funk, 1999; Verba et al., 1995). Comparative research has shown that political interest is a significant predictor of adolescents' willingness to participate in various modes of political activism regardless of the national context (Schulz, 2005; Schulz et al., 2010).

People who have strong beliefs about their ability to perform a task are likely to more actively and persistently engage in the task, which in turn leads to higher levels of task accomplishment (Bandura, 1997; Hoy, Tarter, & Hoy, 2006; Liem, Lau, & Nie, 2008). In the same vein, people possessing a strong sense of political efficacy are highly likely to actively participate in politics. For this reason, political efficacy, along with political interest, has been considered an important motivational factor in political behavior research. Political efficacy is defined as the "the feeling that individual political action does have, or can have, an impact upon the political process, that is, that it is worthwhile to perform one's civic duties" (A. Campbell, Gurin, & Miller, 1954, p. 187). While some studies looked at different dimensions of political efficacy (e.g., political information efficacy, collective political efficacy), most political efficacy studies adopted two dimensions of political efficacy: internal efficacy, which refers to the belief that one has the necessary abilities to understand and participate in politics, and external efficacy, which refers to the belief that governmental institutions and authorities are responsive to citizens' demands (Converse, 1972; Niemi, Craig, & Mattei, 1991).

Since the concept of political efficacy was introduced to explain individuals' electoral behavior (Balch, 1974), many studies have proven that a positive relationship exists between electoral participation (e.g., voting and campaign involvement) and political efficacy (e.g., Abramson & Aldrich, 1982; Finkel, 1985; Pinkleton, Austin, & Fortman, 1998). Research has also found that political efficacy has a positive effect on diverse forms of political participation. For example, based on data gathered from 434 Israeli citizens, Cohen, Vigoda, and Samorly (2001) conducted structural equation modeling to examine the mediating effects of personal variables, including political efficacy, on the relationship between political efficacy and political participation. They divided various types of political participation into two categories: psychological involvement, which was defined as "one's level of personal involvement in social and political issues and knowledge of these issues," and active participation, which was defined as "activities directly aimed at influencing political officials and the political decision-making process" (A. Cohen et al., 2001, pp. 737-738). The authors found that not only did political efficacy have a direct positive effect on both categories of political participation, but it also played a mediating role in the relationship between socioeconomic status and political participation.

Although political efficacy has been addressed primarily as motivation for political participation, it is known that the relationship between political efficacy and political participation is reciprocal (Balch, 1974; Finkel, 1985). Using structural equation modeling, Finkel (1985) identified the positive influence of external and internal efficacy on voting and campaign participation. Finkel also found that both types of electoral participation strengthened external political efficacy. On the other hand, electoral participation did not affect the level of internal efficacy. Finkel asserted that episodic or peripheral participation in civic and political

issues (e.g., voting in presidential elections) is insufficient to promote strong internal political efficacy; instead, behaviors requiring a greater time commitment and more personal involvement (e.g., communal action) may be more effective. The reciprocal relationship between external political efficacy and political participation exemplifies why civic engagement experience during adolescence is important: Through civic engagement, students can develop participatory attitudes, which boost their political participation in adulthood. Moreover, for students' civic engagement experience to be more tightly connected to active participation in adulthood, citizenship education needs to provide constant, as opposed to sporadic, engagement opportunities related to students' lives.

Previous research has shown that internal political efficacy shaped by civic engagement experience in one domain can influence political participation in other domains. Based on the political spillover theory, Jian and Jeffres (2008) investigated the relationship among participation in the workplace, internal political efficacy, and political participation. They found that that there was a positive relationship between internal political efficacy and job autonomy, or "one's level of control in accomplishing one's own job on a daily basis" (Jian & Jeffres, 2008, p. 38), and that internal political efficacy mediated the relationship between job autonomy and three forms of political participation (community participation, voting, and political party and campaign). Pasek et al. (2008) demonstrated that the participation in school-based civic education programs had a positive effect on adolescents' internal political efficacy. Moreover, the increased internal efficacy strengthened adolescents' attentiveness to politics, which in turn increased their tendency to vote. Many studies have shown that political efficacy mediates the relationship between civic engagement experience at school and strong willingness to participate in politics and active political participation (e.g., Beaumont, 2011; Schulz & Fraillon, 2012; Schulz, 2005).

In addition to political interest and internal political efficacy, this dissertation study adopts collective political efficacy as the third motivational factor. While internal political efficacy indicates the beliefs an individual holds about his/her own capabilities, collective political efficacy refers to an individual's beliefs about efficaciousness of the collective action of a group (Beaumont, 2010). Specifically, collective political efficacy is defined as "a citizen's belief in the capabilities of the public as a collective actor to achieve social and political outcomes" (F. L. F. Lee, 2006, p. 299) and represents one's perception of the possibilities for creating change (Yeich & Levine, 1994). To measure collective political efficacy, researchers have developed and administered numerous items, such as "Dramatic change could occur in this country if people banded together and demanded change" (Yeich & Levine, 1994), "The collective action of (Hong Kong) people has a huge influence on public affairs" and "The collective action of (Hong Kong) people can improve society" (F. L. F. Lee, 2006), and "I think by working together, young people from my own ethnic group are able to influence decisions which are made by government" (Jugert, Eckstein, Noack, Kuhn, & Benbow, 2013). These items are all related to the personal perception of social efficaciousness of collective action of a group of people.

Empirical studies have evidenced the positive relationship between collective political efficacy and diverse forms of civic engagement. For example, Lee's (2006) study of 800 Hong Kong residents revealed that collective efficacy had a positive relationship with democratic political attitudes (support for democratization, willingness to participate in demonstrations for democratization) and political participation (participation in the protest in 2004) even after

controlling for internal and external political efficacy. On the other hand, there was not a significant relationship between collective efficacy and voting in the 2004 election (marginally significant) or between collective efficacy and respondents' attitudes towards political debate. In a study conducted on 755 German youth (native German, ethnic German Diaspora, and Turkish migrants), Jugert et al. (2013) examined the relationship between collective political efficacy and offline civic engagement, which was measured by seven items (e.g., volunteer work, participation in a demonstration, buy or boycott), and the relationship between collective political efficacy and online civic engagement, which was measured by five items (e.g., discussing societal or political contents online, participating in an online-based petition). Jugert et al. found that collective efficacy had a positive relationship with online civic engagement for all ethnic groups and had a positive relationship with offline engagement for German and Turkish youth, but not for resettler participants. These two studies suggest that the effect of collective efficacy in political development may differ among different forms of political participation and among adolescents from different backgrounds.

Contextual Factors and Political Development

Family

The family has been acknowledged as a prime socialization agent from the very early scholarship to the present (Jennings, 2007), and family variables have been adopted as focal and important control variables in social science research. In particular, family socioeconomic status (SES), which is represented by family income, parents' occupation and/or educational attainment, home literacy, or combinations of these factors, has been known as a factor with a decisive impact on political development, behavior, and relationships. SES is a determinant of one's present economic, political, cultural, and social capital and also a powerful predictor of one's

future capital (Bourdieu, 1984). Thus, family SES increases or limits the opportunities that a person has to develop the knowledge, skills, beliefs, attitudes, and behavior required for active and effective political participation. Research has demonstrated that people who are less educated, have less educated parents, have lower family income, and belong to lower social class are likely to have lower levels of civic competencies (e.g., lower civic knowledge and weaker political tolerance) and participation in civic and political events (A. Cohen et al., 2001; Hart et al., 2004; Hyman & Levine, 2007; Jennings et al., 2009; Verba et al., 1995). Low-SES students suffer unequal opportunities for civic learning and engagement both inside and outside of the school gate. Kahne and Middaugh's (2008) study of the relationships between U.S. adolescents' family SES and classroom-based civic learning opportunities disclosed that "Schools, rather than helping to equalize the capacity and commitments needed for democratic participation, appear to be exacerbating this inequality by providing more preparation for those who are already likely to attain a disproportionate amount of civic and political voice" (Kahne & Middaugh, 2008, p.18). In short, family SES is a key factor determining both the quantity and quality of civic learning and engagement opportunities that individual adolescents experience.

Along with SES, parents are also one of the most important factors in human development—in particular, during childhood and adolescence—although their influence tapers off as the child matures. Parental political attributes are intentionally and unintentionally transmitted to their offspring to a greater or less degree (Jennings et al., 2009). Using two sets of National Household Education Survey (NHES) data, Hart et al. (2004) found that parents' civic knowledge, involvement in voluntary service, and political tolerance are positively related to adolescents' knowledge, volunteerism, and tolerance. McLellan and Youniss's (2003) study demonstrated that high school students whose parents participated in voluntary service were
more likely to volunteer than those whose parents did not. Jennings et al. (2009) also revealed that parental political attributes such as party identification, political trust, and racial attitudes were passed on to their children. In particular, "If parents are politically engaged and frequently discuss politics with the child, transmission rates rise substantially, particularly on topics of general political significance and salience" (Jennings et al., 2009, p. 795). For this reason, this dissertation study adopts parental political interest and political discussion with parents⁶ as important factors in adolescent political development. Comparative research shows that these parental factors are significantly related to multiple civic outcomes across diverse national contexts (Schulz & Fraillon, 2012; Schulz, 2005).

Peer effect

Peer effects on youth development have long been a topic of interest among educators as well as sociologists. As a child grows and spends more time in school, the influence of school and classmates increases while the influence of parents begins to wane. In school, a peer effect "occurs when the outcomes...of an individual student are influenced by the behaviors, attitudes, or other characteristics of other students with whom they interact during school activities" (Harris, 2010). Peer behavior is likely to be contagious and consequently to significantly influence adolescents' socialization (Jencks & Mayer, 1990). The characteristics of peer groups, such as shared norms, tacit codes, and collective perceptions and culture, affect political development. Communication with peers and observation of peers' behaviors are influential in the development of political qualities during adolescence (Torney-Purta et al., 2010). As Levine (2007) wrote, "When institutions bring together many young people who are civically engaged,

⁶ In this study, *political discussion with parents* is not included as a family contextual factor; rather, it, with *political discussions with friends*, constitutes a civic engagement experience factor: *political discussion outside of school*.

the youth reinforce one another's civic habits and skills. When institutions concentrate young people who are not interested in civic life, however, the 'peer effects' are negative' (p. 103).

However, "Even if the average (that is, the mean or modal) effects [of a peer group] are positive, there are some youth for whom peer networks are catastrophically bad" (Levine, 2007, p. 75). It is often the case that "Students who are low in the perceived social hierarchy choose to disassociate from the dominant group and form alternative peer groups that reject the dominant group's preferences and behaviors" (Harris, 2010, p.1170). Moreover, the characteristics of the peer groups to which adolescents can belong are limited by tacit and unintended school segregation. Therefore, beneficial peer interactions may not be distributed equally among all adolescents within a peer group or between various peer groups. It is likely that the opportunities for beneficial peer interactions are disproportionately distributed along the lines of race/ethnicity and income (Harris, 2010). Evidence suggests that adolescent development is influenced by the characteristics of peer interactions.

Likewise, peers can affect individual students' political development. The effect of peers on adolescent political development has been identified in civic engagement scholarship. For example, using data from 500 Australian adolescents, Da Silva, Sanson, Smart, and Toumbourou (2004) examined the relationship between adolescents' involvement in volunteer work ('civic responsibility' in their terminology) and political activities ('political responsibility' in their terminology) and factors in multiple contexts (family, peer, school, and community). The authors found that adolescents' involvement in volunteer work and political activities was positively related both to peers' encouragement to participate in volunteer work and political activities and to peers' participation in volunteer work and political activities. This result indicates that in the political development process, peers not only act as part of a recruitment network that invites adolescents to civic engagement, but also serve as reference models for one another. Similarly, U.S. adolescents interacting with peers who value knowledge about public issues are likely to read newspapers regularly and participate in face-to-face discussion (N. J. Lee et al., 2013), and high school students whose closest friends were involved in volunteer service were more likely to volunteer than those whose friends were not (McLellan & Youniss, 2003).

Some studies have revealed the effect of shared norms among school/classmates on civic attitudes. Campbell (2006) found that "strong civic norms in an adolescent's high school lead to a greater likelihood of voting well over a decade following high school" (p. 8). Gniewosz and Noack's (2008) study of 1,312 German adolescents revealed a positive relationship between individual negative attitude toward foreigners and classroom level intolerance. Interestingly, Kahne and Sporte (2008) found that peer support for academic achievement had a positive relationship with commitments to civic participation (or willingness to participate in civic/community affairs) among high school students in Chicago. A possible explanation is that helping classmates study may increase students' sense of solidarity and commitment to fellow students, which is in turn transferred to social responsibility and civic commitment.

Given that peer groups overlap considerably with school/classmates in adolescence, peer groups and schools constitute an important mesosystem that influences adolescents' political development (Bronfenbrenner, 1994). For this reason, the current study treated peer effects as a school-level context.

School

As discussed, civic engagement experience at school is important for positive political development. In order for adolescents to acquire meaningful engagement experience, a school should not only provide them with diverse civic engagement opportunities but also create a

democratic climate under which students are able to voice their opinions and participate in school/class activities without intimidation and undue pressure. In this study, I adopted openness in classroom/school discussions, responsiveness to students' opinions, and democratic student-teacher relationships as central components of democratic school context.

Democratic discussion is the embodiment of sound democracy and an effective instructional means to develop democratic knowledge, beliefs, and attitudes (Hess, 2002, 2008a; Parker, 2008). However, in spite of guaranteed opportunities to express themselves, people often conceal their opinions—in particular, on controversial issues—due to personal disposition, concern for relationships with others, perceived public climate, and fear of alienation (Hayes, Glynn, & Shanahan, 2005; Santee & Maslach, 1982; Scheufele & Eveland, 2001; Ulbig & Funk, 1999; Wyatt, Katz, Levinsohn, & Al-Haj, 1996); the same holds true in a school context. Students' active participation in classroom discussion is fairly dependent on whether students believe that their teacher and fellow students respect their opinions and that diverse perspectives are welcomed during discussion (Hahn, 1998). An open climate for discussion is a crucial element of democratic school climate because it affects both classroom discussion and diverse school activities that involve the exchange of opinions.

In a study of 742 college students, Hayes et al. (2005) examined how public opinion climate (hostile vs. friendly public opinion) influences an individual's willingness to voice his/her honest opinion ("How likely would you be to express your true opinion to the group").They found that willingness to self-censor, where self-censorship is defined as the "withholding of one's true opinion from an audience perceived to disagree with that opinion" (Hayes et al., 2005, p. 444), had a negative relationship with respondents' willingness to express their opinion. When a respondent perceived that the public opinion on a topic was consistent with his/hers (friendly climate), he/she tended to show higher willingness to express his/her true opinion. In a hostile climate, the negative effect of willingness to self-censor on opinion expression was greater than in a friendly climate. Hayes, Scheufele, and Huge's (2006) study of 781 U.S. adults showed that willingness to self-censor had a negative relationship with political participation (e.g., political meeting, political campaign, etc.) after controlling for numerous political development factors such as political efficacy, political interest, attention to political news, and political discussion frequency. In short, self-censorship is influenced by the degree of contentiousness of a discussion topic and the degree of public hostility or amity toward one's opinion.

Using data from the Citizen Participation Study (CPS), Ulbig and Funk (1999) investigated the relationships between diverse forms of political activism and respondent's avoidance of contentious political discussion (or conflict aversion). Conflict aversion had negative relationships with protest, campaign support (working and donating), and discussion, but had no significant relationship with voting and contacting elected and nonelected officials. This result suggests that people tend to hide their opinions in political activities that inevitably involve some degree of conflict (i.e., protest, campaign, discussion). By contrast, people do not tend to self-censor in activities that do not require the participant to disclose himself/herself to the public (i.e. voting, contacting officials). Interestingly, Wyatt et al.'s (1996) comparative study of three ethnic groups—Americans, Israeli Jews, and Israeli Arabs—revealed that individuals in these groups chose to self-censor not out of fear of rejection or disapproval, but rather out of concern for others' feelings although the levels of expression inhibition differed across the three cultures. Therefore, even people standing up for the majority opinion may selfcensor to avoid hurting others in conflict situations. These studies on self-expression inhibition imply that successful classroom discussions require a discussion environment in which students are able to disclose their opinions without intrapersonal and interpersonal pressure. Hess and Posselt (2002) found that an individual's perception of his/her peers and level of comfort with public speaking are important factors related to his/her active participation in controversial issue discussion. An open school/classroom climate for discussion allows adolescents to be exposed to both minority and majority perspectives on issues, learn how to contribute to democratic deliberation, and acquire civic competence in collaboration and conflict resolution.

As discussed earlier, adult scaffolding is an essential element in political socialization. Thus, it is fairly likely that the relationship between students and teachers has a great impact on students' political development. In fact, aside from parents, teachers are probably the authority figures that adolescents face most frequently.

Teachers are adult authority figures who wield power over young people's lives. Thus, they play a critical role in educating children about democratic principles and about trust in the democratic process of decision making...[T]he proximate experiences young people have with teachers...are the bases for their beliefs about the responsiveness of the political system to people "like them". (Flanagan et al., 2010, pp. 312-313)

What teachers say and how they react to students' requests and behaviors are directly connected to students' civic engagement experiences at school. For example, it seems that when teachers are outspoken in their opinion on issues, they may obstruct their students' self-expression and deprive their students of the opportunity to be heard in classroom discussions. Teachers are most responsible for democratic climate in a given school or classroom. Accordingly, through his/her experience with teachers during adolescence an individual might develop images and beliefs

about social/political systems and authorities, including public officials and government offices. Research shows when teachers refrain from disclosing their opinions, students have a greater responsibility to participate in class discussions (Hess & McAvoy, 2007).

Wentzel's (1997) study of the relationship between teachers' pedagogical caring and adolescents' motivation to achieve positive social and academic outcomes demonstrated the significance of democratic (and inclusive) student-teacher relations for positive political development. She asked 375 eighth-grade students about the level of social and academic caring they perceived from teachers (e.g., "My teacher really cares about me.", "My teacher cares about how much I learn."), prosocial goal pursuit (e.g., "How often do you try to share what you've learned with your classmates?"), social responsibility goal pursuit (e.g., "How often do you try to do what your teacher asks you to do?"), and academic effort (e.g., "How often do you really pay attention during classes?"). Multiple regressions revealed that students' perceptions of caring from their teacher had positive relationships with prosocial goal pursuit, social responsibility goal pursuit, and academic effort. Similarly, Flanagan, Cumsille, Gill, and Gallay (2007) identified significant relationships between positive perceptions of teacher-student relations and positive civic beliefs among adolescents in the U.S. Employing structural equation modeling, the authors found that adolescents who had a stronger feeling that their teachers treated them fairly and with respect were more likely to respond that America was a just society and to have stronger civic commitments (e.g., patriotism, building tolerance, helping people in need).

In addition to openness in classroom discussion and democratic student-teacher relationships, responsiveness to students' voices is also a significant democratic school context. In fact, the cynicism and skepticism of the underrepresented toward political participation particularly, conventional forms of political activism—can often be attributed to experiences of political inefficaciousness and governmental unresponsiveness (C. Cohen, 2006; Middaugh & Kahne, 2008). Positive feedback on one's political behaviors can motivate and reinforce his/her active civic engagement. As an example, Clarke and Acock (1989) examined the effects of voting, campaign activity, and the outcomes of the 1984 national elections on political efficacy. The authors found that while neither voting nor campaign activity affected political efficacy, voting for winning candidates was positively associated with both internal and external political efficacy. This result implies that positive and responsive participatory experience is more effective in positive political development than simply providing participation opportunities.

Along with democratic school climate, the average socioeconomic status of students in a school (school SES) can affect adolescents' political development as well. School SES is closely related to the resources that a school can utilize for student learning; therefore, it is a crucial factor in the quantity and quality of students' educational experience. Numerous studies have documented the effect of school SES on educational outcomes and adolescent development (e.g., Borman & Dowling, 2010; Konstantopoulos & Borman, 2011; Ripski & Gregory, 2009). In citizenship education scholarship, school SES has been investigated as an important political development factor (e.g., Torney-Purta et al., 2007). In particular, school SES is often discussed as reflecting the inequality in civic learning opportunities among students from different backgrounds. For example, drawing on U.S. data from the IEA Civic Education Study, Kahne and Middaugh (2008) examined the relationships between school SES and students' civic learning. Compared to those who attended schools with low mean SES, students who attended high mean SES schools were more likely to be presented with a greater number of high-quality civic learning opportunities, such as civic learning content, classroom discussions, and voluntary service.

Local community/neighborhood

Scholarship has demonstrated that local community (neighborhood) context has a significant effect on child/youth development such as academic readiness and achievement, behavioral and emotional problems, sexuality, and childbearing (Leventhal & Brooks-Gunn, 2000). Members of a local community share economic, social, and cultural contexts to a greater or lesser extent. Hence, adolescents are directly and indirectly influenced by the neighborhood context in which they are situated throughout the development process. The mechanisms through which the local community context may influence adolescent development can be classified into institutional resources (e.g., the availability and quality of learning and employment opportunities present in the community), *relationships* (e.g., support networks available to parents), and norms/collective efficacy, which refers to "The extent to which community-level formal and informal institutions exist to supervise and monitor the behavior of residents, particularly youths' activities (deviant and antisocial peer-group behavior) and the presence of physical risk (violence and victimization and harmful substances) to residents, especially children and youth" (Leventhal & Brooks-Gunn, 2000, p. 322). Adolescents in marginalized communities are likely to experience disadvantages in each of these categories: they lack "a robust infrastructure of non-governmental organizations capable of mounting, administering and maintaining volunteer programs...[and] adequate numbers of adults who can work with children" (Hyman & Levine, 2007, p. 15). Moreover, adolescents in these communities suffer low levels of safety and high levels of crime (Putnam, 2000).

Research shows that poor communities are likely to be affected by more serious neighborhood disorder (e.g., abandoned buildings, gang activity). Adolescents in communities with high levels of neighborhood disorder are more likely to be influenced by peer deviance and, therefore, are more likely to engage in individual delinquent behaviors (Chung & Steinberg, 2006). Students' perceptions of neighborhood safety have significant relationships with greater trouble avoidance and higher grades (Bowen, Rose, Powers, & Glennie, 2008). Adolescents in communities with higher levels of social capital may enjoy better education, greater welfare, and more a democratic neighborhood climate (Putnam, 2000). In short, community context delimits the frequency, diversity, and quality of the experiences adolescents have in their communities. For this reason, this dissertation takes into account the availability of cultural resources in the local community and social tension in the community. These factors represent institutional resources and community norms, respectively.

Comparative Studies on Civic Engagement

This dissertation study was inspired by previous comparative research on civic engagement. As mentioned earlier, Norris (2002) provided a useful analytic framework for comparative research on political development. Based on the notion that multilevel contexts are involved in an individual's political behavior (see Norris, 2002, p. 20), she conducted an extensive study on cross-national patterns of diverse modes of political activism (electoral turnout, party membership, social capital and mobilizing agencies, and protest politics). Using data on 193 independent nation-states from multiple sources, Norris mapped trends in each mode of political activism across countries; analyzed the difference in political activism by various indicators such as gender, age, income, education, and region; and examined the effects of macro-level (societal modernization and the state structure), meso-level (mobilizing agencies), and micro-level factors (personal resources and motivation) on political activism. She identified the influence of macro-level factors on diverse forms of political participation. This dissertation capitalized on Norris's (2002) merits and takes into account the hierarchical nature of political development (micro- and macro-level political development).

Inspired by Norris's (2002) study on adults' political behavior, Amnå and Zetterberg (2010) built four hypotheses to examine youth political development in different national contexts: (1) the modernization hypothesis, which posits a positive relationship between national socioeconomic development and youth participation; 2) the public institutional hypothesis, which posits a positive relationship between social and political institutions; 3) the social capital hypothesis, which posits a positive relationship between social capital and youth political participation; and 4) the civic volunteerism hypothesis, which posits a positive relationship between resources, motivation, and recruitment options and adolescent political participation. Amnå and Zetterberg's study using data from the IEA Civic Education Study and the European Social Survey supported the public institutional hypothesis, the social capital hypothesis, and the civic volunteerism hypothesis, but did not support the modernization hypothesis. The relationships between public institutions (schools), social capital, and volunteerism factors and youth political participation varied across different civic outcomes. In other words, political development relationships differed according to the mode of political activism. Although this dissertation study closely parallels the comparative research schema of Amnå and Zetterberg's study, I analyzed data from a more recent international study in which more diverse countries participated. Moreover, my study accounted for the multilevel structure of the data.

Hahn's (1998) comparative study on citizenship education also influenced the analytic framework of the current study. She analyzed far-reaching quantitative and qualitative data, ranging from student data to national context information, to explore adolescents' social studies class experience and civic outcomes (e.g., civic tolerance, political trust, political efficacy,

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political interest, willingness to participate in politics) in five countries (England, Denmark, Germany, the Netherlands, and the United States). Hahn found the differences and similarities in adolescents' civic learning experience and political development across these countries, each of which possesses the idiosyncratic macro contexts, such as political culture, educational system, and approaches to civic education. Although, unlike Hahn, I did not apply a qualitative method, this dissertation study also tried to find cross-national similarities and differences in political development relationships in consideration of context-specificity on the country level. To do so, I separately analyzed data for each country and then compared the results across 34 countries; I opted not to analyze pooled data because this method would have obscured the idiosyncratic features of each country.

While a growing body of research addresses comparative and international citizenship education, the IEA studies seem very fruitful and provocative of the recent studies in the field. Since the publication of the IEA Civic Education Study (CIVED) of 28 countries in 1999, (Torney-Purta et al., 2001), a plethora of secondary studies using CIVED data have been published. A decade after CIVED, the International Civic and Citizenship Education Study 2009 (ICCS), the largest international study on civic and citizenship education, was conducted in 38 countries (Schulz et al., 2010) (I will provide more details on this study in the next chapter). As in the case of CIVED, many secondary studies have been implemented using ICCS data. Some of them identified cross-national patterns in adolescents' political attitudes and expected political participation (e.g., Schulz & Fraillon, 2012) and the influence of national context on civic outcome (e.g., Hooghe & Quintelier, 2011). However, not enough studies have simultaneously taken into account multiple contexts, multilevel data structures, and distinct national contexts. For this study, I analyzed ICCS data in order to fill the gaps in our understanding of adolescent political development by considering the multiple, hierarchically structured contexts surrounding adolescents.

CHAPTER 3

METHODOLOGY

This dissertation examines the relationship between personal and contextual factors and adolescents' (8th graders on average) willingness to participate in politics (expected electoral and informal political participation) across 34 countries. To this end, data were drawn from the International Civic and Citizenship Education Study 2009 (ICCS) conducted by the International Association for the Evaluation of Educational Achievement (IEA). This chapter begins with an overview of ICCS, and then I describe the analytic data, measures, and analytic strategy of this dissertation study.

IEA International Civic and Citizenship Education Study⁷

Background

ICCS built on the Civic Education Study (CIVED), which was the second IEA international civic education study carried out in 28 countries during the time when newly emerged democratic regimes were striving to stabilize their political and economic systems after the worldwide events of the late 1980s and early 1990s (Torney-Purta et al., 2001). In the decade that passed between CIVED and ICCS, the world had seen such changes as the acceleration of globalization, the elevation of external threats to civic societies, the increasing influence of nongovernmental groups as alternative vehicles for political participation, and so on. ICCS was developed based on CIVED to reflect emerging concerns about the need to prepare adolescents to become engaged democratic citizens in a 21st century world marked by considerable changes

⁷ This section is based on several ICCS reports. ICCS materials, including test items, questionnaires, reports, and the user guide, are open to the public and can be retrieved from the IEA Study Data Repository (<u>http://rms.iea-dpc.org/</u>).

to civic society and international relations. ICCS was conducted based on six key research topics: variations in adolescents' understanding of and competence in civics and citizenship; changes in civic knowledge and engagement since CIVED; adolescents' political values, attitudes, and behaviors; adolescents' perceptions of threats to civil society; the influence of schools and educational systems on adolescents' civic development; and the effects of adolescents' personal and social background on their civic development (Schulz et al., 2008).

Populations and Sampling Design

38 countries⁸ participated in ICCS from Asia (Chinese Taipei, Hong Kong, Indonesia, the Republic of Korea, and Thailand), Australasia (New Zealand), Europe (Austria, Belgium (Flemish), Bulgaria, Cyprus, the Czech Republic, Denmark, England, Estonia, Finland, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, the Russian Federation, the Slovak Republic, Slovenia, Spain, Sweden, and Switzerland), and Latin America (Chile, Colombia, the Dominican Republic, Guatemala, Mexico, and Paraguay). The ICCS target population was students enrolled in the eighth year of formal schooling, counting from the first year of primary school as defined by UNESCO's International Standard Classification of Education (ISCED Level 1). In general, the students were 8th graders (approximately 14 years of age); however, for countries in which the average age of students in 8th grade was below 13.5 years, 9th grade became the target population. The ICCS teacher survey was administered to all teachers who had been teaching regular school subjects to the target grade students in each country during the testing period since the beginning of the school year. School data and national context data were also collected.

⁸ A few ICCS-participating countries, such as Hong Kong and England, are technically not nation states. However, ICCS designated them as "countries" in their report given that they have distinct educational systems within their countries. This dissertation follows this nomenclature.

ICCS implemented a rigorous sampling procedure to obtain a nationally representative sample in each country: a two-stage stratified cluster sampling design (Schulz, Ainley, & Fraillon, 2011). First, in each country, schools were stratified based on a common characteristic (e.g., geographic region, urbanization level, and school type) in order to increase the efficiency of the sample design. Next, schools were sampled using the probability proportional to size (PPS) procedure, a sampling technique under which the probability of selecting a sampling unit is proportional to the size of the ultimate unit. The number of students enrolled in the target grade or adjacent grade in a school was utilized for the PPS procedure, which gives larger schools a greater probability of selection and smaller schools a lower probability of selection. The final step was within-school sampling. In general, one classroom of the target grade from each sampled school was selected using systematic random sampling—a method that uses a random starting point and a predetermined fixed periodic interval; however, in some countries, more classrooms per school were selected to satisfy the student sample size requirement. All students in the selected class(es) were surveyed.

Participating countries were asked to achieve a minimum student sample size of 3,000 in 150 or more schools. In cases of countries with fewer than 150 schools (e.g., Liechtenstein and Malta), all schools were included in the survey. With regard to the teacher sample size, ICCS required 15 teachers per school. If a school had fewer than 20 teachers, all of the teachers were asked to participate in the teacher survey. In some countries, the actual sample sizes were smaller than the intended sample size. However, as long as a country met (or nearly met) the ICCS standards for overall participation rates (see Schulz et al., 2011), the sample obtained from the country was not regarded as problematic in generalizing from the sample data to population characteristics. Table 3-1 provides the school, student, and teacher sample sizes of each country.

Table 3-1

Country	Student Survey		Teacher Survey	
	Participating Schools	Participating Students	Participating Schools	Participating Teachers
Austria	135	3,385	75	999
Belgium (Flemish)	151	2,968	135	1,630
Bulgaria	158	3,257	158	1,850
Chile	177	5,192	177	1,756
Chinese Taipei	150	5,167	143	2,367
Colombia	196	6,204	188	2,010
Cyprus	68	3,194	66	906
Czech Republic	144	4,630	147	1,599
Denmark	193	4,508	113	928
Dominican Republic	145	4,589	145	778
England	124	2,916	118	1,505
Estonia	140	2,743	133	1,863
Finland	176	3,307	174	2,295
Greece	153	3,153	98	1,271
Guatemala	145	4,002	145	1,138
Hong Kong SAR	76	2,902	101	1,446
Indonesia	142	5,068	141	2,097
Ireland	144	3,355	137	1,861
Italy	172	3,366	168	3,023
Korea, Republic of	150	5,254	148	2,340
Latvia	150	2,761	146	2,077
Liechtenstein	9	357	9	115
Lithuania	199	3,902	199	2,774
Luxembourg	31	4,852	24	290
Malta	55	2,143	55	900
Mexico	215	6,576	202	1,844
Netherlands	67	1,964	22	236
New Zealand	146	3,979	115	1,347
Norway	129	3,013	73	492
Paraguay	149	3,399	139	1,176
Poland	150	3,249	150	2,081
Russian Federation	210	4,295	210	3,081
Slovak Republic	138	2,970	139	1,984
Slovenia	163	3,070	164	2,755
Spain	148	3,309	148	2,017
Sweden	166	3,464	156	1,942
Switzerland	156	2,924	144	1,571
Thailand	149	5,263	149	1,766
Total	5,369	140,650	4,954	62,110

School, Student, and Teacher Sample Sizes of ICCS Countries

Note. This table is an edited version of the original. From *ICCS 2009 Technical Report* (p. 64), by W. Schulz, J. Ainley, & J. Fraillon (Eds.), 2011, Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

In order to derive more accurate estimates about the populations from the ICCS samples, ICCS created an array of weighting variables at different sampling levels reflecting the different selection probabilities in both the school sampling stage and the within-school sampling stage (Schulz et al., 2011). ICCS also provided the guidelines for the use of weighting variable(s) corresponding to analytic data and analysis methods (Brese, Jung, Mirazchiyski, Schulz, & Zuehlke, 2011a).

Instrument and Implementation

Several instruments were developed and implemented as a part of ICCS. First, a student civic knowledge assessment was designed to measure students' civic knowledge, analysis, and reasoning. This assessment included four content domains: civic society and systems, civic principles, civic participation, and civic identities. Test items were constructed over 18 months through the following sequential stages: an item development workshop, preliminary item development, internal review (content validity, clarity and context, question format, appropriateness for target students, scoring strategy), refinement, external review, a pilot test, and a field trial test. The civic knowledge assessment consisted of 80 items. Most of them were presented in a multiple-choice format with four response options; the others were constructed-response items requiring adolescents to write between one and three sentences. 79 out of 80 items were used to form a scale to measure each student's civic knowledge. The released items are provided in *ICCS 2009 user guide for the international database: Supplement 5* (Brese, Jung, Mirazchiyski, Schulz, & Zuehlke, 2011c).

Next, four international questionnaires were developed by the ICCS team to collect data on students, teachers, schools, and national context. The student questionnaire was created to collect students' personal information (demographic characteristics, beliefs, attitudes, previous behaviors, and behavioral intentions) and contextual information (particularly, family and school) affecting the student sample. The teacher questionnaire was developed to collect information about school context, approaches to civic and citizenship education at school, the teaching of civic and citizenship education, and personal information about each teacher. The school questionnaire was designed to collect data on school context, local community context, and civic and citizenship education at school. The national context questionnaire included a wide range of issues related to civic and citizenship education, such as education systems, education policy, approaches to civic and citizenship education, school curriculum, and assessment. In addition to the international civic knowledge test and the four questionnaires, the regional questionnaire—the Asian, European, or Latin American regional instrument—was administered to students in 35 of the 38 ICCS participating countries (three countries did not provide the regional questionnaire to their students). International and national experts in each region participated in the rigorous processes of development, review, discussion, piloting, and finalizing the questionnaires. Copies of the released questionnaires are provided in the ICCS 2009 user guide for the international database: Supplement 1 (Brese, Jung, Mirazchiyski, Schulz, & Zuehlke, 2011b).

The ICCS instruments were translated and adapted for each participating country via the process of national adaptation, translation verification, and layout verification (Schulz et al., 2011). National research coordinators appointed from each country collaborated with international staff and national experts, represented the country at the international level, and oversaw the ICCS implementation in each country. All national centers and national research coordinators in the ICCS-participating countries received guidelines on the internationally standardized survey operations procedure adapted from the IEA's Progress in International

Ready Literacy Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS). The civic knowledge test and survey were implemented between October and December 2008 in countries in the Southern Hemisphere and between February and May 2009 in countries in the Northern Hemisphere.

Current Study

Analytic Data

In this study, I analyzed data from 34 of the 38 ICCS-participating countries. Hong Kong, Liechtenstein, Luxembourg, and the Netherlands were excluded from this study. The data from Liechtenstein and Luxembourg are not appropriate for the multilevel analysis (hierarchical linear modeling) of this study due to the small numbers of schools (nine schools in the data for Liechtenstein and thirty-one in the data for Luxembourg).⁹ Hong Kong and the Netherlands failed to meet the participation rate requirement of the student survey (Schulz et al., 2011); thus, the data may not represent the target population of these countries.

All variables of this study are derived from the student and school data of each country. I chose to exclude the teacher survey data because 11 countries failed to meet the participation rate requirement and, therefore, the teacher sample might not be representative of a target teacher population in these countries. Additionally, ICCS administered the teacher survey to all teachers, including those who did not teach subjects related to civic and citizenship education. Hence, it is possible that teachers' collective perceptions of civic and citizenship education at a school do not clearly reflect the civic and citizenship education implemented in the school.

⁹ ICCS also cautioned researchers that multilevel modeling is not an appropriate analytic method for the data from Liechtenstein and Luxembourg (Brese et al., 2011a).

As aforementioned, ICCS provided a set of weighting variables for student, teacher, and school sample data. Applying appropriate weights ensures the representativeness of a sample, which allows researchers to generalize the findings to the national population. In order to obtain appropriate weights for multilevel analyses, I manually calculated the both student and school sample weights for each country following the ICCS guide (see Brese et al., 2011a, pp. 31-32). These weights were normalized by the multilevel analysis statistical software so that the sum of the weights is equal to the sample size.

Measures

All variables of the current study were chosen from ICCS datasets. To produce the crossnationally equivalent, reliable, and valid scales, the ICCS team utilized advanced statistical techniques, including confirmatory factor analysis (CFA)¹⁰ and item response theory (IRT)¹¹ modeling with weighted likelihood estimates (WLE) (see Warm, 1989). The detailed scaling procedures for ICCS civic knowledge test and questionnaire items are described in the *ICCS 2009 technical report* (Schulz et al., 2011).

Outcome variables

As discussed earlier, diverse modes of political activism need to be examined to fully understand in the political development process. I expected that the relationship between political development factors and adolescents' willingness to participate in politics would be

¹⁰ CFA is a statistical method used to examine the measurement structure underlying a set of test items (Kaplan, 2009). CFA is used to examine "the relationship between observed measures or *indicators* (e.g., test items, test scores, behavioral observation ratings) and latent variables or *factors*...CFA is almost always used during the process of scale development...CFA is an indispensable analytic tool for construct validation in the social and behavioral sciences" (Brown, 2006, pp. 1-2; italics in original).

¹¹ IRT is a statistical model of the relationship between the abilities measured by the test items and examinees' item response (DeMars, 2010). In IRT models, more difficult and discriminating items are more heavily weighted. For this reason, IRT scores are more reliable than simple scores which represent only the number of correct answers. IRT models have been used to construct more appropriate test items and instruments for test takers at specific developmental and/or cognitive levels.

different for different modes of political activism. For this reason, I adopted two different facets of political participation as outcome variables in this study. The first one is *students' expected adult electoral participation* (or expected electoral participation) which indicates adolescents' expectation that they will participate (or adolescents' willingness to participate) in electoral activities in their adulthood. Expected electoral participation was measured by three items:

- 1. Voting in local elections when you are an adult;
- 2. Voting in national elections when you are an adult;
- Getting information about candidates before voting in an election when you are an adult.

For each item, responses were given on a 4-point Likert-type scale (1 = I will certainly to this; 2 = I will probably do this; 3 = I will probably not do this; 4 = I will certainly not do this). The reliabilities of the scale (Cronbach's alpha) ranged from .69 (Indonesia) to .90 (Chile) across the 34 countries. Individual students' scores on expected electoral participation were obtained using IRT with WLE (hereafter, IRT WLE scores). The IRT WLE scores were transformed to "an international metric with an ICCS average of 50 and a standard deviation of 10 for equally weighted datasets from the 36 countries that met sample participation requirements [except for Liechtenstein and Luxembourg]" (Schulz et al., 2011, p. 162). A higher score on this variable indicates a greater expectation of participation (or stronger willingness to participate) in electoral politics as adults.

The second outcome variable is *students' expected future informal political participation* (or expected informal participation) which refers to adolescents' expectation of participation (or adolescents' willingness to participate) in less system-driven, more active and voluntary types of

political activity during the next few years. Four items measured adolescents' expected informal political participation:

- 1. Talking to others about your views on political and social issues;
- 2. Writing to a newspaper about political and social issues;
- 3. Contributing to an online discussion forum about social and political issues;
- 4. Joining an organization for a political or social cause.

Students answered these items based on a 4-point Likert-type scale (1 = I will certainly to this to 4 = I will certainly not do this). The reliabilities of this scale ranged from .73 (Greece) to .85 (Chile, Chinese Taipei, England, and Norway). IRT WLE scores on this scale were calculated and transformed to an international metric with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries. A greater expectation of participation (or a stronger willingness to participate) in informal types of political activity in the near future is indicated by a higher score on this outcome variable.

Student-level predictors

Gender and immigrant background. Gender and *immigrant background* were included as student demographic variables. Gender is represented as a dichotomous variable, where 0 = male and 1 = female. Students were asked to report their birth country as well as their parents' birth country/countries. ICCS created a three-category variable to describe student nationality: native students, first-generation immigrant students (a student's parent(s) were born in another country), and non-native students (both a student and his/her parent(s) were born in another country). In many countries, the number of either first-generation immigrant students or non-native students is too small to represent the population of its corresponding category. Therefore, I combined the two categories and recoded the ICCS immigrant variable into a dichotomous indicator, where 0 =

native students and 1 = immigrant students. Immigrant students comprise less than 3% of the student sample in 16 countries: Bulgaria, Chile, Chinese Taipei, Colombia, the Czech Republic, the Dominican Republic, Finland, Guatemala, Indonesia, the Republic of Korea, Malta, Mexico, Paraguay, Poland, the Slovak Republic, and Thailand. For these countries, the results of the relationship between outcome variables and immigrant background are neither reported nor interpreted because the number of immigrant students is too small to generalize the result.

Civic knowledge. IRT modeling was used to create the student civic knowledge scale. The ICCS team assessed goodness-of-fit for each civic knowledge test item based on diverse item statistics such as the item-total correlations of correct responses and the weighted meansquare statistics (residual-based item fit statistics). To evaluate the quality of ICCS test items, the ICCS team also assessed differential item functioning (DIF) by gender, or the differential probability for students to provide correct answers to test items based on group membership (in this case, student gender) rather than based on individual ability. No significant issues related to the gender DIF were found for the test items. To obtain cross-nationally equivalent test items, ICCS analyzed item-by-country interaction to determine whether or not students from different countries possessing the same ability demonstrate different likelihoods of selecting the correct answer to each question. One item had relatively poor item discrimination and large item-bycountry interaction; therefore, it was excluded from the final scaling. Consequently, the student civic knowledge scale was derived from 79 of the original 80 cognitive assessment items. The overall reliability (Cronbach's alpha) of the test was .84.

ICCS provides both international and national civic knowledge scale scores: 1) the international scale (five sets of IRT plausible values) with a mean of 500 and a standard deviation of 100 for equally weighted datasets from the 36 countries that met sample

participation requirements and 2) the national scale (IRT WLE scores) with a mean of 150 and a standard deviation of 10 for each country. For this study, I used the national civic knowledge scale scores for two reasons. First, as illustrated earlier, this study examined the significance and direction of the effect of political development factors on expected political participation in each country (i.e., a positive, a negative, or a non-significant relationship) and then compared the significance and direction across countries, but I did not set out to compare the magnitude of the effect of civic knowledge (i.e., coefficient) among countries. Therefore, it was not necessary to use the international civic knowledge scale. The second reason is a practical concern. To make the five sets of international scales (plausible values) functional as independent variables for my study, further data manipulation is required. Since the international civic knowledge scale is not necessary for the purposes of the current study, additional data manipulation is superfluous.

Previous civic engagement experience. In this study, I addressed three aspects of adolescents' civic engagement experience as predictors. The first aspect, *students' civic participation at school*, was measured by six items:

- Voluntary participation in school-based music or drama activities outside of regular lessons;
- 2. Active participation in a debate;
- 3. Voting for class representative or school parliament;
- 4. Taking part in decision-making about how the school is run;
- 5. Taking part in discussions at a student assembly;
- 6. Becoming a candidate for class representative or school parliament.

ICCS calculated IRT WLE scores on this scale with an ICCS average of 50 and a standard deviation of 10 for equally weighted datasets from the 36 countries. For each item, three choices

were given to students (1 = Yes, I have done this within the last twelve months; 2 = Yes, I have done this but more than a year ago; 3 = No, I have never done this). Higher scores on the scale reflect more frequent civic participation at school. The reliability values of this scale ranged from .53 (Italy) to .75 (Cyprus and the Republic of Korea).

The second civic engagement experience variable was *students' discussion of political and social issues outside of school* (or political discussion outside of school). To measure this construct, students were asked to respond to four items with four response choices (1 = Never or hardly ever; 2 = Monthly (at least once a month); 3 = Weekly (at least once a week); 4 = Daily or almost daily):

- 1. Talking with your parent(s) about political or social issues;
- 2. Talking with friends about political and social issues;
- 3. Talking with your parent(s) about what is happening in other countries;
- 4. Talking with friends about what is happening in other countries.

IRT WLE scale scores on this factor were obtained with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries. Higher scores on this scale represent more frequent political discussions with parent(s) and friends outside of school. The scale reliabilities ranged from .61 (the Dominican Republic) to .81 (Finland and Sweden).

Students' participation in organized activities outside of school (or civic participation outside of school) was measured by asking students, "Have you ever been involved in activities of any of the following organizations, clubs, or groups?"

- 1. A youth organization affiliated with a political party or union;
- 2. An environmental organization;
- 3. A Human Rights organization;

- 4. A volunteer group doing something to help the community;
- 5. An organization collecting money for a social cause;
- 6. A cultural organization based on ethnicity;
- 7. A group of young people campaigning for an issue.

Originally, ICCS labeled this scale 'students' civic participation in the wider community'. I renamed this scale to emphasize its focus on group and organizational activities and to distinguish this predictor from political discussion outside of school. Responses were given on a three point scale for each item (1 = Yes, I have done this within the last twelve months; 2 =Yes, I have done this but more than a year ago; 3 =No, I have never done this). Higher scores on the scale correspond to more frequent participation in organized activities outside of school. Cronbach's alphas of this scale ranged from .62 (Finland) to .80 (Sweden) across the 34 countries studied.

Family context. This dissertation study adopted family socioeconomic status (SES) and parents' interest in social and political issues as family context variables.

The *SES* index was created from the following indicators: parents' highest occupational status, parents' highest educational level, and home literacy (the number of books at home). Parental occupation data were collected from open-ended questions in the student questionnaire. The ICCS team coded students' responses following ISCO-88 classification (International Labor Organization, 1990; as cited in Schulz et al., 2010) and then transformed the codes into scores on the international socioeconomic index of occupation status (Ganzeboom, De Graaf, & Treiman, 1992; as cited in Schulz et al., 2010) with higher scores indicating higher levels of occupational status. When both parents' occupational information was presented, the higher occupational status was used as the indicator of parental occupational status. With regard to parents' education,

ICCS used the International Standard Classification of Education (ISCED) (UNESCO, 2006; as cited in Schulz et al., 2011) to make an internationally comparable index. Adolescents' responses were recoded into the following six comparable categories: 0 = did not complete ISCED level 1; 1 = ISCED level 1 (primary education); 2 = ISCED level 2 (lower secondary); 3 = ISCED 3 (upper secondary); 4 = ISCED level 4 (non-tertiary post-secondary) or level 5B (vocational tertiary); 5 = ISCED level 5A (theoretically oriented tertiary) or level 6 (post-graduate). When students provided data for both parents, ICCS used the highest education attainment as the indicator of parents' education. Students' home literacy data were obtained from the question, "About how many books are there in your home?" with six response choices (0 = 0.10 books; 1 = 11-25 books; 2 = 26-100 books; 3 = 101-200 books; 4 = 201-500 books; 5 = more than 500 books). ICCS derived students' SES index scores from these three indicators by performing separate principal component analyses for each national sample (M = 0 and SD = 1 for each country). The reliabilities of the SES index across the countries ranged from .50 (the Dominican Republic, New Zealand, and the Russian Federation) to .70 (Greece and Poland).

Parents' interest in political and social issues (or parents' political interest) was measured by a single item, "How interested are your parent(s) in political and social issues?" with four response options (0 = not interested at all; 1 = not very interested; 2 = quite interested; 3 = very interested). However, in 11 countries, less than 2% of reported "not interested at all" and, in most countries, less than 5% of students fell into this category. Therefore, I collapsed 'not interested at all' and 'not very interested' responses and recoded the ICCS variable into a categorical variable with three levels (0 = not interested; 1 = quite interested; 2 = very interested). Then, I created two dummy variables from the categorical variable and set 'not interested' as the reference category. When students presented both parents' information, the higher score was used as the indicator of parents' political interest.

Adolescents' personal perceptions of school context. In this study, I included three student-level variables to represent adolescents' perceived school climate. First, *students' personal perceptions of openness in classroom discussions* (or personal perceptions of classroom discussions) were measured by six items:

- 1. Teachers encourage students to make up their own minds;
- 2. Teachers encourage students to express their opinions;
- 3. Students bring up current political events for discussion in class;
- 4. Students express opinions in class even when their opinions are different from most of the other students;
- 5. Teachers encourage students to discuss the issues with people having different opinions;

6. Teachers present several sides of the issues when explaining them in class. Responses were given on a four-point Likert-type scale (1 = never; 2 = rarely; 3 = sometimes; 4 = often). The reliabilities ranged from .65 (Colombia and Paraguay) to .81 (England, the Republic of Korea, and Sweden) across the countries. IRT WLE scores were calculated and transformed to an international metric with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries. A higher value on the scale indicates a stronger endorsement of openness in classroom discussions.

Second, *students' personal perceptions of student influence on decisions about school* (or personal perceptions of student influence), which refers to the extent to which students feel their opinions about class/school affairs were accepted, was measured by the following question: "In

your school, how much are students' opinions taken into account when decisions are made about":

- 1. The way classes are taught;
- 2. What is taught in classes;
- 3. Teaching/learning materials;
- 4. The timetable;
- 5. Classroom rules;
- 6. School rules.

For each item, four response options were given $(1 = to a \text{ large extent}; 2 = to a \text{ moderate extent}; 3 = to a small extent}; 4 = not at all). IRT WLE scores on this scale were calculated with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries. The higher scores indicate a greater degree of perceived student influence on class/school decision. The reliabilities of this scale were between .72 (the Dominican Republic) and .90 (the Republic of Korea).$

The third perceived school climate predictor measured how positive the relationships between students and teachers were in a school. Here, a 'more positive' relationship connotes a "less vertical, more democratic, closer, and stronger" relationship. Five items measured *students*' *personal perceptions of student-teacher relations at school* (or personal perceptions of studentteacher relations):

- 1. Most of my teachers treat me fairly;
- 2. Students get along well with most teachers;
- 3. Most teachers are interested in students' well-being;
- 4. Most of my teachers really listen to what I have to say;
- 5. If I need extra help, I will receive it from my teachers.

For each item, responses were given on a four-point Likert scale (1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree). Higher scores indicate more positive perceptions of student-teacher relations. ICCS provided IRT WLE scores on this scale with a mean of 50 and a standard deviation of 10 for equally weighted countries. The scale reliabilities ranged from .53 (Indonesia) to .85 (Chinese Taipei).

Psychological motivation. Three motivational factors were adopted as predictors for this study. The first, *students' interest in politics and social issues* (or political interest), was measured by five items:

- 1. Political issues within your local community;
- 2. Political issues in your country;
- 3. Social issues in your country;
- 4. Politics in other countries;
- 5. International politics.

Responses were given on a four-point Likert-type scale for each item (1 = very interested; 2 = quite interested; 3 = not very interested; 4 = not interested at all). The reliabilities of the political interest scale ranged from .75 (Guatemala and Indonesia) to .92 (Norway and Sweden) across the ICCS-participating countries. IRT WLE scale scores were obtained with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries. Higher scores on the scale indicate greater political interest.

Second, *students' sense of internal political efficacy* (or internal political efficacy) was measured by the following six statements:

1. I know more about politics than most people my age;

- 2. When political issues or problems are being discussed, I usually have something to say;
- 3. I am able to understand most political issues easily;
- 4. I have political opinions worth listening to;
- 5. As an adult I will be able to take part in politics;
- 6. I have a good understanding of the political issues facing this country.

Students answered these questions based on a four-point Likert scale (1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree). IRT WLE scores were calculated with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries. The higher scale scores correspond to a stronger sense of internal political efficacy. The reliabilities of the internal political efficacy scale ranged from .72 (Guatemala) to .89 (Denmark, Finland, and Sweden) across the countries.

Lastly, I included *students' collective school efficacy* in this study as a proxy for collective political efficacy. Given the limited opportunities for adolescents to participate in organized political activity, it seems that a school is the most accessible and important official institution that offers adolescents the opportunity to be involved in collective activities. Thus, schools become important to the development of self-efficacy beliefs pertaining to collective action. In this respect, collective school efficacy in adolescence is a good substitute for collective political efficacy. As a collective school efficacy scale, I adopted the ICCS scale, 'students' perceptions of the value of participation at school'. Although the ICCS scale may not have been intended to measure students' collective school efficacy, this scale shows students' beliefs in their influence as a group. The idea underlying the ICCS scale resonates with the concept of collective school efficacy in that the scale emphasizes students' collective actions and represents

students' confidence in the impact of their participation at school (Schulz et al., 2010). IRT WLE scale scores with an ICCS average of 50 and a standard deviation of 10 for equally weighted countries were derived from the following five statements:

- 1. Student participation in how schools are run can make schools better;
- 2. Lots of positive changes can happen in schools when students work together;
- Organizing groups of students to express their opinions could help solve problems in schools;
- 4. All schools have a school parliament;
- 5. Students can have more influence on what happens in schools if they act together rather than alone.

For each item, responses were given on a four-point Likert scale (1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree). Higher scores on the scale indicate a stronger sense of collective school efficacy. The reliabilities of this scale across countries ranged from .54 (Indonesia) to .81 (Chinese Taipei, Finland, the Republic of Korea, and Sweden)

School-level predictors

Peers' civic engagement experience. I included three peer effects predictors in this study, each of which is the aggregate mean of its corresponding student-level predictor in a school: (1) *school average of civic participation at school* (or peers' school participation) from students' civic participation at school, (2) *school average of discussion of political and social issues outside of school* (or peers' political discussions) from students' discussion of political and social issues outside of school, and (3) *school average of civic participation outside of school* (or peers' organized activities) from students' participation in organized activities outside of school. As communication with and observation of peers are likely to influence adolescents' political development. Therefore, these school-level predictors represent the opportunities for students to observe peers' perceptions and behaviors regarding civic engagement and to be exposed to shared norms among schoolmates/classmates. Higher scores on each school-level scale indicate that, on average, students in a school had more participation experience in civic activities at school, more participation experience in political discussions, and more participation experience in organized activities outside of school, respectively.

Average SES in a school. Average SES in a school (school SES) was obtained by computing the mean of student-level SES values within each school. Higher scores on this scale correspond to higher school SES levels.

Adolescents' collective perceptions of school climate. In addition to personally perceived school climate, this study included three school-level variables to represent collective perceptions of school climate (or collectively perceived school climate). Three collective perception variables were obtained by computing the mean of their corresponding student-level predictors' values for each school: *collective perceptions of openness in classroom discussions* (or school climate for classroom discussions) from students' perceptions of openness in classroom discussions, *collective perceptions of influence on decisions about school* (or school climate for students' influence) from students' perceptions of influence on decisions about school climate for students influence) from students' perceptions of student-teacher relations at school. While the student-level school context predictors are more likely to represent an objective, overall school

context. Higher scores on these school-level scales reflect more positive collective experiences, implying a higher level of democratic climate in these three dimensions of the school context.

Community context. This study placed school and community context at the same level (school) for two reasons. First, by and large, students attend schools close to their neighborhoods; therefore, the schools and neighborhoods to which students belong generally share a community context. In fact, a school is one of the most important public institutions which adolescents belong to and interact with in their communities. In some communities, a school functions as the hub of the community. Second, because ICCS participating schools were randomly selected from all over each country, it is highly likely that the number of schools sampled in each local community is not sufficient to show meaningful school variation in a specific community. In short, it is not unreasonable to put schools and neighborhoods at the same level unless a sufficient number of schools exist in a community to warrant testing of school difference within the community and unless a sufficient number of schools are actually sampled.

This dissertation study derived two local community context variables from the ICCS school data. Communities that possess abundant social and cultural assets can offer adolescents more opportunities to be exposed to diverse social and cultural stimuli and interpersonal experience. Therefore, this study included the *availability of resources in the local community* (or community resources) predictor. Community resources were measured based on the availability of six resources in the immediate area surrounding the school: public library, cinema, theatre or concert hall, language school, museum or art gallery, and public garden or park. Principals reported the availability of each resource with a "yes" or "no" response. IRT WLE scores on this scale were calculated with an ICCS mean of 50 and a standard deviation of 10 for equally weighted countries. Higher scale scores indicate the greater availability of social and

cultural resources in a community. The reliabilities of this scale ranged from .65 (the Russian Federation and Malta) to .86 (Slovenia).

The second local community context variable is *principals' perceptions of social tension in the community* (or community tension). Principals were asked to rate the extent to which the following 12 issues are a source of social tension in the area where their schools were located: immigration, poor quality of housing, unemployment, religious intolerance, ethnic conflicts, extensive poverty, organized crime, youth gangs, petty crime, sexual harassment, drug abuse, and alcohol abuse. Responses were given on a four-point Likert-type scale (1 = to a large extent; 2 = to moderate extent; 3 = to a small extent; 4 = not at all). The reliabilities of the IRT WLE scale with an ICCS mean of 50 and a standard deviation of 10 for equally weighted countries ranged from .74 (Thailand) to .93 (Ireland, Malta, and Sweden). Higher scores reflect higher levels of social tension in a community.

Missing Data

Due to missing data, the analytic sample size of this study was smaller than the original ICCS sample size. All cases with missing values in the student-level data were deleted from the analytic data (i.e. listwise deletion), which resulted in the deletion of seven schools with missing values for school-level aggregate variables from the analysis. I applied a different method to missing cases in the school questionnaire data (availability of resources in the local community and social tension in the community). Because of the nature of multilevel data, the elimination of a higher-level unit results in the deletion of its lower-level units as well. Hence, using listwise deletion to address missing cases in the school-level data would have considerably reduced the student sample size. To minimize the loss of student sample and school-level data, I applied a mean substitution method for the school questionnaire variables for each country—replacing the
Table 3-2

	Student Sample		School	School Sample	
Country (country code)	Analytic	Included Case ^a	Analytic	Mean-imputed	
	Sample Size	(%)	Sample Size	$Case^{b}(\%)$	
Austria (AUT)	2,873	84.87	135	20.74	
Belgium (Flemish) (BFL)	2,787	93.90	151	1.32	
Bulgaria (BGR)	2,775	85.20	158	0.00	
Chile (CHL)	4,722	90.95	176	0.56	
Chinese Taipei (TWN)	5,008	96.92	150	1.33	
Colombia (COL)	4,869	78.48	196	0.51	
Cyprus (CYP)	2,495	78.12	68	16.18	
Czech Republic (CZE)	4,392	94.86	144	8.33	
Denmark (DNK)	3,846	85.31	193	12.44	
Dominican Republic (DOM)	2,645	57.64	144	2.76	
England (ENG)	2,451	84.05	124	15.32	
Estonia (EST)	2,565	93.51	140	10.71	
Finland (FIN)	3,048	92.17	176	1.70	
Greece (GRC)	2,824	89.57	153	18.95	
Guatemala (GTM)	3,254	81.31	143	2.07	
Indonesia (IDN)	4,299	84.83	142	2.11	
Ireland (IRL)	2,912	86.80	144	8.33	
Italy (ITA)	3,107	92.31	172	0.58	
Korea, Republic of (KOR)	5,090	96.88	150	0.67	
Latvia (LVA)	2,595	93.99	150	10.67	
Lithuania (LTU)	3,674	94.16	199	2.01	
Malta (MLT)	1,946	90.81	55	1.82	
Mexico (MEX)	5,420	82.42	215	1.40	
New Zealand (NZL)	3,353	84.27	146	17.81	
Norway (NOR)	2,428	80.58	129	12.40	
Paraguay (PRY)	2,345	68.99	147	2.01	
Poland (POL)	3,089	95.08	150	0.00	
Russian Federation (RUS)	4,071	94.78	210	0.95	
Slovak Republic (SVK)	2,835	95.45	138	0.72	
Slovenia (SVN)	2,844	92.64	163	4.29	
Spain (ESP)	3,048	92.11	148	1.35	
Sweden (SWE)	3,017	87.10	166	9.04	
Switzerland (CHE)	2,592	88.65	156	7.69	
Thailand (THA)	4,849	92.13	149	0.67	
Total ^c	114,068	87.36	5,179	5.40	

The Analytic Student and School Sample Size

^aThe percentage of included cases was produced by dividing the analytic student sample size by the ICCS student sample size (see Table 3-1).

^bThe percentage of imputed cases was produced by dividing the number of schools with imputed values by the ICCS school sample size (see Table 3-1).

^cThe total ICCS sample size drawn from the 34 countries is 130,575 students and 5,186 schools.

missing values in a school-level variable with the national mean of the variable.

Table 3-2 presents the analytic student and school sample size in this study and the percentage of valid student cases and mean-imputed school cases. The missing data rates were less than 10% in the data from 17 countries, 10% to 20% in 13 countries, and about 22% in Colombia and Cyprus. A considerable amount of the samples from Paraguay and the Dominican Republic were excluded from the analysis (about 31% and 42%, respectively). With respect to school data, the rates of mean-imputed schools ranged from 0 to 5% in 21 countries, 5% to10% in four countries, and 10% to 15% in four countries. Mean substitution was necessary for a number of school cases in the data for England (15.32%), Cyprus (16.18%), New Zealand (17.81%), Greece (18.95%), and Austria (20.74%).

Although listwise deletion and mean substitution are very common methods for dealing with missing data in diverse disciplines due to their convenience, they have some important limitations, such as producing biased parameter estimates when the missing completely at random assumption, indicating that missingness of a variable is independent of any variables including itself, does not hold (Enders, 2010). Therefore, the findings of the current study might be limited by this data treatment method.

Analytic Strategy

This study employed hierarchical linear modeling (HLM) to examine the relationships between political development factors and adolescents' expected political participation across 34 countries. As described, ICCS used a two-stage sampling design in which schools in each country were first sampled and then one or more intact classes were selected from each sampled school. Accordingly, the probability of being selected was not equal among target students—that is, students were not selected independently. By correcting the standard errors accompanying a multilevel data structure, HLM can produce more accurate estimates than single-level statistical methods (Snijders & Bosker, 2012).

Additionally, HLM allows researchers not only to investigate the dependency of the observations on the low-level units embedded within the higher-level units (i.e., students within schools in this study), but also to explore the influence of a variable on outcome variables at both an individual and a group level by decomposing the total variance in the variable into individual-level and group-level variation. As described in the Measures section, seven student-level predictors were aggregated to the school level for this study: previous civic engagement experience, SES, and democratic school climate. All aggregate (school-level) variables were introduced together with the corresponding student-level variables to maintain within and between group components of the relationship between predictors and outcome variables. This allowed me to examine the effects of the seven aggregate school variables on adolescents' expected political participation after controlling for the effects of their corresponding student-level variables.

To conduct the multilevel analysis for this study, I employed a four-step analytical procedure. First, I ran an unconditional model with no covariate for each outcome variable. The unconditional model provided information on the sources of variability in a dependent variable by partitioning the variance in the variable into within-group (i.e., within-school) and between-group (i.e., between-school) variance components. The within-school variance component (σ^2) and the between-school variance component (τ) were used to calculate the intraclass correlation coefficient (ICC), the proportion of variation in the outcome variable that is attributed to between-group difference: ICC = $\tau / (\tau + \sigma^2)$.

After the unconditional model, I estimated two within-school models. In the second model (Model 1), I included all the student-level predictors but motivational factors to examine the relationships between demographics, civic knowledge, previous civic experience, and perceived family/school context and adolescents' willingness to participate in politics (expected political participation). Third, three motivational factors (political interest, internal political efficacy, and collective school efficacy) were added into the second model (Model 2). Motivation is a strong driving force directly attached to one's behavior; moreover, motivational factors have a mediating effect in the political development process (e.g., Beaumont, 2011; A. Cohen et al., 2001). Therefore, I expected that adding motivational factors would considerably influence the relationship between some student-level predictors and outcome variables.

Lastly, I introduced all student- and school-level predictors in the full model (Model 3) to examine the unique effects of the predictors in political development relationships. In the full model, civic knowledge and three motivational factors were grand-mean centered (the national mean was subtracted from individual students' values); three civic engagement experience factors, family SES, and three perceived school context factors were group-mean centered (the school mean was subtracted from individual students' values); and all school-level variables were grand-mean centered (the national mean was subtracted from individual schools' values). Because the primary purpose of this study is to compare cross-national patterns in political development relationships, I report and interpret the results from the full model (and the empty model) but do not address Model 1 or Model 2 in this dissertation.

Previous studies have noted that the effect of gender and SES on adolescents' academic and political development may vary across schools (e.g., Konstantopoulos & Borman, 2011; Wilkenfeld, 2009). Therefore, the current study examined whether the relationship between gender and family SES predictors and expected political participation varies between schools. The slope(s) for variable(s) with a significant random effect (gender, family SES, or both) were allowed to vary randomly; if the effect(s) were not significant, the slope(s) were fixed. In all HLM models, intercepts were allowed to vary randomly while slopes for all student-level variables except for gender and family SES were fixed. Consequently, the HLM models for each country have no, one, or two random slopes. The final model (full model) is expressed as,

Level-1 (student-level) model:

$$\begin{split} Y_{ij} &= \beta_{0j} + \beta_{1j} \, (\text{gender}) + \beta_{2j} \, (\text{immigrant background}) + \beta_{3j} \, (\text{civic knowledge}) + \beta_{4j} \\ &\quad (\text{civic participation at school}) + \beta_{5j} \, (\text{political discussion outside of school}) + \\ &\quad \beta_{6j} \, (\text{civic participation outside of school}) + \beta_{7j} \, (\text{family SES}) + \beta_{8j} \, (\text{middle} \\ &\quad \text{level of parents' political interest}) + \beta_{9j} \, (\text{high level of parents' political} \\ &\quad \text{interest}) + \beta_{10j} \, (\text{openness in classroom discussions}) + \beta_{11j} \, (\text{students'} \\ &\quad \text{influence}) + \beta_{12j} \, (\text{student-teacher relations}) + \beta_{13j} \, (\text{political interest}) + \beta_{14j} \\ &\quad (\text{internal political efficacy}) + \beta_{15j} \, (\text{collective school efficacy}) + r_{ij} \end{split}$$

Level-2 (school-level) model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} \text{ (peers' civic participation at school)} + \gamma_{02} \text{ (peers' political discussion}$$

outside of school) + γ_{03} (peers' civic participation outside of school) + γ_{04}
(school mean SES) + γ_{05} (avg. openness in classroom discussions) + γ_{06} (avg.
influence on decisions about school) + γ_{07} (avg. student-teacher relations) +
 γ_{08} (community resources) + γ_{09} (community problems) + u_{0j}

 $\beta_{kj} = \gamma_{k0} \ (k = 2-6, \ 8-15)$

 $\beta_{1j} = \gamma_{10} + u_{1j}$ (when u_{1j} is not significant, the slope is fixed)

 $\beta_{7j} = \gamma_{70} + u_{7j}$ (when u_{7j} is not significant, the slope is fixed)

I used HLM 7 software (Raudenbush, Bryk, Cheong, Congdon, Jr., & Du Toit, 2011) to perform multilevel analyses. HLM results with robust standard errors are reported and interpreted.

Cross-national patterns in political development relationships

As illustrated in the Introduction chapter, after performing HLM for each country, I simplified and classified the relationships between predictors and outcome variables into three categories: positive, non-significant, and negative relationships. With regard to each predictor, countries were listed in one of these three categories. Then, I determined whether the countries by and large fell into one category (a cross-nationally consistent pattern) or two or three categories (a cross-nationally inconsistent pattern). I defined a cross-nationally consistent pattern as one in which 26 or more countries (75% or greater) belonged to the same relationship category and a cross-nationally inconsistent pattern as one in which 25 or fewer countries belonged to the same category. Next, I compared the cross-national relationships for expected electoral participation to the cross-national relationships for expected informal political participation.

As an extra task, not a main research question, I attempted to find shared national contexts among countries belonging to the same relationship category (e.g., Countries in which female adolescents have stronger expected political participation than male counterparts are likely to have great gender equality). To this end, I used multiple international data resources such as the Human Development Report (United Nations Development Programme, 2009, 2010), CIA World Factbook (Central Intelligence Agency, 2009, 2011, 2013), Freedom House reports (Freedom House, 2009), and the Democracy Index (The Economy Intelligence Unit, 2008). I show the results of this task in the Discussion chapter.

CHAPTER 4

RESULTS

This study was designed to answer five research questions: (1) the cross-national relationship between personal political development factors and expected electoral participation; (2) the cross-national relationship between contextual political development factors and expected electoral participation (3) the cross-national relationship between personal political development factors and expected informal political participation; (4) the cross-national relationship between contextual political development factors and expected informal political participation; and (5) differences and similarities between the cross-national relationships for expected electoral participation and the cross-national relationships for expected informal political participation. In this chapter, I present the analysis results for these five questions. I start by reporting descriptive statistics in order to outline the basic features of the data in this study. Then, based on HLM results, I show the political development relationships across countries for each outcome variable-expected electoral and informal political participation. With regard to each outcome variable, I present its relationships with personal political development factors first and then its relationships with contextual political development factors. Lastly, I compare the cross-national relationships for expected electoral participation with the cross-national relationships expected informal participation.

Descriptive Analysis

Appendix A presents descriptive statistics for the student-level variables including the mean, standard deviation, and range for data collected in 34 countries. The percentage of female students ranged from 43.46% (the Republic of Korea) to 55.99% (the Dominican Republic)

across the countries studied. Immigrant students amounted to between .06% (the Republic of Korea) and 25.23% (Switzerland) across the countries. In some countries, the number of immigrant students surveyed was too small (e.g., only three students in the Republic of Korea and 19 students in Colombia) to be considered representative and to produce a reliable estimate. Descriptive statistics for the school-level variables are given in Appendix B.

Appendix C provides the bivariate correlations among student-level variables across the 34 countries. The correlations between the demographic variables (gender and immigrant background) and both outcome variables (expected electoral and informal political participation) varied across countries. Civic knowledge had positive correlations with expected electoral participation in all countries; however, the correlations between civic knowledge and expected informal participation varied across countries with negative correlations in eight countries, non-significant in six countries, and positive in 20 countries. Civic engagement experience (civic participation at school, political discussions outside of school, and civic participation outside of school) had positive correlations with both electoral and informal political efficacy, and collective school efficacy) were positively correlated with both electoral and informal political political participation in all countries but Thailand (no significant correlation between internal political efficacy and expected electoral participation).

Family SES was positively correlated with expected electoral participation in 33 countries, with the exception of the Dominican Republic. On the other hand, the correlations between Family SES and expected informal participation varied across countries with negative correlations in four countries, not significant in five countries, and positive in 25 countries. Parents' political interest had positive correlations with both types of expected political

participation when students whose parents were very interested in political and social issues were compared with the rest of students.

Personal perceptions of openness in classroom discussions and student-teacher relationships had positive correlations with both outcome variables in all but two countries (the Dominican Republic and Malta). Personal perceptions of student influence on decisions about school had positive correlations with expected informal participation across countries; however, its correlations with expected electoral participation were almost evenly divided across the three categories—correlations were negative in nine countries, not significant in 14 countries, and positive in 11 countries.

Table 4-1

Correlations between Expected Electoral Participation and Expected Informal Participation across Countries

AUT	BFL	BGR	CHL	TWN	COL	CYP	CZE	DNK
.322 ^{**}	.379 ^{**}	.360 ^{**}	.424 ^{**}	.388 ^{**}	.361 ^{**}	.426 ^{**}	.412 ^{**}	.399 ^{**}
DOM	ENG	EST	FIN	GRC	GTM	IDN	IRL	ITA
.435 ^{**}	.471 ^{**}	.372 ^{**}	.362 ^{**}	.306 ^{**}	.294 ^{**}	.308 ^{**}	.409 ^{**}	.322 ^{**}
KOR	LVA	LTU	MLT	MEX	NZL	NOR	PRY	POL
.334 ^{**}	.300 ^{**}	.270 ^{**}	.379 ^{**}	.306 ^{**}	.407 ^{**}	.367 ^{**}	.372 ^{**}	.406 ^{**}
	RUS .402 ^{**}	SVK .380 ^{**}	SVN .313 ^{**}	ESP .330 ^{**}	SWE .391 ^{**}	CHE .358 ^{**}	THA .233 ^{**}	

***p* < .01

Table 4-1 shows the correlations between expected electoral and expected informal political participation in each of the 34 countries. The correlation between the outcome variables

was weak (r < .4) in 25 countries and moderate in nine ($.4 \le r < .6$). The correlation was positively significant (p < .01) in all countries.

The bivariate correlations among school-level variables are provided in Appendix D. Peers' school participation (school mean of civic participation at school) and peers' political discussion (school mean of political discussion outside of school) had positive correlations with the school mean of expected electoral and informal political participation in almost all countries. While peers' organized activities (school mean of civic participation outside of school) had varying correlations with the school mean of expected electoral participation, the variable had positive correlations with the school mean of expected informal participation in most countries.

School SES was positively correlated with school mean of expected electoral participation in all countries but the Dominican Republic; however, the correlation between school SES and school mean of expected informal participation varied across countries. School climate for classroom discussions (collective perceptions of openness in classroom discussions) was positively correlated with the school mean of electoral participation in 32 countries; on the other hand, the school-level predictor had varying correlations with school mean of expected informal participation. School climate for student influence (collective perceptions of student influence on decisions about school) and school climate for student-teacher relations (collective perceptions with school mean of expected electoral and informal participation.

Two community context variables (availability of resources in the local community and social tension in the community) also had varying correlations with the two outcome variables.

Multilevel Analysis: Adolescents' Expected Electoral Participation

The ICC for adolescents' expected electoral participation in each country was calculated using the within-school variance (σ^2) and between-school variance (τ) components obtained from the unconditional model. Appendix E shows the ICCs for all countries. The between-school variance was statistically significant in all countries. The ICCs ranged from .0104 (Guatemala) to .1347 (England) across countries, which indicates that 1.04% to 13.47% of the difference in expected electoral participation among students can be explained by school-level differences across countries.

The full HLM model included 15 student-level predictors and nine school-level predictors. Based on the HLM results, I present the relationships between political development factors and adolescents' expected electoral participation across 34 countries. Because this study explores the patterns in cross-national political development relationships, I do not detail the results of the full model for each country (Appendix F provides the HLM results for each country).¹² Countries are listed in corresponding categories with regard to each predictor—a positive, a non-significant, or a negative relationship. Countries showing marginally significant relationships (p < .1) are arranged in the same category with those showing significant relationships (p < .05), but marginally significant relationships are distinguished from significant relationships—marginal significance is denoted in italics.

Personal Political Development Factors

In this section, I present the cross-national relationships between personal political development factors and expected electoral participation. The findings presented here correspond to RQ 1. Results for adolescents' demographic characteristics (gender and immigrant

¹² The order of reported predictors differs slightly between this section and Appendix F.

background) and civic knowledge, personal civic engagement experience (civic participation at school, political discussions outside of school, and organized activities outside of school), and psychological motivation factors (political interest, internal political efficacy, and collective school efficacy) are reported in order.

Gender, immigrant background, and civic knowledge

Table 4-2 shows how adolescents' gender (female) and immigrant background were related to their expected electoral participation across 34 countries. Gender had a crossnationally inconsistent relationship with adolescents' expected electoral participation. All three categories of political development relationships appeared: positive, not significant, negative relationships. Specifically, in Denmark, New Zealand, Sweden, and Finland (marginal significance), female students had stronger expected electoral participation than male students; however, in eight countries (including marginal significance), males had stronger expected electoral participation. In 22 countries, gender was not a significant predictor of adolescents' expected electoral participation.

The relationships between adolescents' immigrant background and expected electoral participation were cross-nationally inconsistent. In six countries,¹³ there was no significant difference in expected electoral participation between native and immigrant students. On the other hand, in the remaining 12 countries (including marginal significance), immigrant adolescents showed lower levels of willingness to participate in electoral politics than their native peers. There were no countries in which immigrant adolescents have stronger willingness to participate in electoral politics than native adolescents.

¹³ I have reported the results for the immigrant variable for 18 countries where more than 3% of the analytic sample were immigrant students.

Civic knowledge showed a completely consistent pattern in political development

relationship across countries. In all 34 countries, civic knowledge had positive relationships with

adolescents' expected electoral participation (p < .05).

Table 4-2

Relationships between Demographic Characteristics and Expected Electoral Participation across Countries

Relationship	Country
Gender (female)	
Positive	DNK NZL SWE FIN
Not significant	BGR CHL TWN CYP EST GRC GTM IRL ITA KOR LVA LTU MLT MEX NOR PRY POL RUS SVK SVN ESP CHE
Negative	AUT COL CZE DOM ENG IDN THA BFL
Immigrant backgro	bund ^a
Positive	None
Not significant	ENG EST LTU NZL RUS SVN
Negative	AUT BFL CYP DNK GRC IRL ITA LVA NOR SWE CHE ESP
<i>Note</i> . Italics indicate a m	arginally significant relationship $(p < .1)$.

^a16 countries were not included because of the small number of immigrant students.

Personal civic engagement experience

Overall, three student-level civic engagement experience factors had cross-nationally consistent relationships with expected electoral participation (see Table 4-3). Multilevel analysis revealed a cross-nationally consistent relationship between adolescents' civic participation at school and expected electoral participation: positive relationships in 26 countries (including five marginally significant cases). There were non-significant relationships between adolescents' civic participation at school and expected electoral participation in eight countries. No negative relationship was found.

Table 4-3

Relationships between Personal Civic Engagement Experience and Expected Electoral

Participation across Countries

Relationship	Country
Civic participation	at school
Positive	BFL CHL TWN CYP CZE DNK ENG FIN GTM IRL ITA MLT MEX NZL NOR PRY POL RUS SVK ESP THA <i>DOM GRC KOR</i> <i>SVN SWE</i>
Not significant	AUT BGR COL EST IDN LVA LTU CHE
Negative	None
Political discussion	is outside of school
Positive	SVN FIN POL SWE
Not significant	AUT BFL BGR CHL TWN COL CYP CZE DNK ENG GRC GTM IDN IRL ITA KOR LVA LTU MLT MEX NZL NOR PRY RUS SVK ESP CHE THA
Negative	DOM EST
Organized activitie	es outside of school
Positive	AUT BFL EST CHE
Not significant	BGR TWN COL CYP CZE DNK DOM ENG FIN GRC GTM IDN IRL ITA KOR LTU MLT MEX NZL NOR PRY POL RUS SVK SVN ESP SWE THA
Negative	CHL LVA
<i>Note</i> . Italics indicate a r	narginally significant relationship ($p < .1$).
Political disc	cussions outside of school were not significantly related to adolescents'

expected electoral participation in 28 countries. In four countries (including three marginally

significant cases), students who had more opportunities to discuss political and social issues with

parents or friends had stronger willingness to participate in electoral politics in adulthood;

however, in two countries, political discussions outside of school had a negative relationship

with the outcome variable.

Participation in organized activities outside of school had a cross-nationally consistent relationship with adolescents' expected electoral participation: non-significant relationships in 28 countries. In four countries, more experience in organized activities outside of school was associated with a stronger willingness to participate in electoral politics. In two countries (marginal significance), adolescents who more actively participated in organized activities outside of school tended to have lower levels of expected electoral participation.

Psychological motivation

This study found a cross-nationally consistent relationship between all three motivational factors and adolescents' expected electoral participation. Students' political interest had positive relationships with electoral participation in all 34 countries including a marginally significant relationship in Slovenia. Students with a stronger sense of internal political efficacy had a stronger willingness to participate in electoral politics as adults in all countries but Thailand where internal political efficacy was not a significant predictor of electoral participation. Students who had a stronger collective school efficacy showed a stronger willingness to participate in electoral participate.

Contextual Political Development Factors

In this section, I present the cross-national relationships between contextual political development factors and expected electoral participation. The findings in this section correspond to RQ 2. Results for family context (family SES and parents' political interest), peer effect (peers' civic participation at school, peers' political discussions outside of school, and peers' organized activities outside of school), democratic school climate (openness in classroom discussions, students' influence on school decisions, and student-teacher relations), school SES, and community context (community resources and community tension) are reported in order.

Family context

The cross-national relationships of family SES and parents' political interest with adolescents' expected electoral participation are given in Table 4-4. Controlling for numerous student- and school-level variables, family SES was not a significant predictor of expected electoral participation in 22 countries. In 11 countries (marginal significance in three countries), students from more advantaged families showed a stronger willingness to participate in electoral activism as adults. The Dominican Republic is the only country where family SES was negatively related to adolescents' expected electoral participation.

It turned out that parental interest in social and political issues had a cross-nationally consistent relationship with expected electoral participation. In particular, when comparing students whose parents had little interest in social and political issues with those whose parents were very interested, parental political interest was a significant positive predictor of expected electoral participation in all countries (including four marginally significant cases) but Indonesia and Latvia. Even a comparison between not-interested and quite-interested parents yielded positive relationships in 30 countries (including marginal significance). It is noteworthy that parents' political interest had no negative relationships with adolescents' expected electoral participation.

Table 4-4

Relationships between Family Context Variables and Expected Electoral Participation across Countries

Relationship	Country
Family SES	
Positive	CZE ENG FIN KOR NZL SVK SVN CHE AUT IDN ESP

Not significant	BFL BGR CHL TWN COL CYP DNK EST GRC GTM IRL ITA
	LVA LTU MLT MEX NOR PRY POL RUS SWE THA
Negative	DOM

Parental political interest (quite)

Positive	AUT BFL BGR TWN COL CYP CZE DNK ENG EST FIN GRC
	GTM IRL ITA KOR LTU MLT MEX NZL NOR PRY POL SVK
	SVN ESP SWE CHE THA DOM
Not significant	CHL IDN LVA RUS
Negative	None

Parental political interest (very)

Positive	AUT BFL BGR TWN CYP CZE DNK DOM ENG EST FIN GTM
	IRL ITA KOR LTU MLT MEX NZL NOR PRY POL SVK SVN
	ESP SWE CHE THA CHL COL GRC RUS
Not significant	IDN LVA
Negative	None
Note Italics indicate a 1	marginally significant relationship $(n < 1)$

Note. Italics indicate a marginally significant relationship (p < .1).

Peers' civic engagement experience

Table 4-5 presents the relationships between peers' civic engagement experience (the school average of student-level civic engagement experience) and adolescents' expected electoral participation. Three peer effect factors-peers' school participation, peers' political discussions, and peers' organized activities-were not significantly associated with expected electoral participation in most countries (27 countries; 26 countries; 28 countries, respectively).

Nevertheless, students whose classmates had more school participation experience were likely to have a stronger willingness to participate in electoral politics in seven countries (two marginal significant cases) while no negative relationship between peers' school participation and the outcome variable was found in any country. Adolescents attending schools in which their friends more frequently discussed public issues outside of school tended to show higher levels of expected electoral participation in seven countries (including marginal significance); however, in Italy, attending a school in which peers had more opportunities for political discussions outside of school was negatively associated with expected electoral participation (p < .1). In four countries (one marginally significant case), peers' participation in organized activities outside of school had positive relationships with adolescents' willingness to participate in electoral politics, but it had negative relationships in two countries.

Table 4-5

Relationships between Peers' Civic Engagement Experience and Expected Electoral Participation across Countries

Relationship	Country
Peers' school partic	cipation
Positive	COL CZE POL ESP CHE GTM RUS
Not significant	AUT BFL BGR CHL TWN CYP DNK DOM ENG EST FIN GRC IDN IRL ITA KOR LVA LTU MLT MEX NZL NOR PRY SVK SVN SWE THA
Negative	None
Peers' political disc	ussions
Positive	BFL CHL NOR BGR FIN GTM IDN
Not significant	AUT TWN COL CYP CZE DNK DOM ENG EST GRC IRL KOR LVA LTU MLT MEX NZL PRY POL RUS SVK SVN ESP SWE CHE THA
Negative	ITA
Peers' organized ac	tivities
Positive	AUT BFL MLT CZE
Not significant	BGR CHL TWN COL CYP DNK DOM ENG EST FIN GRC GTM IRL ITA KOR LVA LTU MEX NZL NOR PRY POL SVK SVN ESP SWE CHE THA
Negative	IDN RUS

Note. Italics indicate a marginally significant relationship (p < .1).

School climate

The relationships between school climate predictors (openness in classroom discussions, students' influence on school decisions, student-teacher relations) and expected electoral participation were examined at both student and school levels. At the student level, these predictors represent personal perception or experience; and at the school level, they represent collective perception/experience or overall school climate.

Table 4-6 exhibits the relationships between three personally perceived school climate variables (student-level predictors) and adolescents' expected electoral participation across 34 countries. A cross-nationally inconsistent pattern was shown with regard to personal perceptions of openness in classroom discussions. Students who perceived or experienced a classroom climate more open for discussion were likely to have a stronger willingness to participate in electoral activities as adults in 14 countries (including three marginally significant cases) while no significant relationship was found in the remaining 20 countries.

A cross-nationally inconsistent pattern was found in the relationship between personal perceptions of student influence on decisions about school and expected electoral participation. Personal perceptions of student influence were not significantly related to expected electoral participation in 20 countries; however, I found a negative relationship in 12 countries (two marginally significant cases). Only in two countries (one marginally significant case), perceived student influence was positively associated with adolescents' willingness to participate in electoral politics.

Perceived student-teacher relations were a cross-nationally consistent predictor of adolescents' expected electoral participation. In 27 countries (including marginally significant relationships in three countries), adolescents who had personally observed or experienced a more democratic and amicable relationship with teachers had higher levels of expected electoral

participation. Personal perceptions of student-teacher relations were not significantly related to

electoral participation in the remaining seven countries.

Table 4-6

Relationships between Students' Personal Perceptions of School Climate and Expected Electoral Participation across Countries

Relationship	Country
Personal perception	ns of classroom discussions
Positive	DOM ENG EST GRC GTM IDN MEX NZL POL SVK THA COL ITA NOR
Not significant	AUT BFL BGR CHL TWN CYP CZE DNK FIN IRL KOR LVA LTU MLT PRY RUS SVN ESP SWE CHE
Negative	None
Personal perception	ns of student influence
Positive	RUS TWN
Not significant	AUT BFL BGR CHL COL CYP DNK DOM ENG EST FIN GRC IDN LTU MEX PRY POL SVK SWE THA
Negative	CZE ITA KOR LVA MLT NZL NOR SVN ESP CHE GTM IRL
Personal perception	ns of student-teacher relations
Positive	BFL CHL TWN COL CYP CZE DNK DOM ENG GRC IDN IRL ITA KOR LVA LTU MLT MEX NZL NOR SVK SVN ESP CHE <i>FIN RUS SWE</i>
Not significant	AUT BGR EST GTM PRY POL THA
Negative	None

Note. Italics indicate a marginally significant relationship (p < .1).

The relationships between three school-level school climate variables (the school average

of perceived school climate) and adolescents' expected electoral participation are given in Table

4-7. The relationship between school climate for classroom discussions and expected electoral

participation varied across countries. In eight countries (three marginally significant cases), students attending schools that were more open to classroom discussion tended to have a stronger willingness to participate in electoral politics; however, in three countries, an open classroom climate for discussions had negative relationships with electoral participation. In 23 countries, no significant relationship was found.

Table 4-7

Relationships between Collective Perceptions of School Climate and Expected Electoral Participation across Countries

Relationship	Country	
School climate for classroom discussions		
Positive	IDN ITA KOR LTU THA DNK LVA PRY	
Not significant	AUT BFL BGR TWN COL CZE DOM ENG EST FIN GRC GTM IRL MLT MEX NZL NOR POL RUS SVK SVN ESP SWE	
Negative	CYP CHE CHL	
School climate for	student influence	
Positive	None	
Not significant	AUT BFL COL CYP CZE DNK DOM ENG EST FIN GTM IDN IRL ITA LTU MLT MEX NOR PRY POL RUS SVN ESP SWE THA	
Negative	BGR TWN GRC KOR LVA NZL CHE CHL SVK	
School climate for student-teacher relations		
Positive	BGR CHL ENG ITA NZL CHE DNK FIN GRC IDN MLT MEX	
Not significant	AUT BFL TWN COL CYP CZE DOM EST GTM IRL KOR LVA LTU NOR PRY POL RUS SVK SVN ESP SWE THA	
Negative	None	

Note. Italics indicate a marginally significant relationship (p < .1).

Attending a school which was more responsive to students' opinions on school/classroom agenda was not significantly related to adolescents' expected electoral participation in 25 countries. Interestingly, while school climate for student influence was not positively associated with electoral activism in any country, it was negatively associated with students' electoral activism in nine countries (two marginally significant cases).

In contrast to school climate for student influence, school climate for student-teacher relations had no negative relationships in any country. In 12 countries (including six marginally significant cases), students who attended schools with more positive student-teacher relations had a stronger willingness to participate in electoral politics in adulthood. In 22 countries, school climate for student-teacher relations was not a significant predictor of adolescents' expected electoral participation.

School SES and community context

Table 4-8 displays cross-national relationships of school SES and community context factors to adolescents' expected electoral participation. All three categories of political development relationships were shown regarding school SES. In 25 countries, school SES was not significantly associated with adolescents' expected electoral participation. Students in higher SES schools had a stronger willingness to participate in electoral politics in six countries (three marginally significant cases), but a weaker willingness to participate in electoral politics in three countries.

The availability of social and cultural resources in the local community was not a significant predictor of expected electoral participation in almost all countries (29 countries). In four countries (one marginally significant case), students who lived in a community with more

social and cultural resources showed lower levels of expected electoral participation. In Denmark, this predictor had a marginally positive relationship with electoral participation.

Social tension in the local community had no significant relationship with adolescents' expected electoral participation in 25 countries. In six countries (two marginally significant cases), the level of social tension in the community was negatively related to expected electoral participation. In three countries (marginal significance), students who were exposed to greater community tension had a stronger willingness to participate in electoral politics.

Table 4-8

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Relationships between School SES and Community Context and Expected Electoral Participation across Countries

Relationship	Country
School SES	
Positive	CZE FIN CHE EST LTU RUS
Not significant	AUT BFL BGR CHL COL CYP DNK DOM ENG GRC GTM IDN IRL ITA MLT MEX NZL NOR PRY POL SVK SVN ESP SWE THA
Negative	TWN KOR LVA
Community resour	ces
Positive	DNK
Not significant	BFL CHL TWN COL CYP CZE DOM ENG EST FIN GRC GTM IDN IRL ITA KOR LVA LTU MEX NZL NOR PRY POL SVK SVN ESP SWE CHE THA
Negative	AUT MLT RUS BGR
Community tension	n
Positive	IDN LVA THA
Not significant	AUT BFL CHL CYP DNK DOM ENG EST FIN GRC GTM IRL ITA KOR LTU MLT NZL NOR PRY POL RUS SVK SVN SWE CHE
Negative	TWN COL MEX ESP BGR CZE
Note. Italics indicate a n	narginally significant relationship $(p < .1)$.

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Multilevel Analysis: Adolescents' Expected Informal Political Participation

The ICCs for adolescents' expected informal political participation in 34 countries are given in Appendix G. The ICCs ranged from 0.0132 (Switzerland) to 0.0754 (England) across countries, which indicates that 1.32% to 7.54% of the difference in expected informal participation among students can be explained by school-level differences. The between-school variance was statistically significant in all countries.

As in expected electoral participation, I listed countries by relationship category positive, non-significant, negative relationships—for each predictor. Marginally significant relationships (p < .1) are distinguished from significant relationships (p < .05); however, they are listed in the same category. The results of the full model for each country are reported in Appendix H.¹⁴

Personal Political Development Factors

In this section, I present the cross-national relationships between personal political development factors and expected informal political participation. The findings in this section answer RQ 3. As in expected electoral participation, results for adolescents' demographic characteristics and civic knowledge, personal civic engagement experience, and psychological motivation factors are reported in order.

Gender, immigrant background, and civic knowledge

Table 4-9 shows how adolescents' gender (female), immigrant background, and civic knowledge were associated with their expected informal political participation across 34 countries. Gender had cross-nationally varying relationships with adolescents' expected informal participation. Specifically, in seven countries (two marginally significant cases), female

¹⁴ The order of reported predictors differs slightly between this section and Appendix H.

adolescents had a stronger willingness to participate in informal types of political activity during the next few years than male adolescents; however, in eight countries (two marginally significant cases), females had lower levels of willingness than male peers. In 19 countries, gender was not a significant predictor of adolescents' expected informal political participation.

Table 4-9

Relationships between Demographic Characteristics and Civic Knowledge and Expected Informal Political Participation across Countries

Relationship	Country
Gender (Female)	
Positive	DNK ENG FIN NZL ESP SWE RUS
Not significant	AUT BFL BGR CHL COL CYP CZE EST GRC GTM IRL ITA KOR LTU MEX NOR SVK SVN CHE
Negative	TWN DOM IDN MLT POL THA LVA PRY
Immigrant backgro	ound
Positive	IRL
Not significant	AUT BFL CYP ENG EST GRC ITA LVA LTU NZL NOR RUS SVN ESP
Negative	DNK CHE SWE
Civic knowledge	
Positive	None
Not significant	CZE DNK DOM ENG FIN GRC IDN IRL ITA MLT NZL NOR POL RUS SVK SVN SWE CHE
Negative	AUT BFL BGR CHL TWN COL EST GTM KOR LVA LTU MEX PRY ESP THA <i>CYP</i>
Note. Italics indicate a r	narginally significant relationship ($p < .1$).

^a16 countries were not included because of the small number of immigrant students.

Students' immigrant background was not significantly related to expected informal

participation in 14 countries. Immigrant students had lower levels of expected informal political

participation than native students in three countries (one marginally significant case). Interestingly, immigrant students in Ireland showed a stronger willingness to participate in informal types of political activity as youth than native students.

Civic knowledge had cross-nationally inconsistent relationships with adolescents' expected informal political participation. Notably, there were no countries in which civic knowledge had a positive relationship with expected informal participation. Civic knowledge was not significantly related to expected informal participation in 18 countries, and it was negatively related in 16 countries (one marginally significant case).

Personal civic engagement experience

In the majority of countries, all three personal civic engagement experience factors had positive relationships with students' expected informal political participation; moreover, no negative relationship was found in any country (see Table 4-10). Civic participation at school had positive relationships with expected informal participation in 25 countries (three marginally significant cases) and had no significant relationship in nine countries.

Students who had more opportunities to discuss current events with parents or friends outside of school showed a stronger willingness to participate in informal types of political activity during the next few years in 28 countries (three marginally significant cases). There was no significant relationship between political discussion outside of school and expected informal participation in the remaining six countries.

More active participation in organized activities outside of school was associated with greater expected informal participation in 32 countries (three marginally significant cases). In two countries only, involvement in organized activities was not significantly related to adolescents' willingness to participate in informal types of politics as youth.

Table 4-10

Relationships between Personal Civic Engagement Experience and Expected Informal Political

Participation across Countries

Relationship	Country
Civic participation at school	
Positive	BGR CYP CZE DNK DOM ENG EST FIN GRC GTM ITA LVA MLT MEX NZL NOR PRY POL SVK SVN SWE CHE <i>BFL CHL</i> <i>COL</i>
Not significant	AUT TWN IDN IRL KOR LTU RUS ESP THA
Negative	None
Political discussions outside of school	
Positive	AUT BFL CHL TWN COL CYP CZE DNK ENG FIN GTM IDN IRL ITA LVA LTU MLT MEX NZL NOR PRY POL SVK ESP SWE <i>RUS SVN CHE</i>
Not significant	BGR DOM EST GRC KOR THA
Negative	None
Organized activities outside of school	
Positive	AUT BFL CHL TWN COL CYP CZE DNK ENG EST FIN GRC IDN IRL KOR LTU MLT MEX NZL NOR PRY POL RUS SVK SVN ESP SWE CHE THA <i>DOM GTM ITA</i>
Not significant	BGR LVA
Negative	None
<i>Note</i> . Italics indicate a marginally significant relationship ($p < .1$).	

Psychological motivation

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Political interest and internal political efficacy had perfectly cross-nationally consistent relationships with adolescents' expected informal political participation. Students who had greater political interest and those who had greater internal political efficacy had a stronger willingness to participate in informal types of political activity in all 34 countries. Collective school efficacy was positively related to informal participation in 26 countries (marginal

significance in England, Indonesia, Malta, and Spain), not significantly related in eight countries (Belgium (Flemish), Cyprus, Denmark, Estonia, Finland, New Zealand, Poland, and Switzerland), and negatively related in none.

Contextual Political Development Factors

In this section, I present the cross-national relationships between contextual political development factors and expected informal participation. The findings presented here correspond to RQ 4. Results for family context, peer effect, school climate, school SES, and community context are reported in order.

Family context

Table 4-11 presents the cross-national relationships of family SES and parental political interest with adolescents' expected informal political participation. In 24 countries, family SES was not a significant predictor of adolescents' expected informal participation. In seven countries (two marginally significant cases), students from higher SES family showed a stronger willingness to participate in informal types of political activity during the next few years; on the other hand, in three countries (two marginal significant cases), family SES was negatively related to expected informal participation.

Parents' interest in social and political issues had cross-nationally inconsistent relationships with adolescents' expected informal political participation. When comparing students whose parents were little interested in social and political issues and those whose parents were very interested, parental political interest was not significantly related to expected informal participation in 23 countries. Parental political interest was a positive predictor in 11 countries (one marginally significant case), and there were no negative relationships between this predictor and expected informal participation. An almost identical pattern appeared when I compared students whose parents were little interested in social and political issues with students whose parents were quite interested: positive relationships in 12 countries (five marginally significant cases) and non-significant relationships in 21 countries. One exception was Finland in which a positive relationship was found.

Table 4-11

Relationships between Family Context Variables and Expected Informal Political Participation across Countries

Relationship	Country
Family SES	
Positive	TWN ENG IDN ITA MLT LTU ESP
Not significant	AUT BFL BGR CHL COL CYP DNK EST FIN GRC GTM IRL KOR LVA MEX NZL NOR PRY POL SVK SVN SWE CHE THA
Negative	RUS CZE DOM
Parental political in	terest (quite)
Positive	TWN CYP CZE ITA MLT NOR RUS CHL DOM EST SVK CHE
Not significant	AUT BFL BGR COL DNK ENG GRC GTM IDN IRL KOR LVA LTU MEX NZL PRY POL SVN ESP SWE THA
Negative	FIN
Parental political in	terest (very)
Positive	BGR CYP CZE DNK GTM IDN MLT NOR PRY RUS GRC
Not significant	AUT BFL CHL TWN COL DOM ENG EST FIN IRL ITA KOR LVA LTU MEX NZL POL SVK SVN ESP SWE CHE THA
Negative	None

Note. Italics indicate a marginally significant relationship (p < .1).

Peers' civic engagement experience

As presented in Table 4-12, the relationships between all three peer effect factors and

adolescents' expected informal political participation were cross-nationally inconsistent. Peers'

school participation was not a significant predictor of expected informal participation in 24 countries. In eight countries (three marginally significant cases), schoolmates' civic engagement experience at school had positive relationships with adolescents' willingness to participate in informal types of politics during the next few years, whereas in two countries, this peer effect variable was negatively related.

Table 4-12

Relationships between Peers' Civic Engagement Experience and Expected Informal Political Participation across Countries

Relationship	Country
Peers' school participation	
Positive	COL CYP DOM PRY POL EST MLT NZL
Not significant	AUT BFL BGR CHL TWN CZE DNK ENG FIN GRC GTM IDN IRL ITA KOR LTU NOR RUS SVK SVN ESP SWE CHE THA
Negative	MEX LVA
Peers' political discussions	
Positive	BFL COL CYP CZE DNK FIN IDN ITA KOR NOR <i>MLT PRY</i> CHE
Not significant	AUT BGR CHL TWN DOM ENG EST GRC GTM IRL LVA LTU MEX NZL POL RUS SVK SVN ESP SWE THA
Negative	None
Peers' organized activities	
Positive	BFL TWN COL GRC MEX NOR POL RUS SVN CHE CHL LTU ESP
Not significant	AUT BGR CYP CZE DNK DOM ENG EST FIN GTM IDN IRL ITA KOR LVA MLT NZL PRY SVK SWE THA
Negative	None

Note. Italics indicate a marginally significant relationship (p < .1).

Peers' political discussions outside of school and peers' participation in organized activities outside of school was positively related to expected informal participation in 21 countries and not significantly related in the remaining 13 countries (with marginal significance in three countries).

School climate

The relationships between school climate predictors (openness in classroom discussions, student influence on school decisions, student-teacher relations) and expected informal participation were examined at the student level (personal perceptions of school climate) and the school level (overall school climate).

Table 4-13 presents the cross-national relationships between personal perceptions of school climate and adolescents' expected informal political participation. The relationships between perceived openness in classroom discussions and expected informal participation were cross-nationally inconsistent: a positive relationship in 13 countries (three marginal significant cases), a non-significant relationship in 21 countries, and a negative relationship in no countries. Similarly, perceived student influence was positively related to expected informal political participation in 11 countries, not significantly related in 23 countries, and negatively related in none.

In contrast, the relationships between personal perceptions of student-teacher relations and informal political participation were cross-nationally consistent. This predictor had no significant relationship in most countries (29 countries). In three countries (including marginal significance), adolescents who personally observed or experienced more positive student-teacher relations had higher levels of expected informal participation. In two countries, more positive perceptions of student-teacher relations were marginally associated with a weaker willingness to

participate in informal types of politic activities as youth.

Table 4-13

Relationships between Students' Personal Perceptions of School Climate and Expected Informal Political Participation across Countries

Relationship	Country
Personal perceptions of classroom discussions	
Positive	TWN FIN IDN IRL ITA KOR NOR POL CHE THA AUT GRC SWE
Not significant	BFL BGR CHL COL CYP CZE DNK DOM ENG EST GTM LVA LTU MLT MEX NZL PRY RUS SVK SVN ESP
Negative	None
Personal perception	s of student influence
Positive	AUT BFL CYP DNK ENG EST KOR LVA LTU NZL POL
Not significant	BGR CHL TWN COL CZE DOM FIN GRC GTM IDN IRL ITA MLT MEX NOR PRY RUS SVK SVN ESP SWE CHE THA
Negative	None
Personal perceptions of student-teacher relations	
Positive	DOM NZL CHL
Not significant	AUT BFL BGR TWN COL CYP CZE DNK ENG EST FIN GTM IDN IRL ITA KOR LVA LTU MLT MEX PRY POL RUS SVK SVN ESP SWE CHE THA
Negative	GRC NOR

Note. Italics indicate a marginally significant relationship (p < .1).

Table 4-14 presents the cross-national relationships between three school-level school climate predictors (the school average of perceived school climate) and adolescents' expected informal political participation. In most countries, none of the school-level school climate variables had a significant relationship with informal political participation: 28 countries for

school climate for classroom discussions, 25 countries for school climate for student influence,

and 31 countries for school climate for student-teacher relations.

Table 4-14

Relationships between Collective Perceptions of School Climate and Expected Informal Political Participation across Countries

Relationship	Country
School climate for classroom discussions	
Positive	PRY AUT
Not significant	BFL BGR CHL TWN COL CZE DNK DOM ENG EST FIN GRC GTM IRL ITA KOR LVA LTU MLT MEX NZL NOR POL RUS SVK ESP SWE THA
Negative	SVN CHE CYP IDN
School climate for student influence	
Positive	AUT CYP DNK EST FIN IRL RUS CZE ITA
Not significant	BFL BGR CHL TWN COL DOM ENG GRC GTM IDN KOR LVA LTU MLT MEX NZL NOR PRY POL SVK SVN ESP SWE CHE THA
Negative	None
School climate for student-teacher relations	
Positive	ENG KOR
Not significant	AUT BFL BGR CHL TWN COL CYP CZE DNK DOM EST FIN GRC GTM IDN IRL LVA LTU MLT MEX NZL NOR PRY POL RUS SVK SVN ESP SWE CHE THA
Negative	

rgı 1a iy sigi ficant relation snip (p < .))

School climate for classroom discussions was positively related to adolescents' informal

participation in two countries (one marginally significant case) and negatively related in four

countries (two marginally significant cases). While school climate for student influence was

negatively related to informal participation in no country, students attending schools which were more responsive to students' opinions showed greater expected informal participation in nine countries (two marginally significant cases). Positive school climate for student-teacher relations was associated with adolescents' stronger willingness to participate in informal types of politics as youth in England (p < .05) and the Republic of Korea (p < .1); however, in Italy, students attending schools in which student-teacher relations were more positive showed lower levels of expected informal political participation.

School SES and community context

Table 4-15 displays the cross-national relationships of school SES and community context factors with adolescents' expected informal political participation. In 26 countries, school SES was not significantly associated with expected informal participation. In five countries (one marginal significant case), students in a higher SES school were likely to have a stronger willingness to participate in informal types of political activity as youth. In three countries (one marginal significant case), school SES was negatively related to expected informal participation.

Two community context factors had cross-nationally consistent relationships with expected informal political participation. Neither community resources nor social tension in the community had a significant relationship with adolescents' expected informal participation in 30 countries. In three countries, adolescents who lived in communities with more social and cultural resources had higher levels of expected informal participation; however, in Belgium (Flemish), the availability of community resources was negatively associated with the outcome variable. With regard to community tension, in three countries (one marginal significant case), students who were exposed to greater community social tension had a stronger willingness to participate in informal types of politics during the next few years; on the other hand, community tension had

a negative relationship with adolescents' expected informal participation in the Republic of

Korea.

Table 4-15

Relationships between School SES and Community Context and Expected Informal Political Participation across Countries

Relationship	Country
School SES	
Positive	BFL CZE FIN IRL EST
Not significant	AUT BGR CHL TWN COL CYP DNK ENG GRC GTM IDN ITA LVA LTU MLT MEX NOR PRY POL RUS SVK SVN ESP SWE CHE THA
Negative	KOR NZL DOM
Community resources	
Positive	BGR ENG PRY
Not significant	AUT CHL TWN COL CYP CZE DNK DOM EST FIN GRC GTM IDN IRL ITA KOR LVA LTU MLT MEX NZL NOR POL RUS SVK SVN ESP SWE CHE THA
Negative	BFL
Community tension	
Positive	GRC SWE BFL
Not significant	AUT BGR CHL TWN COL CYP CZE DNK DOM ENG EST FIN GTM IDN IRL ITA LVA LTU MLT MEX NZL NOR PRY POL RUS SVK SVN ESP CHE THA
Negative	KOR

Note. Italics indicate a marginally significant relationship (p < .1).

Comparison between Expected Electoral Participation and Expected Informal Political Participation

In addition to the influence of national context as a macro-level setting, this study also assumed that the political development relationship would differ according to the mode of political activism. Based on the ecological perspective of human development, proximal processes are influenced by the characteristics of the developmental outcomes under consideration (Bronfenbrenner, 1994). As such, the relationship between political development factors and electoral participation may differ from the relationship between political development factors and participation in informal politics. On the other hand, it is possible that some factors are significant to the development of political qualities regardless of the mode of political activism as in the case of those political development factors that are significant regardless of the national context (e.g., political interest and internal political efficacy).

In this section, I show comparisons between the cross-national relationships for expected electoral participation and the cross-national relationships for expected informal political participation. The comparison between these types of expected political participation addresses RQ 5. Table 4-16 provides the summary of the cross-national relationships between all (personal and contextual) political development factors in this study and both forms of expected political participation.
Table 4-16

Summary of Political Development Relationships for Expected Electoral Participation and *Expected Informal Political Participation* (N = 34)

Predictors	Electoral participation			Informal participation		
	Pos.	Not Sig.	Neg.	Pos.	Not Sig.	Neg.
PERSONAL FACTORS		-			-	
Demographic characteristics						
gender (female)	4(1)	22	8 (1)	7 (1)	19	8 (2)
immigrant background ^a	0	6	12	1	14	3 (1)
Civic knowledge	34	0	0	0	18	16(1)
Personal civic engagement						
school participation	26 (5)	8	0	25 (3)	9	0
political discussions	4 (3)	28	2	28 (3)	6	0
organized activities	4	28	2 (2)	32 (3)	2	0
Psychological motivation						
political interest	34 (1)	0	0	34	0	0
internal political efficacy	33	1	0	34	0	0
collective school efficacy	34	0	0	26 (4)	8	0
CONTEXTUAL FACTORS						
Family context						
SES	11 (3)	22	1	7 (2)	24	3 (2)
Parents' political interest (Q)	30(1)	4	0	12 (5)	21	1
Parents' political interest (V)	32 (4)	2	0	11(1)	23	0
Peers' civic engagement						
school participation	7 (2)	27	0	8 (3)	24	2
political discussions	7 (4)	26	1(1)	13 (3)	21	0
organized activities	4(1)	28	2	13 (3)	21	0
Personally perceived school clin	nate					
openness in discussions	14 (3)	20	0	13 (3)	21	0
student influence	2(1)	20	12 (2)	11	23	0
student-teacher relations	27 (3)	7	0	3 (1)	29	2 (2)
Collectively perceived school cl	imate					
openness in discussions	8 (3)	23	3 (1)	2(1)	28	4 (2)
student influence	0	25	9 (2)	9 (2)	25	0
student-teacher relations	12 (6)	22	0	2(1)	31	1
School SES	6 (3)	25	3	5(1)	26	3 (1)
Community context						
community resources	1	29	4(1)	3	30	1
community tension	3 (3)	25	6 (2)	3 (1)	30	1

Note. Pos. = positive relationship; Not Sig. = not significant relationship; Neg. = negative relationship. Numbers in parentheses indicate the number of countries with marginally significant relationships (p < .1). ^a16 countries were not included because of the small number of immigrant students

Personal Political Development Factors

Gender, immigrant background, and civic knowledge

With regard to adolescents' gender, there was no remarkable difference between the cross-national relationships for electoral participation and the cross-national relationships for informal participation. Male adolescents had higher levels of expected electoral and informal political participation than female adolescents in a few more countries (eight vs. four for electoral participation; eight vs. seven for informal participation). There was no significant relationship between gender and both types of expected political participation in more than half of the countries.

Adolescents' immigrant background was negatively related to expected electoral participation in 67% of the countries. On the other hand, immigrant background was not a significant predictor of expected informal political participation in most countries.

Civic knowledge had very different cross-national relationships with each mode of political activism. In all 34 countries, a greater level of civic knowledge is associated with a stronger willingness to participate in electoral activism as adults. However, civic knowledge had no positive relationships with expected informal political participation in any country; its relationships were either non-significant or negative.

Personal civic engagement experience

There were a few notable points in the cross-national relationships between the three personal civic engagement experience predictors and both forms of expected political participation. First, students' civic participation at school was positively related to both forms of expected political participation in the majority of the 34 countries. Second, students' political discussions outside of school and civic participation outside of school did not have a significant relationship with electoral participation in most countries; however, these outside-of-schoolparticipation factors were positively associated with expected informal participation in most countries. Third, any of the three factors had no negative relationships with expected informal participation in any country.

Psychological motivation

Psychological motivation factors were significant for both forms of expected political participation in general. Political interest and internal political efficacy were positively related to both expected electoral and informal political participation in all countries, with one exception. Although collective school efficacy was not a significant predictor of informal political participation in eight countries, this motivation factor had a positive association with electoral participation in all 34 countries and with informal participation in 26 countries.

Contextual Political Development Factors

Family context

Family SES was not a significant predictor of either form of expected political participation in more than 64% of the countries. However, SES was a positive predictor of expected electoral participation in 11 of the 12 remaining countries and expected informal participation in seven of the 10 remaining countries.

A noteworthy pattern was found in the cross-national relationships with regard to parents' political interest: parents' political interest had positive relationships with students' expected electoral participation in almost all the countries; on the other hand, parents' political interest was not a significant predictor of informal political participation in the majority of the countries. When comparing adolescents whose parents were not interested in politics with those whose

parents were very interested, parents' political interest had no negative relationship with either type of expected political participation in any country.

Peers' civic engagement experience

On the whole, peer effect predictors were not significantly related to either form of expected political participation in the majority of the countries. Nonetheless, considering only significant relationships, some interesting patterns were shown with regard to each predictor. First, peers' civic participation at school was positively related to both forms of expected political participation except for two cases related to informal participation. Second, mingling with schoolmates who had more experience with political discussions outside of school was associated with a stronger willingness to participate in both modes of political activism. Lastly, peers' organized activities were not significantly associated with expected electoral participation in most countries; however, in 13 countries, students surrounded by friends who more actively participated in social organizations or youth groups outside of schools showed a stronger willingness to participate in informal types of politics.

School climate

Each of three student-level school climate predictors showed distinctive cross-national political development relationships. Personal perceptions of openness in classroom discussions were not significantly related to either form of expected political participation in the majority of the countries (20 and 21 countries, respectively), and this predictor was positively related to both forms of expected participation in the rest of the countries (14 and 13 countries, respectively). No negative relationship was found between perceived openness in classroom discussions and either type of expected political participation

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Personal perceptions of student influence at school were not a significant predictor of either electoral or informal participation in more than half of the countries. When focusing on significant relationships, it is notable that personally perceived student influence was negatively related to expected electoral participation in 12 countries but, by contrast, it was positively related to informal political participation in 11 countries.

Personal perceptions of student-teacher relations had positive relationships with expected electoral participation in most countries. On the other hand, perceived student-teacher relations had no significant relationship with expected informal participation in most countries.

As in peer effect predictors, in general, the three school-level school climate predictors were not significantly related to either type of expected political participation in the majority of the countries. Notably, the cross-national relationships between school climate for classroom discussions and expected political participation differ somewhat from the relationships between its corresponding student-level predictor and expected political participation. There were no negative relationships between perceived openness to classroom discussions and either type of expected political participation; however, school climate for classroom discussions was negatively related to expected electoral participation in three countries and to informal political participation in four countries.

The two remaining school-level school climate factors show patterns similar to their corresponding student-level factors. Focusing on significant relationships, the associations between school climate for student influence and electoral participation were exclusively negative; on the other hand, the associations between school climate for student influence and informal participation were all positive. School climate for student-teacher relations was positively related to electoral participation in 12 countries with no negative relationship in any

country; by contrast, this school-level predictor is not significantly related to expected informal participation in almost all (31) countries.

School SES and community context

School SES was a not significant predictor of either type of expected political participation in the majority of the countries. It is noteworthy that school SES was negatively related to expected electoral and informal political participation in three countries.

Community contextual factors (availability of social and cultural resources and social tension in the local community) were not significant predictors of either form of expected political participation overall. Considering only significant relationships, the two community context factors were negatively related to electoral participation in more countries (one vs. four for community resources and three vs. six for community tension), but they were positively related to informal political participation in more countries (three vs. four both community factors).

CHAPTER 5

DISCUSSION

Based on political socialization theory, political development can be explained at both micro and macro levels. An individual develops political knowledge, beliefs, attitudes, and behaviors through constant interactions with human and environmental factors existing in various micro contexts (e.g., family, school, peer group, local community). A macro context (e.g., national economic development and social inequality) influences political development directly by regulating one's social perceptions and behaviors and indirectly by intervening in one's interactions with and within micro contexts. This study assumed the context-specificity of political development: the function of political development factors would not necessarily be the same in different macro contexts. Based on this notion, the current study explored the relationships between a wide range of political development factors and adolescents' expected political participation in different national contexts as a macro-level setting (RQ 1, 2, 3, and 4). I anticipated variability in political development relationships across countries. At the same time, I expected that some political development factors would be important to political development regardless of the national context. This study identified both cross-nationally consistent and inconsistent patterns in political development relationships. These mixed patterns were true for both expected electoral participation and expected informal political participation.

Another main focus of this study was the link between political development and the mode of political activism (RQ 5). According to Bronfenbrenner's (1994) ecological systems theory, the nature of the developmental outcomes under consideration has a crucial influence on an individual's developmental interactions with and within micro contexts. If so, it seems that the direction and result of political development is related to the characteristics of civic outcomes.

For this reason, this study investigated political development relationships for two different modes of political activism (electoral and informal). Previous research has shown that different forms of political participation require different material resources, social networks, and psychological motivation (e.g., Verba et al., 1995) and that a person's perception of the effectiveness of specific forms of political participation can vary according to the personal and social conditions that s/he faces (e.g., C. Cohen, 2006; Middaugh & Kahne, 2008). However, as in the national context, I expected that some factors would show similar cross-national relationships regardless of the type of expected political participation. The results showed both differences and similarities between the cross-national relationships for electoral participation and the cross-national relationships for informal participation.

In this chapter, I summarize and discuss the findings of this study for each political development factor. I address the relationships between personal factors and expected political participation first and then the relationships between contextual factors and expected political participation. In addition, beyond describing political development relationships across different national contexts and different modes of political activism, I discuss national contexts that may be related to political development relationships in all or some of the countries that fell into the same relationship category for some predictors (RQ X1 and X2). I referenced numerous national context indices from multiple reports, selecting international data collected in the same year ICCS was conducted or the closest year available (see Chapter 3).¹⁵

¹⁵ Data from Belgium and the United Kingdom are used to represent Belgium (Flemish) and England.

Personal Factors and Expected Political Participation

Gender

This study found a cross-nationally inconsistent relationship between gender and expected political participation. In other words, female adolescents have higher levels of willingness to participate in both modes of political activism than male adolescents in some countries, similar levels of willingness in other countries, and lowers levels of willingness in still others. A body of literature has documented variations in the influence of gender on civic engagement based on the national context and the form of engagement. For example, a recent report on American women's engagement in civic and political domains illustrated that young women are more likely than their male counterparts to join community associations, to spend more time on volunteer service, and even to vote; on the other hand, they tend to have less interest in politics, to participate less in political discussions, to pursue future careers in a political domain less frequently, and to show lower self-confidence in political leadership (Kawashima-Ginsberg & Thomas, 2013). Comparative research on civic engagement in Europe and North America revealed that a national context in favor of women's political leadership and participation is positively related to female adolescents' political discussions and willingness to participate in politics as adults (Flanagan & Wray-Lake, 2011).

When comparing the cross-national relationships for expected electoral participation and the cross-national relationships for expected informal participation, interesting gender difference was found in England. Female adolescents in England had lower levels of willingness to participate in electoral activity in adulthood than male peers, but they had a stronger intention to participate in informal types of political activism during the next few years. It is expected that England possesses unique national context(s) related to this notable pattern.

My investigation using international data resources suggests that the disparity or the alikeness in expected political participation between female and male adolescents (micro-level political development) might be associated with the level of gender equality in a society (macro context). Figure 5-1 displays the relationships between gender effects on expected political participation and the Gender Empowerment Measure across 34 countries. In Figure 5-1, the yaxis represents the relationship between gender and expected electoral (the top chart) and expected informal political participation (the bottom chart). On the y-axis, a four indicates that the relationship between gender and expected political participation is positive (i.e., female adolescents have higher levels of willingness to participate in politics than males) (p < .05), a two indicates that the relationship is marginally positive (p < .1), and a zero means that the relationship is not significant. A minus four indicates that the relationship between gender and expected political participation is negative (i.e., the female adolescents have lower levels of willingness to participate in politics than males) (p < .05), and a minus two indicates that the relationship is marginally negative (p < .1). The x-axis is the Gender Empowerment Measure, which represents the degree of gender equality in economic and political domains. On the x-axis, "1.000" indicates societies with perfect gender equality.

Figure 5-1 shows that in countries in which female adolescents had a stronger willingness to participate in politics than male peers, women were more active in economic and political domains. With regard to electoral participation, four countries in which female adolescents had higher levels of expected electoral participation recorded high gender empowerment scores. The relationship between the gender effect and gender inequality is clearer in informal participation. Countries in which females had higher levels of expected informal participation than males showed relatively higher gender empowerment scores (except for the Russian Federation) while countries in which females had lower levels of expected informal participation showed relatively lower gender empowerment scores.

The relationship between the gender effect on expected political participation and the level of gender inequality can also be identified using a gender inequality indicator specifically related to a political domain. Figure 5-2 illustrates the relationships between the gender effect and the percentage of women in parliament. As in Figure 5-1, the y-axis represents the relationship between gender (female) and adolescents' expected political participation. The x-axis indicates the percentage of woman-held seats in parliament. Overall, countries in which female adolescents had a stronger expected electoral (the top chart in Figure 5-2) or expected informal participation (the bottom chart in Figure 5-2) than males had relatively more women in parliament. In countries in which female adolescents were less inclined to participate in politics than males, there were relatively fewer female members of parliament. Figure 5-1 and Figure 5-2 suggest the possibility that a national context that encourages or discourages women's advancement in economic and political domains is related to a greater or lesser degree to the development of female adolescents' willingness to participate in politics.

In addition, it seems that the gender effect is somewhat related to the overall quality of life in a society. Figure 5-3 displays the relationship between the gender effect on expected political participation and the Human Development Index (HDI), which "measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living" (United Nations Development Programme, 2010, p. 216). The x-axis indicates HDI scores. Higher values on this index (close to one) represent more developed countries based on health, education, and economy as a whole. With respect to expected electoral participation (the top chart in Figure 5-3), no clear association between the gender effect and the HDI is shown. However, four countries in which female adolescents had a stronger willingness to participate in electoral politics than male peers recorded very high HDI scores. Moreover, for informal political participation (the bottom chart in Figure 5-3), countries in which female students had a stronger willingness to participate in informal types of political activity as youth than male students show very high HDI levels (except for the Russian Federation). On the other hand, countries in which males have higher levels of expected informal political participation show relatively moderate or low levels of the HDI among the countries.

Considering the relationships between the gender effect on expected political participation and the above three indices (Figure 5-1, 5-2, and 5-3), it seems that the influence of gender inequality and overall quality of life is more pronounced on expected informal participation than expected electoral participation. This difference may be connected to the characteristics of the two different forms of political participation. While electoral participation is more likely system-driven and institutional, informal participation is a more active and more voluntary activity. Governments or systems encourage citizens to participate in elections—even by compulsory voting laws in some countries; on the other hand, it is possible that they less actively support citizens' informal political participation. In this situation, the amount of resources necessary for citizens to participate in electoral activism is smaller than the amount needed for informal participation.

In addition, expression of one's opinions is fairly influenced by the social and political climate and fear of social censure (Hayes et al., 2005). Individuals perceive and expect that different forms of political participation can result in different degrees of social alienation or conflict (Ulbig & Funk, 1999). In some societies, by revealing a personal perspective, an

individual opens him/herself to criticism and places him/herself at serious emotional and physical risk. Informal political participation often requires strong motivation or stimulation because some active forms of participation (even public discussions) accompany public exposure of one's social and political perspectives. Therefore, social norms and context in favor of disclosure of minority opinions and active participation by female citizens are likely to contribute more to women's participation in more active and direct types of political activism.

In sum, the effect of gender on adolescents' expected political participation is not the same in different national contexts. It seems that the level of gender equality in economic, social, and political domains is associated with the development of female adolescents' willingness to participate in politics—at the very least, in some countries. In particular, female students' informal participation might be more sensitive than electoral participation to women's social and political advancement in their country. For socially disadvantaged groups, informal types of political participation are often more powerful and direct ways to ameliorate their social and political conditions than system-driven participation (e.g., voting). In this respect, gender inequality at the macro level and gender effects at the micro level can be reciprocally related. As a macro context, reduced gender inequality increases the likelihood that female adolescents will engage in active forms of political participation as well as electoral participation (micro-level political development). Their active participation in the present and future will decrease the gender gap in diverse areas, including economic, social, and political domains. Therefore, it seems that efforts to promote the political participation of female adolescents at a micro level should go hand in hand with efforts to reduce gender inequality at a macro level—especially, in societies with serious gender inequality which lack social awareness and institutions in favor of women's social and political advancement.



Figure 5-1. Cross-national relationships between gender (female) and expected electoral and informal political participation by Gender Empowerment Measure. Y-axis: 4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship; -2 = a marginally negative relationship; -4 = a negative relationship.



Figure 5-2. Cross-national relationships between gender (female) and expected electoral and informal political participation by the percentage of women in parliament. Y-axis: 4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship; -2 = a marginally negative relationship; -4 = a negative relationship.



Figure 5-3. Cross-national relationships between gender (female) and expected electoral and informal political participation by Human Development Index. Y-axis: 4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship; -2 = a marginally negative relationship; -4 = a negative relationship.

Immigrant Background

This study found that different cross-national relationships exist between students' immigrant background and each mode of political activism. Immigrant students had lower levels of expected electoral participation than native students in many countries (12 of 18 countries). On the one hand, this reflects the common idea that students from underrepresented backgrounds have less faith in the effectiveness of system-driven political participation. On the other hand, it is possible that the immigrant adolescents in this study did not expect to gain the citizenship necessary to vote in local and national elections. Moreover, when their parents do not have suffrage, immigrant adolescents lack parental role models for electoral participation. This relationship between citizenship status and the influence of immigrant background on expected electoral participation may be clearer in counties with compulsory voting. Figure 5-4 shows that immigrant adolescents in the two countries that have compulsory voting, Belgium and Greece (one on the x-axis), had lower levels of willingness to participate in electoral activities (-4 on the y-axis) than their native peers.

In terms of informal political participation, it is remarkable that there was no difference in informal political participation between immigrant and native students in most countries (14 of 18 countries) given previous studies showing the negative influence of an immigrant background on civic engagement. Immigrant adolescents in Ireland even had a stronger willingness to participate in informal types of political activity than native students; this phenomenon warrants a case study. Possible hypotheses are (1) that 14 years old is too young to have interest or experience in informal types of political participation in some countries and (2) that 14-year-old adolescents are not allowed to be actively involved in social and political issues in other countries. Therefore, in these countries, the willingness of native students to participate in informal political activities is as low as that of immigrant students. Another hypothesis is (3) that immigrant students in still other countries believe that informal types of political activity are more effective ways of being heard and achieving their social and political needs than systemdriven political activities. In these countries, immigrant students are equally as willing to participate in informal political activities as native students. It is possible that racial identity (Schildkraut, 2005) and experience as members of underrepresented groups (Middaugh & Kahne, 2008) are related to immigrant students' preference for informal types of political participation.



Figure 5-4. Cross-national relationships between an immigrant background and expected electoral participation by compulsory voting system. Y-axis: 0 = a non-significant relationship; -2 = a marginally negative relationship; -4 = a negative relationship.

Unfortunately, as mentioned earlier, the sample size of immigrant students of many countries in the current study was too small to represent the population of immigrant adolescents

in the countries. Therefore, further research in more countries is required to understand the role of an immigrant background in the political development process in diverse national contexts. Nevertheless, this study presents a broad picture: at least for 14-year-old adolescents, the effect of an immigrant background on the development of willingness to participate in politics may not be identical in different national contexts and between different modes of political activism.

Civic Knowledge

One of the most interesting findings in my study is that the cross-national relationships between civic knowledge and expected political participation were different by the mode of political activism. Civic knowledge had positive relationships with adolescents' expected electoral participation in all countries. By contrast, civic knowledge was not significantly or even negatively related to informal political participation in all countries. This finding resonates with previous studies that revealed different relationships between civic knowledge and diverse forms of civic engagement (e.g., Hart et al., 2007; Hooghe & Quintelier, 2011). In particular, the positive relationship between civic knowledge and expected electoral participation regardless of the national context highlights the importance of civic knowledge to a greater degree than previous research.

However, although civic knowledge can have varying relationships with different types of political activity, it is surprising that civic knowledge did not have a positive relationship with adolescents' expected informal participation in any countries. With regard to this result, the first possible explanation is similar to the explanation I posited with respect to the gender effect national contexts that does not support adolescents' active participation in social and political issues. In some societies, adolescents' active social engagement may not be socially welcomed or institutionally supported. In particular, in societies where academic success in adolescence is very closely related to socioeconomic success and students have the heavy pressure of academic achievement (e.g., passing high-stakes tests and fulfilling tasks in many subject matters), adolescents' political participation can be dismissed as a waste of time or regarded as a detriment to academic and social success. Under this macro context, official knowledge stressed through national standards and curriculum content is highly likely, at best, to inculcate strong beliefs in system-driven, formal, and moderate participation rather than to impress the necessity of transformative engagement on students or, at worst, to justify marketized competition as essential in a capitalist society cunningly disguised as a democratic society (Apple, 2000, 2006). As a result, civic knowledge may be influential in encouraging adolescents to participate in electoral activism as adults, but it may not be conducive to developing active participation in adolescence.

Second, it is possible that the civic education curriculum in this grade (8th-9th) focuses on the institutional procedures of political participation and emphasizes personally responsible citizenship rather than participatory and justice-oriented citizenship. Civic education that exclusively focuses on a model of personally responsible citizenship seeks to inculcate adolescents with the civic traits required to live as a member of a community, such as good neighborliness and loyalty, tends to avoid politics and policy (Westheimer & Kahne, 2004). Responsibility, integrity, and obedience are important individual traits in a good and functional society; but they are not necessarily democratic or transformative (Hess, 2009; Westheimer & Kahne, 2004). Therefore, civic knowledge based on personally responsible citizenship may not encourage adolescents to participate in direct and active types of political activity. In fact, civic knowledge itself is not necessarily democratic, and therefore civic knowledge needs to be distinguished from democratic knowledge (Hess, 2009). In order for civic knowledge to serve as a resource for democratic civic engagement, civic learning should be grounded in a thorough consideration of democratic citizenship (Hess, 2009; Westheimer & Kahne, 2004). Adolescents should have opportunities to understand notions of and participate in democratic and transformative action. However, when the curricular focus on personally responsible and obedient citizenship is combined with the macro-context discussed above, the disconnection or negative relationship between civic knowledge gained from schools and informal types of political activism during adolescence seems to be exacerbated.

Third, 14-year-old adolescents are likely to be familiar with electoral participation, but not with informal participation. Beginning in the early grades, children are frequently exposed to electoral activities such as classroom elections and student councils; on the other hand, until late adolescence, they have relatively little or even no chance to experience informal types of political activity, such as writing a letter to the editor of a local newspaper and joining social and political organizations. Given the importance of situated learning to political development (McIntosh & Youniss, 2010), students in early and middle adolescence have too few situated learning opportunities to practice informal types of political participation while they have relatively sufficient situated learning experience with electoral participation. This lack of informal participation experience seems to be more serious in national contexts in which adolescents' active participation in current issues is not institutionally and socially supported. Without adult scaffolding-another key element of positive political development (McIntosh & Youniss, 2010)—it may be difficult for 14-year-old adolescents to have quality informal participation experience and to understand unfamiliar modes of political activism. Simple information that is not supported by situated learning and adult scaffolding is likely to have little influence on the development of willingness to participate in informal political activism.

Lastly, acquisition of civic knowledge does not fuel some forms of political participation. As discussed above, informal political participation is likely to demand relatively stronger willingness to participate in politics compared to system-supported formal participation. Some informal types of activities cost more in material resources such as time and money (Verba et al., 1995) and require participants to shoulder heavier burdens and face greater obstacles such as societal ignorance and criticism. With regard to the relationship between civic knowledge and informal political participation, Green et al.'s (2011) experimental study on the effect of knowledge of constitutional principles on support for civil liberties is noteworthy. Their study was designed to test the theoretical claim that political knowledge has a positive effect on democratic political attitudes and support for democratic values (Delli Carpini & Keeter, 1996; Galston, 2001; Nie, Junn, & Stehlik-Barry, 1996). To do so, they randomly assigned high school students to two different civics curricula—the experimental curriculum "designed to promote awareness and understanding of constitutional rights and civil liberties" (Green et al., 2011, p. 463) and the regular civics curricula introduced as the control curricula. Then, they examined how students' acquisition of political knowledge specifically related to civil liberties impacts support for civil liberties. The study concluded that "it is possible to increase awareness and understanding of civil liberties without producing an increase in support for those civil liberties" (Green et al., 2011, p. 474). That is, civic knowledge may not be causally connected to political attitudes. Although their study might not be generalizable to all kind of political attitudes and behaviors, their finding suggests that civic knowledge does not necessarily promote any mode of political activism. Building on Green et al.'s (2011) findings, the results of this study imply that civic knowledge is important to the development of willingness to participate in system-driven formal types of participation but that civic knowledge is less influential in encouraging

participation types that require a greater amount of material resources and more intense psychological motivation.

In short, the relationship between civic knowledge and expected political participation is likely to be influenced by the macro context (e.g., social perceptions of diverse modes of political activism—in particular, active participation during adolescence, the directions and contents of civic education at this grade level, and civic engagement experience available to this age group) and the characteristics of different types of political activity (i.e., difference in psychological, material, and social resources necessary for different forms of political participation). It seems that these elements jointly affect the function of civic knowledge in the political development process.

Civic Engagement Experience

Civic participation at school was positively associated with electoral participation, informal participation, or both in all countries but Austria, Indonesia, and Lithuania. No negative relationship with either form of political participation was found in any country. This result reaffirms the importance of school-based civic and citizenship education for positive political development (Galston, 2004; Levine, 2007; Trafford, 2008). The current study identified that participation in extracurricular activities and student government could be beneficial to adolescents' political development *in different national contexts*.

Notably, in five countries, civic participation at school was positively related only to expected electoral participation, and in six countries, it was positively related only to expected informal participation. This might be related to the different characteristics of civic engagement opportunities that adolescents encounter at school in these countries. Group activities at school can have traits related to both formal (e.g., elections in a student assembly) and informal

engagement (e.g., casual discussions with colleagues in extracurricular activity and joining a socially active student club). It is possible that in these 11 countries, one type of engagement is more popular in schools but the other is not encouraged. Detailed investigations for these countries might reveal which distinct features of civic engagement experience at school in different macro contexts are related to specific political qualities.

As an example of the link between macro context and the function of civic participation at school in the political development process, figure 5-5 displays cross-national relationships between civic participation at school and adolescents' expected informal political participation by global region. The y-axis represents the relationship between civic participation at school and expected informal participation (4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship). The x-axis represents regions (1 = WesternEurope; 2 = Eastern/Central Europe; 3 = Scandinavia; 4 = Hispanic America; 5 = Asia; 6 = NewZealand). In all Scandinavian countries (Denmark, Finland, Norway, and Sweden), participatory experiences in school activities had positive relationships with expected informal participation. In contrast, civic participation at school did not have a significant relationship with informal participation in any of Asian countries (Chinese Taipei, Indonesia, the Republic of Korea, and Thailand). It seems that certain macro contexts shared among the countries in the same region, such as historical and cultural milieu, may account for the difference between the two regions in the influence of civic participation at school on students' willingness to participate in informal types of political activity. For example, active political participation during adolescence may not be supported and may even be discouraged in countries in which academic achievement is the deciding factor for social success and therefore academic competition is regarded as the most important way to maintain or improve one's social position. The Asian countries included in this

study might share this social perception and societal structure. Civic participation at school in this social condition is unlikely to have a meaningful influence on adolescent political participation. The length of experience as a democracy might also be related to the difference between Scandinavian (old democracies) and Asian countries (relatively young democracies).



Figure 5-5. Cross-national relationships between civic participation at school and expected informal political participation by region. Y-axis: 4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship.

Figure 5-6 suggests other possible macro contexts which seem to be related to the difference between Scandinavian and Asian countries. Compared to Asian countries (the data for Chinese Taipei is missing), Scandinavian countries invested a higher percentage of their GDPs in public education (the top chart in Figure 5-6). In addition, Scandinavian countries record the highest levels of gender equality in economic and political domains; on the other hand, Asian



Figure 5-6. National education expenditure (% of GDP) and Gender Empowerment Measure across countries

countries (the data for Chinese Taipei is missing) show relatively low levels of gender equality (the bottom chart in Figure 5-6). In order to figure out the influence of gender inequality as a macro context, further research on the disparity between female and male adolescents in civic engagement experience at school and its relationship with political behavioral intention in female and male adolescents is required.

Regardless of the national context, civic participation experience outside of school (political discussions and organized activities) seems to be important to the development of adolescents' expected informal participation but not to the development of expected electoral participation. Considering the characteristics of these two outside-of-school participation predictors, this result is understandable. Political discussion is an informal type of participation activity defined in this study. It is likely that students who more frequently discuss political issues with parents or friends will more easily engage in political conversation with others in different settings. Organizations or groups for social and political causes require their members to actively and directly participate in target issues to achieve their goals. Therefore, it seems natural that participation in organized activity. It is worth noting that political discussions and organized activities had no significant relationship with expected electoral participation in most countries.

Political discussions outside of school had no positive relationships with any form of expected political participation in Bulgaria, the Dominican Republic, Estonia, Greece, the Republic of Korea, and Thailand. Participation in organized activities outside of school was not positively associated with either outcome variable in Bulgaria and Latvia. For Bulgarian adolescents, it seems that civic participation outside of school was not influential in developing willingness to participate in politics. In Bulgaria, all three civic engagement experience predictors had nothing to do with adolescents' expected electoral participation. An unexpected result is the negative relationships between political discussions and electoral participation in the Dominican Republic and Estonia and between organized activities and electoral participation in Chile and Latvia. These relationships can be interpreted in two ways: (1) civic participation outside of school (either predictor) may help adolescents recognize the limitation of electoral participation under their national context and increase distrust in civic institutions, including local and national governments and representatives; and (2) adolescents who have believe less in the effectiveness of electoral participation may try to be directly involved in community and political issues (or to remain politically indifferent). If the first interpretation is correct, civic participation outside of school is a way in which adolescents in these countries understand social context, which in turn decreases their willingness to participate in electoral activities. If the second is true, adolescents already perceive electoral participation as ineffective for them based on direct and indirect experiences in their social context; and therefore, civic participation outside of school is the outcome from their experience rather than the window through which they view society and politics.

These results for previous civic engagement experience suggest that civic education should provide adolescents with opportunities to experience diverse forms of civic engagement. The current study builds on the assumption that different forms of political participation have distinct aspects; therefore, the influence of predictors on willingness to participate in politics might differ based on the form of participation. Findings suggest that formal (i.e., electoral) and informal types of participation at school are positively related to both forms of participation and that casual or active types of participation outside of schools (political discussions and organized activities outside of school) are positively associated with expected informal political participation, but not with electoral participation. It seems that the transference of previous political participation experience to future participation is more likely to occur between similar forms of activities. Therefore, appropriate and specific civic engagement experience should be provided to adolescents according to the purpose of the civic engagement program. In addition, this study shows that schools are a great venue for exposure to and instruction about diverse dimensions of political activism.

Psychological Motivation

This study resonates with previous research that demonstrates the close relationships between psychological motivational factors and political behavioral intention and behaviors (e.g., Beaumont, 2010; Schulz, 2005; Ulbig & Funk, 1999; Verba et al., 1995). Political interest, internal political efficacy, and collective school efficacy were all significant predictors of both forms of expected political participation regardless of the national context. In other words, the influence of motivational factors on expected political participation is independent from the mode of political activism and the national context. This suggests that civic education to promote these motivation factors can contribute to the development of multiple modes of political activism in diverse social and national contexts.

The tight relationship between motivational factors and expected political participation may include the mediating effect of these predictors on the relationship between other political development factors and expected political participation. Previous research has documented the mediating effect of motivational factors on civic engagement and political development (e.g., Beaumont, 2011; A. Cohen et al., 2001; Pasek et al., 2008; Schulz & Fraillon, 2012). In fact, I detected the possibility of the mediating effect of motivational factors in the process of analysis although I did not report it in this dissertation. As described, I employed a four-step procedure to analyze the data (see the Analytic Strategy in Chapter 3 for a detailed explanation). During the four-step analytical procedure, I found that when the motivational factors were introduced to the model, the relationships between many student-level predictors and expected political participation changed in all 34 countries. Some relationships even shifted from significant to non-significant relationships. In addition, the three motivational factors had significant correlations with the outcome variables and the majority of student-level predictors (see Appendix C). In this respect, the motivational factors in the current study might serve a mediating role in the political development process. Future research can examine whether the motivational factors mediate political development relationships in each country, how different or similar the mediating effect of the motivational factors is across countries, and whether predictors mediated by the motivational factors in some countries are also mediated by the factors in other countries. These questions will provide practical knowledge that helps to plan meaningful civic learning programs and civic engagement opportunities for adolescents in different macro contexts.

Contextual Factors and Expected Political Participation

Family

Despite the significant correlations between family SES and both types of political participation in most countries (see Appendix C), family SES did not have a significant relationship with expected political participation in more than half of countries. In these countries, it seems that the non-significant relationship is related to the introduction of other predictors. In other words, the disparity in expected political participation among adolescents

from different socioeconomic backgrounds might be explained to a great extent by the difference among adolescents in other personal and/or environmental factors—in particular, motivational factors as discussed above. As another possible explanation, 14-year-old adolescents in these countries may be too young to have experienced the influence of socioeconomic stratification on their social lives. If so, perceptions of political participation among the adolescents may not vary along social class lines *yet*. The effect of SES on political development might increase along with development stages as an individual has cumulative direct/indirect personal and collective experience and gains a deeper and wider view of society.

A notable group of countries with regard to the relationship between family SES and expected political participation is the Latin American countries in the study: Chile, Colombia, the Dominican Republic, Guatemala, Mexico, and Paraguay. In Figure 5-7, the y-axis represents the relationship between family SES and adolescents' expected informal participation, and the xaxis represents global regions. As shown in Figure 5-7, family SES had no significant relationship with either type of expected political participation (zero on the y-axis) in any Latin American countries (four on the x-axis) except for the Dominican Republic. In this study, Dominican adolescents from more advantaged families showed lower levels of willingness to participate in both electoral and informal types of political activity, which is unusual given the common notion that SES has a positive effect on civic engagement. However, because of the considerable number of missing cases in the data from the Dominican Republic, this result should be interpreted with caution—supplementary studies are warranted.



Figure 5-7. Cross-national relationships between family SES and expected political participation by region. Y-axis: 4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship; -2 = a marginally negative relationship; -4 = a negative relationship.





Figure 5-8. GDP per Capita (PPP US\$) and Gini Index across countries

Interestingly, these Latin American countries recorded relatively low GDP per capita (PPP US\$)¹⁶ and high Gini coefficients (see Figure 5-8). It is possible that the influence of SES on political participation in relatively poor countries such as these where a small number of people possess most of the national wealth and most others suffer from scarce socioeconomic resources is different from the influence of SES in countries with more stable social and economic structure. In a poor and economically polarized society, the powerful may make use of institutional procedures as a way to maintain their personal economic and social status and may not appreciate the social value of political participation. On the other hand, for the majority of the population living in desperate conditions, political action might be regarded as the most influential or even the only way to improve their circumstances and ameliorate the existing unfair social order. In this case, the influence of SES on political participation is unlikely to be proportional to individuals' SES levels. In short, the effect of SES may not be visible in a very polarized society unless we scrutinize the meaning and importance of political participation for each social class in the society.

With regard to this argument, in Thailand, a country with a low GDP and a high Gini index value, family SES was not a significant predictor of either form of political participation as in the Latin American countries. However, another Asian country—Indonesia—tells a different story. Indonesia marks the lowest GDP per capita (PPP US\$) of the 34 countries and has a high Gini coefficient (see Figure 5-8). However, family SES had a positive relationship with both electoral and informal participation (p < .1 and p < .05, respectively). Another noteworthy individual case is the Czech Republic, which is the only country in which family SES had a

¹⁶ In order to compare national wealth across countries, the Human Development Report 2009 used GDP per capita dollar estimates derived from the purchasing power parity (PPP) calculation (see United Nations Development Programme, 2009).

positive relationship with electoral participation (p < .05) but a negative relationship with informal political participation (p < .1). These unique relationships between family SES and expected political participation in Indonesia and the Czech Republic are likely attributable to their distinct national contexts.

This study supports previous research documenting the importance of parents' roles in adolescents' political development (e.g., Hart et al., 2004; Jennings et al., 2009; McLellan & Youniss, 2003). In all but one country, parents' political participation was positively related to adolescents' willingness to participate in electoral activity, informal activity, or both. The only exception is Latvia in which parental political interest had no significant relationship with either form of political activism. It is notable that parents' political interest had different cross-national relationships with each type of expected political participation. Students living with parents who were very interested in politics had a stronger willingness to participate in electoral activities regardless of the national context. In contrast, no significant relationship between parents' political interest and expected informal political participation was found in more than half of the countries.

The cross-nationally inconsistent relationships between parents' political interest and expected informal political participation can be explained in part by parents' desire for their child's academic and social success. Parents who have strong political interest play an important role as a source of civic knowledge and engagement experience and increase their child's interest in social and political issues. However, simultaneously, parents may stress the importance of academic achievement in adolescence. That is, parents can send two conflicting messages: "Politics is something we need to pay consistent attention to. But, for now, it is not something that you need to engage in." The influence of parents' political interest on adolescents' expected

informal participation might be related to a social context in which one of the two messages is more powerful or both messages are balanced. In particular, in a society in which academic success is the most powerful path toward social success, parents are highly likely to urge their children to focus all their attention on academic achievement. Consequently, parents' eagerness for their children's academic success could override the influence of parental political interest on adolescents' informal participation. If this is true, countries showing a positive relationship between parents' political interest and adolescents' informal participation are noteworthy cases because this relationship pattern implies that parental political interest boosts adolescents' informal political participation regardless of how much pressure parents place on their children to succeed academically. Which macro and family contexts produce a positive relationship between parents' political interest and expected informal participation is an important and interesting research topic for future research.

Gender role socialization can also contribute to an explanation of the cross-nationally inconsistent relationships between parents' political interest and expected informal political participation—in particular, for non-significant relationships. In some societies, parents may send different messages to boys and girls regarding their roles in a family and a society. Specifically, parents may encourage political interest more for males, which can lead to male adolescents' stronger willingness to participate in politics. On the other hand, parents, even those who have strong political interest, may hinder females from having interest in social and political issues and suppress female adolescents' attempts to take active roles in social and political domains. In this case, the influence of parents' political interest on adolescents' expected informal participation might not be detected unless we examine a male group and a female group separately. A non-significant relationship between parents' political interest and expected
informal political participation is a manifestation of gender inequality. In order to identify this gender disparity, further research on the influence of gender on the structural relationship between parents' political interest, adolescents' political interest, and adolescents' informal participation is required.

In sum, the cross-national relationships between parents' political interest and expected political participation confirm my assertion that political development relationships vary according to the macro context and the mode of political activism. In addition, given the intimate relationship between parents' political interest and adolescents' expected electoral participation regardless of the national context, it is worthwhile to think about how to increase parents' political interest. Some studies indicating that parents' involvement in civic education programs may produce positive civic outcomes for the parents themselves as well as their children (e.g., Bixby, 2008; Linimon & Joslyn, 2002). It is meaningful work to examine whether and how adolescent civic education can increase their parents' political interest in diverse macro contexts. **Peers**

In general, peers' civic engagement experience (average civic engagement experience of students in a school) was not significantly related to expected political participation in the majority of the countries. However, in quite a few countries, attending a school in which classmates/schoolmates had more civic engagement experience at and outside of school was positively associated with one type of expected political participation. To put it another way, in these countries, an adolescent can benefit from having classmates who actively participate in school and community activities by sharing norms of participatory citizenship and observing peers' political behaviors. In addition to these general patterns, there are a few interesting cases that are worthy of further investigations.

First, in Mexico and Latvia, peers' school participation (average civic participation at school of students in a school) had negative relationships with expected informal participation, while personal civic participation at school was positively related to expected informal participation. In other words, students who had more actively participated in school activities had a stronger willingness to participate in informal types of political activity during the next few years; however, attending schools in which classmates actively participated in school activities was associated with lower levels of willingness. A possible explanation for the negative relationship between peers' school participation and expected informal participation is derived from dysfunctional school activities. For example, when an individual repeatedly watches and experiences messy, disorganized, and unproductive student-led collective activities, s/he may question the effect of informal student participation and abstain from being involved in informal activities. This tendency may be strengthened in cases where electoral types of activities prove more effective and functional in addressing school issues.

Second, in Italy, peers' political discussions outside of school (the average of students' political discussion outside of school in a school) had a negative relationship with expected electoral participation but a positive relationship with expected informal participation. In the Russian Federation, peers' organized activities outside of school (the average of students' civic participation outside of school in a school) had a negative relationship with expected electoral participation but a positive relationship with expected informal participation.

Third, Belgium (Flemish) is the only country in which peers' political discussions outside of school and peers' organized activities outside of school were positively related to both types of expected political participation. In Indonesia, peers' school participation was positively associated with both types of expected political participation; however, peers' organized activities outside of school were negatively related to expected electoral participation and not significantly related to informal participation. Each of these results is likely connected to their idiosyncratic national contexts and warrant case studies.

Overall, the results of this study imply that civic engagement during adolescence is effective in developing individuals' participatory citizenship. This study found not only that personal civic engagement experience was positively associated with both forms of adolescents' expected political participation in almost all countries but also that peers' civic engagement experience was positively associated in quite a few countries. Therefore, providing adolescents with more civic engagement opportunities can contribute to positive political development by allowing them to directly participate in the opportunities and to observe their peers' behaviors.

In some cases, the groups with whom adolescents associate (sharing civic and political norms and observing peers' behaviors) might be more influential in the political development process than the activities that individual adolescents participate in (students' personal experiences). I found that civic engagement experience had positive relationships with expected political participation only at the school level, not at the student level, in several countries (e.g., Colombia and the Republic of Korea). In these countries, the effort to provide civic participation experience to the student body as a whole (e.g., mandated community service) could be more effective in developing expected political participation than encouraging individual students' voluntary civic participation. However, this result might have a different implication. We cannot rule out the possibility that students are segregated by social background in these countries—that is, students who have much civic engagement experience attend the same school. If this is true, the positive influence only at the school level is not evidence showing positive peer effects but rather a sign of social inequality and tacit segregation.

School

It is natural for people with different personal characteristics and backgrounds to perceive and interpret a certain situation or experience in different ways. Similarly, students are highly likely to have their own personal perceptions of school climate and to make their own interpretations of their experience in a school. Moreover, in fact, students in the same class and school do not necessarily all enjoy equal educational opportunities and experiences. That is, an individual student's experience with school climate is not necessarily a direct reflection of the overall school climate. This study took into account the difference between personally perceived school climate and actual (or overall) school context by distinguishing school context at the student level from school context at the school level. After discussing the student- and schoollevel effects of school climate, I present the findings on school SES.

Personal perceptions of school climate

Personal perceptions of openness in classroom discussions had cross-nationally inconsistent relationships with both forms of expected political participation. In 13 countries, this predictor was not a significant predictor of either form of expected political participation. In 15 countries, the political development relationships are different for electoral and informal political participation. In Greece, Indonesia, Italy, Norway, Poland, and Thailand, personally perceived openness in classroom discussions had positive relationships with both forms of expected political participation. This result clearly shows that the influence of openness in classroom discussions on adolescent political development varies according to the national context and the mode of political activism.

In all the Asian countries, personal experience of democratic classroom discussions was positively associated with expected informal participation. This pattern is interesting given that civic participation at school, as discussed, had no significant relationship with informal participation in these countries. While activities related to civic participation at school are more likely extracurricular and student-led, classroom discussions can be categorized as teacherscaffolded and instructionally-designed. Based on this characterization, these results can be understood in three possible ways. First, civic participation at school in the Asian countries may focus mainly on electoral activities. Autonomous student activity at school may be limited or not encouraged. Second, related to the first point, if adolescents in these countries have little experience of informal types of civic engagement, democratic classroom discussion must be a very important way for students to be exposed to diverse perspectives on an issue and to express themselves. In this situation, a teacher is a significant actor who can help students as newcomers to understand the unfamiliar repertoire of political activism. Third, although civic participation at school may provide a good chance for adolescents to experience diverse and autonomous civic engagement, it is not always beneficial or even functional. Assuming that classroom discussions designed by teachers are more organized, systemic, and instructional, these results in the Asian countries might show the importance of the quality of civic engagement opportunities. Further research on adolescents' civic experience at school in the Asian countries will provide a better understanding of what kind of civic engagement experience should be provided and how best to provide it to foster positive adolescent political development.

Personal perceptions of student influence on decisions about school are a good example of factors that exhibit varying political development relationships according to the mode of political participation. This predictor was negatively or not significantly associated with expected electoral participation but positively or not significantly associated with expected informal participation. The Russian Federation and Chinese Taipei are exceptions: in these countries, positive relationships were found between personally perceived student influence and expected electoral participation.

Focusing on the significant relationships, the positive relationship between perceived student influence and expected informal participation suggests that students' feelings of empowerment are closely related to positive political development. However, how can we explain the negative relationship between perceived student influence and electoral participation? A possible explanation can be derived from the way in which students' voices are heard in a school and applied to school practice. In some schools, students' collective voices may be accepted only when students make persistent and strong petitions, while their opinions formed through electoral procedures may not be accepted. Students in such school environments are likely to form beliefs in the effectiveness of active and direct participation but to raise doubts as to the usefulness of system-driven electoral activism. The disparity in students' beliefs in the effectiveness of different modes of political activism may be wider in a society in which citizens perceive that electoral participation has little influence on their reality—particularly, for adolescents who have constantly experienced inequality in indirect and direct ways (C. Cohen, 2006; Junn, 1999; Middaugh & Kahne, 2008). In addition, adolescents in a society that experienced a political upheaval or huge social change in the recent past which was triggered by active, intense citizen participation are likely to have strong beliefs in the effectiveness of informal types of political activism in achieving collective goals.

With regard to the way in which students' voices are heard and accepted in school, it is worthwhile to think about the equality of student voices. As Sanders (1997) stated, "Insidious prejudices [regarding class, race, and gender] may incline citizens to hear some arguments and not others. Importantly, this prejudice may be unrecognized by those citizens whose views are

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disregarded as well as by other citizens" (p. 353). In the same fashion, it is possible that the voices of a few students in power who have better grades and/or advantaged family backgrounds could be disproportionately privileged and accepted. An even worse scenario is one in which only the opinions of dominant students are repeatedly brought up for a school/classroom debate or on a ballot (that is, they are in control of all formal procedures for forming public opinions). Under these circumstances, students might question the meaning of an electoral process and think of an electoral process as a procedure that justifies the opinions of some. In more extreme cases, adolescents might recognize, accept, and acquiesce to the inequalities among people from a very early age. The opposite situation is that student opinions are adopted only based on majority rule excluding an appropriate deliberation process. In this scenario, perceived student influence may have nothing do to with expected informal participation. Therefore, schools and teachers should consider how to capture the opinions of the entire student body and simultaneously how to allow diverse opinions to be heard.

Some countries showed distinctive relationships between personally perceived student influence and expected political participation. Chinese Taipei and the Russian Federation were only countries in which perceived student influence was positively related to expected electoral participation. In the Republic of Korea, Latvia, and New Zealand, this predictor had negative relationships with electoral participation but positive relationships with informal participation.

Using international data, I discovered that in a group of countries a few national contextual factors might influence the relationship between perceived student influence and expected informal political participation. In Figure 5-9, the y-axis represents the relationship between personally perceived student influence and expected informal political participation.

The x-axis indicates freedom ratings representing the level of democratic freedom¹⁷ (the first chart), press freedom (the second chart), and the national education level, represented by the UN education index¹⁸ (the third chart). Countries in which perceived student influence was positively related to expected informal political participation (four on the y-axis in all three charts) recorded relatively high levels of democratic freedom (in the first chart, one on the x-axis indicates the highest freedom level), high levels of press freedom (in the second chart, zero on the x-axis indicates the highest press freedom), and high national education levels (in the last chart, one on the x-axis indicates the highest educational level) among countries. It is very likely that students participate more comfortably and confidently in social and political issues in a society where political rights and civil liberties are highly valued and diverse perspectives can be voiced and heard. Given the positive relationships between educational achievement and political participation, citizens in societies that provide more high quality educational opportunities are more likely to actively participate in politics. Higher levels of adult educational achievement may translate to better adult scaffolding for adolescents participating in and interpreting civic engagement experiences. Although these relationships cannot be generalized to all countries, at the very least, it seems that the likelihood that adolescents' experiences of empowerment and efficaciousness promote expected informal participation is higher in a society that values civic and political rights, allows diverse perspectives, and provides extensive high quality educational opportunities.

¹⁷ Freedom is defined as "the opportunity to act spontaneously in a variety of fields outside the control of the government and other centers of potential domination—according to two broad categories: political rights and civil liberties" (Freedom House, 2009). See details on the Freedom House website http://www.freedomhouse.org/report/freedom-world/freedom-world-2009.

¹⁸ This index is derived from "the adult literacy rate and the combined gross enrollment ratio for primary, secondary and tertiary schools" (United Nations Development Programme, 2009, p. 209).





2008-2009 Press freedom from HDR 2010

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Figure 5-9. Cross-national relationships between personal perceptions of student influence on decisions about school and expected informal political participation by freedom rating, press freedom rating, and education index. Y-axis: 4 = a positive relationship; 2 = a marginally positive relationship; 0 = a non-significant relationship.

In most countries, personal perceptions of student-teacher relations had positive relationships with electoral participation. In a democracy, electoral activism is the way in which citizens select their representatives and form governing bodies. Citizens expect that their representatives and government will respond to their needs and share their social and political perspectives. Citizens who believe that their vote will have a desired effect are likely to vote, but people who doubt the effectiveness of their electoral participation might not be. In short, citizens' electoral participation will be affected by the level of citizens' trust in their authorities. During adolescence, teachers, along with parents, are probably the most important authority figures who influence students' experience of power relationships. Therefore, the relationship

that students have with teachers may impact adolescents' perceptions of the responsiveness of the government to their needs (Flanagan et al., 2010) and their trust in society (Flanagan et al., 2007). It is possible that students' interactions with teachers may influence their perceptions of the value of the electoral process as a means of achieving their desired social or political goals. Based on classroom experiences, adolescents may internalize beliefs about the way authority figures respond to their needs or suggestions. These beliefs may in turn influence citizens' evaluation of the government representatives who are elected to represent them.

No significant relationship was found between students' perceptions of student-teacher relations and expected informal participation in 29 countries. In other words, an adolescent's belief that s/he had a close relationship with his/her teacher did not influence his/her willingness to participate in informal types of political activism in most countries. There are two exceptional cases worthy of further investigation. In Chile, the Dominican Republic, and New Zealand, personally perceived student-teacher relations were positively related to informal political participation as well as electoral participation. By contrast, in Greece and Norway, perceived student-teacher relations were negatively related to informal political participation but positively related to electoral participation.

This difference, for example, might be attributed to the combination of social context and the degree of teachers' involvement in public issues. In a context in which teachers are socially discouraged or legally prohibited from disclosing their own social and political opinions, student-teacher relationships do not necessarily stimulate students' active and direct involvement in public issues while positive student-teacher relations can develop students' trust in existing social institutions and political systems such as electoral procedures. On the other hand, in a social environment in which teachers actively participate in diverse political agenda and frequently discuss controversial issues with their students, close student-teacher relations could serve as a conduit through which teachers' political attitudes and awareness are transmitted to students. However, even if a society allows teachers to disclose their opinions and publicly participate in politics, if teachers have little interest in political issues and participation, student-teacher relations are unlikely to influence adolescents' active involvement in social and political issues. In short, with regard to the development of informal political participation, student-teacher relations could play a mediating role between teachers' social position and students' perceptions of informal types of political activism. Therefore, future research on these exceptional cases needs to include an examination of what political messages are, or are not, transmitted to students by teachers. This research could shed light on how teachers' political attitudes and perspective influence students' political development.

In conclusion, this study identified varying relationships between perceived school context and expected political participation according to the macro context and the mode of political activism. Nevertheless, the results of the current study suggest that positive personal perception or experience of a democratic school climate could be beneficial to the development of adolescents' expected political participation in diverse macro contexts. However, it should be noted that allowing student influence on school decisions could result in lowering adolescents' willingness to participate in electoral activities as adults. It seems that student influence on school issues, which is accompanied by students' involvement in those issues, needs to be delimited and guided. Therefore, it is a valuable task to explore to what extent and in what ways student voices need to be accepted in order to prevent possible side effects of student influence. Lastly, there are noteworthy cases concerning the relationships between personal perceptions of school climate and expected political participation. In Austria, none of perceived school climate

predictors had significant relationships with expected electoral participation, and in Bulgaria and Paraguay, they were not significantly related to either expected electoral or expected informal participation. The fact that none of the three predictors had anything to do with the development of adolescents' willingness to participate in politics could be a serious sign of the need to ameliorate the current citizenship education approach and school environment. Further research on these countries is required.

Democratic school climate

The cross-national relationship between school climate for classroom discussions and expected electoral participation was different from the cross-national relationship between personally perceived classroom discussions and expected electoral participation. At the student level, openness in classroom discussions had positive or not significant relationships with both forms of expected political participation; however, at the school level, negative relationships were found between openness in classroom discussions and both forms of expected participation in some countries. Overall, personal experience of democratic political discussions is more effective in promoting participatory citizenship than being situated in a school context (i.e., attending a school) marked by openness in classroom discussions. In fact, even if a school provides an open environment for classroom discussion, this does not mean that all students enjoy the opportunity to actively engage in the deliberation process (see Hayes et al., 2006). School climate for classroom discussions does not necessarily function for all students in the same way (see Sanders, 1997). In Cyprus and Switzerland, school climate for classroom discussions was even negatively related to both electoral and informal participation. In Indonesia and Switzerland, while personally perceived openness in classroom discussions was positively

related to informal political participation, school climate for classroom discussions was negatively related.

However, this result does not offer definitive proof that school climate for classroom discussions is of little importance to the development of expected political participation. In some cases, school climate is more effective in stimulating adolescents' willingness to participate in politics than personal experience. In Denmark, the Republic of Korea, Latvia, and Lithuania, personal perceptions of openness in classroom discussions had no significant relationship with electoral participation, but school climate for classroom discussions had positive relationships. For adolescents in Paraguay, personal experience of classroom discussions was not related to any form of expected political participation, but attending a school with more democratic discussion climate was associated with higher levels of expected electoral and informal political participation. However, these results do not provide a conclusive statement on the effect of school climate for classroom discussions without further detailed research. It is possible that a certain macro-level social context causes a gap in adolescents' experiences between schools. For example, in some societies, students might be segregated along racial, economic, social, or cultural lines. In this situation, students within the same school could have similar personal perceptions of classroom experiences, but there could be a wide gap in the quantity and quality of opportunities for democratic political discussions from school to school. Consequently, which school a student attends is a powerful factor in his/her political development, and as in the peer effect, this school effect might be the manifestation of social and educational inequality.

Focusing on significant relationships, the cross-national relationships between the school climate for student influence and expected political participation are almost the same as those between personally perceived student influence and expected political participation. Attending

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schools that were more responsive to students' opinions on school and class agenda was negatively related to expected electoral participation but positively related to expected informal participation. There are some conspicuous cases. In Bulgaria, Chile, Greece, and the Slovak Republic, perceived student influence was not significantly related to expected electoral participation, but school climate for student influence was positively related. In the Czech Republic, Finland, Ireland, Italy, and the Russian Federation, personal perceptions of student influence had no significant relationship with informal political participation, but school climate for student influence might increase an individual adolescent's willingness to participate in electoral activities as adults; however, belonging to a school where students' opinions are well received might reduce students' willingness.

Similar to personal perceptions of student-teacher relations, school climate for studentteacher relations seems to be more influential in developing willingness to participate in systemdriven activities than willingness to participate in informal types of political activity. With a few exceptions, attending schools where the relationships between students and teachers were more positive had positive or not significant relationships with electoral participation and no significant relationship with informal political participation regardless of the national context. Notable cases are England, where this school-level factor might positively influence both forms of expected political participation; Italy, where this factor had a positive relationship with electoral participation but a negative relationship with informal participation; and Bulgaria, where its corresponding student-level factor was not influential but school climate for studentteacher relations might increase adolescents' expected electoral participation. In Austria, it seems that both personal experience of positive relationships with teachers and attending a school characterized by democratic student-teacher relations had little influence on adolescents' expected electoral participation.

Summary. This study examined the relationship between school climate and adolescents' expected political participation at the student level (students' personal experience or observation; personally perceived school climate) and at the school level (actual or overall school climate; a school average of students' perceived school climate). The results show that the cross-national relationships for electoral and informal participation are different at both the student and school levels (the exception is perceived openness in classroom discussion). This result also implies that the influence of personally perceived school climate on political development can be different from the influence of actual (overall) school climate on political development. I found crossnationally inconsistent relationships between school climate predictors and expected political participation; however, a few cross-national relationships were consistent regardless of the national context (e.g., the relationship between perceived student-teacher relations and expected political participation). By and large, three patterns in cross-national political development relationships were shown in relation to the school climate factors: varying relationships in different macro contexts, different relationships between the two modes of political activism, and consistent relationships regardless of the national context.

All in all, it seems that personally perceived school climate is more effective in developing political qualities in different countries than overall school climate. However, in some countries, the difference in democratic climate between schools is significantly related to expected political participation while the difference in personal perceptions of school climate within a school is not. In short, school climate does not always function in the same way at the student and school levels. Therefore, school-based citizenship education must consider both how

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to create a democratic school climate and how to ensure that students experience a democratic school climate. Valuable insights may be derived from further research on how to promote synergy between personal experience and school climate.

Exceptional but interesting cases are Austria, where no student- and school-level school climate predictors had a significant relationship with adolescents' expected electoral participation, and Bulgaria, where no student- and school-level school climate predictors were significantly related to expected informal participation.

School SES

In most countries, school SES was not a significant predictor of adolescents' expected political participation. Focusing on significant relationships, school SES was significantly related to electoral participation (positive in Estonia, Lithuania, and the Russian Federation; negative in Chinese Taipei and Latvia) and informal participation (positive in Belgium (Flemish), Estonia, Finland, and Ireland; negative in the Republic of Korea and New Zealand). In some of these countries, the positive relationship between school SES and expected political participation could be evidence of an inequality in civic opportunities (Kahne & Middaugh, 2008). If students are segregated into different schools based on socioeconomically-divided residential areas, the sociopolitical perspectives of students in the same school might be homogenous. Compared to students in low SES schools, students in high SES schools are likely to have higher quality civic learning opportunities. Adolescents in countries showing the negative relationship between school SES and expected political participation school SES and expected political participation might also be segregated along the lines of social class. However, in these countries, adolescents from affluent families may be urged to focus only on academic achievement and kept away from social issues and politics.

Cases studies on some countries could be helpful to understand the different influences of school SES on political development. In the Czech Republic, Estonia, and Finland, school SES was positively related to both expected electoral and informal participation; however, in the Republic of Korea, attending schools with higher average SES was negatively related to both forms of expected participation. In particular, in the Republic of Korea, family SES was positively associated with a stronger willingness to participate in electoral activism, but school SES was negatively associated. In the Czech Republic, school SES had a positive relationship with informal participation while family SES had a negative relationship. In the Dominican Republic, both family SES and school SES were negatively related to adolescents' expected informal political participation, and no positive relationships was found between family and school SES and expected electoral participation. The influence of SES in the Dominican Republic stands as a counterexample to the general understanding of the relationship between SES and political development; however, I cannot rule out the possibility that this result is related to a considerable number of missing cases in the data from the Dominican Republic.

Local Community

In general, the community contextual factors adopted in this study were not significantly associated with adolescents' expected political participation. Significant relationships were found in a small number of countries. This result suggests that community resources and problems do not impact students' willingness to participate in politics in most countries, at least during middle adolescence. However, this does not mean that community context is irrelevant to 14-year-old adolescents' political development. Rather, although the community contextual factors do not directly influence adolescents' behavioral intention, they might have an indirect effect. ICCS (Schulz et al., 2010) proposed the possibility of a positive relationship between community

resources and students' civic knowledge and a negative relationship between community problems and students' civic knowledge in many countries. This implies that these community factors could influence political qualities associated with an adolescent's willingness to participate in politics, such as civic knowledge, political interest, and social perceptions. Future studies need to examine the indirect influence of community factors in the political development process as well as any direct influence.

CHAPTER 6

CONCLUSION

A body of research has documented that numerous political development factors and multiple contexts are involved in political development. Based on this research, I designed this study to gain a deeper understanding of how the numerous factors function in different macro contexts. In addition, I sought to elucidate the difference between the cross-national political development relationships for expected electoral participation and the cross-national political development relationships for expected informal political participation. My findings demonstrate that political development factors function differently in the process of adolescent political development across different countries and different forms of expected political participation. However, some political development relationships were consistently significant regardless of the macro context or the mode of political activism. This study also suggests that political development relationships may be influenced by a specific macro context by displaying the possibility that a group of countries showing the same political development relationships have common national contexts. This comparative study responded to the need for studies to consider the full range of factors, multiple contexts, and various forms of participation involved in political development (Amnå et al., 2009; Torney-Purta et al., 2010); to understand the dynamics among political development factors in diverse social contexts (Sapiro, 2004); and to provide useful insight for democratic citizenship education in diverse and volatile social and cultural contexts (Hahn & Alviar-Martin, 2008). However, the scope and methodology of this study have some limitations.

First, because of the correlational nature of this study, I could not draw causal relationships between predictors and outcome variables. Previous research may help to interpret

some associations between dependent and independent variables as precedence-posteriority relations (e.g., parents' political interest and child's political participation). Yet, my research does not corroborate any causal relationship. Moreover, there is no guarantee that causality found in one national context can be applied to other national contexts. In this respect, longitudinal studies are required to make causal inferences about the political development process in diverse social contexts.

Second, because this study looked at unidirectional associations, it might fail to catch some inverse directions or reciprocal relationships between variables. For example, the positive (or negative) relationship between school SES and expected political participation may suggest that attending a high SES school promotes (or decreases) adolescents' willingness to participate in politics. On the other hand, the relationship could indicate that students from privileged families that are inclined toward (or disinclined toward) political participation tend to attend the same school (i.e., segregation by class) in certain social contexts. Another example is the reciprocal relationship between motivation (political interest and internal political efficacy) and political participation. Future research needs to take into account these multi-directional relationships.

Third, the outcome variables of this study represent behavioral intention, not participation itself. The political development relationships of my study do not necessarily extend to actual participation—again, the necessity of longitudinal studies comes to the fore. However, this limitation does not invalidate or devalue this dissertation study. A number of studies have demonstrated the close relationships between behavioral intention and actual behavior (e.g., Webb & Sheeran, 2006). More importantly, in reality, students in middle adolescence have limited resources and social connections to participate in informal types of political activity, and they do not yet enjoy full rights required for some forms of political participation such as suffrage. Therefore, willingness to participate in politics is the primary goal of civic education at this developmental stage and serves as a crucial index related not only to adolescents' actual participation in the future but also to successful civic education.

Fourth, for the purposes of this analysis, I used a simple method to deal with missing data: listwise deletion and mean substitution. As a result, in a few countries such as Paraguay and the Dominican Republic, a considerable number of cases were excluded from my analysis. Therefore, the results for these countries should be interpreted with caution. Researchers conducting future secondary analyses using ICCS data may want to exclude the countries with a considerable amount of missing data. As another option, advanced missing data treatment methods such as multiple imputation might produce more reliable estimates.

Lastly, in this study, I attempted to find national contextual factors related to specific patterns in micro-level cross-national relationships. Although this was not one of the main research questions of this dissertation, discovering macro contexts related to political development relationships is a meaningful task for democratic citizenship education in diverse societies. Exploration of macro/national context helps to capture context-specific dynamics among political development factors. This work is also important for the applicability of the results to other societies with similar contexts. I believe that comparative studies focusing on macro contexts, including cultural and educational contexts, can make meaningful contributions to both practice in citizenship education and scholarship on civic engagement.

Despite these limitations, the current study has important implications for policy makers, practitioners, and researchers. First, this study found that the relationship between political development factors and expected political participation varied across countries. That is, micro-

level political development is influenced by macro contexts. This highlights the importance of social context in relation to the development of democratic values, attitudes, and behaviors. Education for democratic citizenship is an important way to promote democracy in a society from a long-term perspective. At the same time, the socioeconomic, cultural, and political environment of the society has a direct and immediate impact on the nature, features, and direction of citizenship education. Without macro-level support, educational efforts on the micro level are highly likely to be ineffective or dysfunctional. Therefore, for democracy on a social and national level. In short, successful democratic citizenship education should be tailored to the multilevel contexts in which students are situated.

Second, citizenship education programs need to situate their specific purpose in the context in which the programs are implemented. This study demonstrated that the relationship between political development factors and willingness to participate in politics is different according to the mode of political activism (electoral vs. informal). For example, civic knowledge was positively related to expected electoral participation in all 34 countries; but civic knowledge was not significantly or even negatively related to expected informal political participation in all 34 counties. This result implies that democratic citizenship education should be thoughtfully planned and implemented according to its goals—that is, its target civic outcomes.

Third, democratic citizenship education at school should provide diverse civic engagement opportunities, and it should also consider how to make the opportunities meaningful and effective. This study revealed that diverse civic engagement experiences during adolescence may contribute to the development of adolescents' willingness to participate in politics in different national contexts and that school climate is related to adolescents' political behavioral intention in varying ways according to the national context and the mode of political activism. These results imply that civic engagement opportunities and school climate can have synergic effects on positive adolescent political development. However, it is also possible that the school climate is not supportive to civic engagement opportunities in some macro contexts or even an impediment in other social contexts. Therefore, democratic citizenship education should consider both the school and the social contexts in which students gain civic engagement experience. Practitioners and educators need to think about what adolescents can use in *their own context* and what adolescents can do in *their own practice* in order for adolescents to develop democratic citizenship.

Fourth, although I found that political development relationships vary across different national contexts and between different modes of political activism, at the same time, I discovered that some factors such as political interest and internal political efficacy were positively related to expected political participation regardless of the national context and the mode of political activism. This finding implies that citizenship education promoting these factors contributes to increasing adolescents' willingness to participate in *multiple modes* of political activism in *diverse social and national contexts*.

Fifth, this study analyzed each country's data separately in order to preserve the distinct national contexts of each country, simplified and classified the analysis results, and compared the results across countries. This analytic strategy can aid researchers seeking to examine overall trends in political development and civic engagement across different groups or countries and to detect specific patterns and unique cases among the groups or countries. In particular, as I have shown, the analytic method of this study can be employed to find the relationship between

specific patterns in micro-level phenomena and macro-level contexts with regard to diverse topics beyond civic engagement research.

The current study also provides a useful guide for future research. First, this study found a number of cases showing unique political development relationships. Further studies of these unique cases will widen and deepen our understanding of adolescent political development and civic engagement. More importantly, the case studies can make meaningful contributions to improving civic and citizenship education in the countries and be useful for political development research and democratic citizenship education in countries that were not covered by ICCS.

Second, some countries that appear to have some common macro contexts showed different political development relationships. I did not explore the differences that emerged, but future research may provide insight. For example, Norway was the only country in which there was no gender difference in either form of expected political participation. By contrast, in the other Scandinavian countries (Denmark, Finland, and Sweden), female adolescents had higher levels of willingness to participate in both modes of political activism than males (see Figure 5-1 and 5-2). Likewise, among Latin American countries, the Dominican Republic is the only country in which family SES was negatively related to both forms of expected political participation. In the other Latin American countries, there was no significant relationship between family SES and either form of expected political participation (see Figure 5-7). Determining the specific conditions that cause variations in the political development relationships between countries with common macro contexts will advance our understanding of the function of various political development factors.

Third, as discussed in the previous chapter, I suggest the possibility that psychological motivation has a mediating effect on the relationship between other predictors and outcome variables. How different or similar is the mediating effect of the motivational factors across countries? Are there predictors that mediated by the motivational factors in some countries, but not in others? Given that motivational factors are influential to positive political development regardless of the national context and the mode of political activism, these questions will provide practical knowledge that helps to plan meaningful civic learning opportunities for adolescents in different macro contexts.

Fourth, the relationships I examined in this study are not exhaustive. Using ICCS data, future studies can investigate numerous hidden political development relationships that my study did not cover. For example, civic knowledge could serve as a bridge between civic engagement experience and expected political participation. In some countries, democratic school climate seems to have only an indirect relationship with expected political participation during middle adolescence. I proposed some possible relationships in the previous chapter. I hope that future studies will find these hidden relationships and fill the relational gaps among variables.

Lastly, future studies could analyze ICCS data from various angles. For example, in this study, the informal political participation variable (ICCS scale) was derived from survey items asking about adolescents' online and offline political discussion, writing to a newspaper, and joining an organization. However, some studies may focus exclusively on a specific type of behavior such as political discussion, membership in organizations, following the news, and so on. For these studies, it might be more productive to examine single items corresponding to specific behaviors. Moreover, it is possible that a specific civic or political behavior is common in some countries but unusual in other countries. In this case, the ICCS constructs (or latent

variables) might be useful for researchers examining political development and civic engagement in some countries but not in others. Therefore, researcher on specific countries might need to create their own scales or use manifest variables rather than the ICCS constructs. In short, future research can find more effective ways to use ICCS data according to its purpose and context.

The value of comparative research is well represented the following statement: "Remembering that research findings in one context are not directly applicable to another cultural context, we believe findings from varied studies can provide hypotheses for studies in other contexts and there may be potential implications for policy and practice in contexts similar to those where the research was conducted" (Hahn & Alviar-Martin, 2008, p. 99). My comparative study clearly illustrates the necessity of context-specific efforts for democratic citizenship education and simultaneously the possibility of the applicability of context-specific research to other contexts.

REFERENCES

- Abramson, P. R., & Aldrich, J. H. (1982). The decline of electoral participation in America. *The American Political Science Review*, 76(3), 502–521.
- Amnå, E., Ekström, M., Kerr, M., & Stattin, H. (2009). Political socialization and human agency. The development of civic engagement from adolescence to adulthood. *Statsvetenskaplig Tidskrift*, 111(1), 27–40.
- Amnå, E., & Zetterberg, P. (2010). A political science perspective on socialization research: Young Nordic citizens in a comparative light. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 43–65). Hoboken, NJ: Wiley. doi:10.1002/9780470767603.ch2
- Apple, M. W. (2000). *Official knowledge: Democratic education in a conservative age* (2nd ed.). New York, NY: Routledge.
- Apple, M. W. (2006). *Education the "Right" way: Markets, standards, god, and inequality* (2nd ed.). New York, NY: Routledge.
- Avery, P. G. (2001). *Developing political tolerance*. ERIC Digest. (ERIC Document Reproduction Service No. ED458186). Retrieved from ERIC database.
- Balch, G. I. (1974). Multiple indicators in survey research: The concept "sense of political efficacy." *Political Methodology*, *1*(2), 1–43. doi:10.2307/25791375
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman and Company.
- Barber, B. R. (1989). Public talk and civic action: Education for participation in a strong democracy. *Social Education*, *53*(6), 355–356, 370.
- Battistoni, R. (2008). Democracy's practice grounds: The role of school governance in citizenship education. In J. S. Bixby & J. L. Pace (Eds.), *Educating democratic citizens in troubled times: Qualitative studies of current efforts* (pp. 131–156). Albany, NY: State University of New York Press.
- Beane, J. A., & Apple, M. W. (2007). The case for democratic schools. In M. W. Apple & J. A. Beane (Eds.), *Democratic schools: Lessons in powerful education* (2nd ed., pp. 1–29). Portsmouth, NH: Heinemann.
- Beaumont, E. (2010). Political agency and empowerment: Pathways for developing a sense of political efficacy in young adults. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 525–558). Hoboken, NJ: Wiley. doi:10.1002/9780470767603.ch20
- Beaumont, E. (2011). Promoting political agency, addressing political inequality: A multilevel model of internal political efficacy. *The Journal of Politics*, 73(1), 216–231. doi:10.1017/S0022381610000976

- Bixby, J. S. (2008). To think, live, and breathe politics: Experiencing democratic citizenship in Chicago. In J. S. Bixby & J. L. Pace (Eds.), *Educating democratic citizens in troubled times: Qualitative studies of current efforts* (pp. 252–280). Albany, NY: State University of New York Press.
- Borman, G. D., & Dowling, M. (2010). Schools and inequality : A multilevel analysis of Coleman 's equality of educational opportunity data. *Teachers College Record*, *112*(5), 1201–1246.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste* (R. Nice, Trans.). Cambridge, MA: Harvard University Press.
- Bowen, G. L., Rose, R. A., Powers, J. D., & Glennie, E. J. (2008). The joint effects of neighborhoods, schools, peers, and families on changes in the school success of middle school students. *Family Relations*, 57(4), 504–516. doi:10.1111/j.1741-3729.2008.00518.x
- Brady, H. E., Verba, S., & Schlozman, K. L. (1995). Beyond SES: A resource model of political participation. American Political Science Review, 89(2), 271–294.
- Brese, F., Jung, M., Mirazchiyski, P., Schulz, W., & Zuehlke, O. (2011a). *ICCS 2009 user guide for the international database*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Brese, F., Jung, M., Mirazchiyski, P., Schulz, W., & Zuehlke, O. (2011b). *ICCS 2009 user guide for the international database: Supplement 1*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Brese, F., Jung, M., Mirazchiyski, P., Schulz, W., & Zuehlke, O. (2011c). *ICCS 2009 user guide for the international database: Supplement 5*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Eds.), *International encyclopedia of education* (2nd ed., Vol. 3, pp. 1643– 1647). Oxford, England: Pergamon Press/Elsevier Science.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793–828). Hoboken, NJ: Wiley.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.
- Campbell, A., Gurin, G., & Miller, W. E. (1954). *The voter decides*. Evanston, IL: Row, Peterson and Company.
- Campbell, D. E. (2006). *Why we vote: How schools and communities shape our civic life*. Princeton, NJ: Princeton University Press.

- Carnegie Corporation of New York & The Center for Information and Research on Civic Learning and Engagement (CIRCLE). (2003). *The civic mission of schools*. Retrieved from http://www.civicyouth.org/PopUps/CivicMissionofSchools.pdf
- Central Intelligence Agency. (2009). The world factbook 2009. Retrieved from https://www.cia.gov/library/publications/download/download-2009
- Central Intelligence Agency. (2011). The world factbook 2011. Retrieved from https://www.cia.gov/library/publications/download/download-2011
- Central Intelligence Agency. (2013). The world factbook 2013. Retrieved from https://www.cia.gov/library/publications/download/download-2013
- Chung, H. L., & Steinberg, L. (2006). Relations between neighborhood factors, parenting behaviors, peer deviance, and delinquency among serious juvenile offenders. *Developmental Psychology*, 42(2), 319–331. doi:10.1037/0012-1649.42.2.319
- Clarke, H. D., & Acock, A. C. (1989). National elections and political attitudes: The case of political efficacy. *British Journal of Political Science*, 19(4), 551–562. doi:10.1017/S0007123400005639
- Cohen, A., Vigoda, E., & Samorly, A. (2001). Analysis of the mediating effect of personalpsychological variables on the relationship between socioeconomic status and political participation: A structural equations framework. *Political Psychology*, 22(4), 727–757. doi:10.1111/0162-895X.00260
- Cohen, C. (2006). African American youth: Broadening our understanding of politics, civic engagement and activism. *Youth Activism: A Web Forum Organized by the Social Science Research Council.* Retrieved from http://ya.ssrc.org/african/Cohen/
- Compton-Lilly, C. (2007). *Re-reading families: The literate lives of urban children, four years later*. New York, NY: Teachers College Press.
- Converse, P. E. (1972). Change in the American electorate. In A. Campbell & P. E. Converse (Eds.), *The human meaning of social change* (pp. 263–337). New York, NY: Russell Sage Foundation.
- Da Silva, L., Sanson, A., Smart, D., & Toumbourou, J. (2004). Civic responsibility among Australian adolescents: Testing two competing models. *Journal of Community Psychology*, 32(3), 229–255. doi:10.1002/jcop.20004
- Dahl, R. A. (1998). On democracy. New Haven, CT: Yale University Press.
- Dalton, R. J. (2004). Democratic challenges, democratic choices: The erosion of political support in advanced industrial democracies. Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199268436.001.0001
- Dalton, R. J., & Klingemann, H. (2007). Citizens and political behavior. In R. J. Dalton & H. Klingemann (Eds.), *The Oxford handbook of political behavior* (pp. 3–26). New York, NY: Oxford University Press. doi:10.1093/oxfordhb/9780199270125.003.0001

- Delli Carpini, M. X., & Keeter, S. (1996). What Americans know about politics and why it *matters*. New Haven, CT: Yale University Press.
- DeMars, C. (2010). Item Response Theory. New York: Oxford University Press.
- Dewey, J. (1913). Interest and effort in education. Cambridge, MA: Riverside Press.
- Diamond, L. (2008). The democracy rollback: The resurgence of the predatory state. *Foreign Affairs*, 87(2), 36–48.
- Dudley, R. L., & Gitelson, A. R. (2002). Political literacy, civic education, and civic engagement: A return to political socialization? *Applied Developmental Science*, 6(4), 175– 182. doi:10.1207/S1532480XADS0604_3
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, *53*(1), 109–132. doi:10.1146/annurev.psych.53.100901.135153
- Ekman, J., & Amnå, E. (2012). Political participation and civic engagement: Towards a new typology. *Human Affairs*, 22(3), 283–300. doi:10.2478/s13374-012-0024-1
- Enders, C. K. (2010). Applied missing data analysis. New York, NY: The Guilford Press.
- Erikson, E. H. (1968). Identity, youth, and crisis. New York, NY: W. W. Norton & Company.
- Feldman, L., Pasek, J., Romer, D., & Jamieson, K. H. (2007). Identifying Best Practices in Civic Education: Lessons from the Student Voices Program. *American Journal of Education*, 114(1), 75–100. doi:10.1086/520686
- Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science*, 29(4), 891–913. doi:10.2307/2111186
- Flanagan, C. A. (2004). Volunteerism, leadership, political socialization, and civic engagement. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 721–746). New York, NY: Wiley.
- Flanagan, C. A., Bowes, J. M., Jonsson, B., Csapo, B., & Sheblanova, E. (1998). Ties that bind: Correlates of adolescents' civic commitments in seven countries. *Journal of Social Issues*, 54(3), 457–475.
- Flanagan, C. A., Cumsille, P., Gill, S., & Gallay, L. S. (2007). School and community climates and civic commitments: Patterns for ethnic minority and majority students. *Journal of Educational Psychology*, 99(2), 421–431. doi:10.1037/0022-0663.99.2.421
- Flanagan, C. A., & Levine, P. (2010). Civic engagement and the transition to adulthood. *The Future of Children Center for the Future of Children the David and Lucile Packard Foundation*, 20(1), 159–179. Retrieved from http://futureofchildren.org/futureofchildren/publications/docs/20_01_08.pdf
- Flanagan, C. A., Martinez, M. L., Cumsille, P., & Ngomane, T. (2011). Youth civic development: Theorizing a domain with evidence from different cultural contexts. *New Directions for Child and Adolescent Development*, 134, 95–109. doi:10.1002/cd.313

- Flanagan, C. A., & Sherrod, L. R. (1998). Youth political development: An introduction. *Journal of Social Issues*, 54(3), 447–456. doi:10.1111/j.1540-4560.1998.tb01229.x
- Flanagan, C. A., Stoppa, T., Syvertsen, A. K., & Stout, M. (2010). Schools and social trust. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic* engagement in youth (pp. 307–329). Hoboken, NJ: Wiley.
- Flanagan, C. A., & Stout, M. (2010). Developmental patterns of social trust between early and late adolescence: Age and school climate effects. *Journal of Research on Adolescence*, 20(3), 748–773. doi:10.1111/j.1532-7795.2010.00658.x
- Flanagan, C. A., & Wray-Lake, L. (2011). Civic and political engagement. In B. B. Brown & M. J. Prinstein (Eds.), *Encyclopedia of adolescence, Vol.* 2 (pp. 35–43). San Diego, CA: Academic Press.
- Freedom House. (2009). Freedom in the world 2009. Retrieved from http://www.freedomhouse.org/report/freedom-world/freedom-world-2009
- Galston, W. A. (2001). Political knowledge, political engagement, and civic education. *Annual Review of Political Science*, 4(1), 217–234. doi:10.1146/annurev.polisci.4.1.217
- Galston, W. A. (2004). Civic education and political participation. *PS: Political Science & Politics*, *37*(2), 263–266. doi:10.1017/S1049096504004202
- Gastil, J., & Xenos, M. (2010). Of attitudes and engagement: Clarifying the reciprocal relationship between civic attitudes and political participation. *Journal of Communication*, 60(2), 318–343. doi:10.1111/j.1460-2466.2010.01484.x
- Gniewosz, B., & Noack, P. (2008). Classroom climate indicators and attitudes towards foreigners. *Journal of Adolescence*, *31*(5), 609–624. doi:10.1016/j.adolescence.2007.10.006
- Green, D. P., Aronow, P. M., Bergan, D. E., Greene, P., Paris, C., & Weinberger, B. I. (2011). Does knowledge of constitutional principles increase support for civil liberties? Results from a randomized field experiment. *The Journal of Politics*, 73(2), 463–476. doi:10.1017/S0022381611000107
- Hahn, C. L. (1998). *Becoming political: A comparative perspective on citizenship education*. Albany, NY: SUNY Press.
- Hahn, C. L. (2010). Comparative civic education research: What we know and what we need to know. *Citizenship Teaching and Learning*, *6*(1), 5–23. doi:10.1386/ctl.6.1.5
- Hahn, C. L., & Alviar-Martin, T. (2008). International political socialization research. In L. S. Levstik & C. A. Tyson (Eds.), *Handbook of Research in Social Studies Education* (pp. 81– 108). New York, NY: Routledge.
- Harackiewicz, J. M., Durik, A. M., Barron, K. E., Linnenbrink-Garcia, L., & Tauer, J. M. (2008). The role of achievement goals in the development of interest: Reciprocal relations between achievement goals, interest, and performance. *Journal of Educational Psychology*, *100*(1), 105–122. doi:10.1037/0022-0663.100.1.105

- Harris, D. N. (2010). How do school peers influence student educational outcomes? Theory and evidence from economics and other social sciences. *Teachers College Record*, *112*(4), 1163–1197.
- Hart, D., Atkins, R., Markey, P., & Youniss, J. (2004). Youth bulges in communities: The effects of age structure on adolescent civic knowledge and civic participation. *Psychological Science*, 15(9), 591–597. doi:10.1111/j.0956-7976.2004.00725.x
- Hart, D., Donnelly, T. M., Youniss, J., & Atkins, R. (2007). High school community service as a predictor of adult voting and volunteering. *American Educational Research Journal*, 44(1), 197–219. doi:10.3102/0002831206298173
- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Validating the willingness to self-censor scale: Individual differences in the effect of the climate of opinion on opinion expression. *International Journal of Public Opinion Research*, 17(4), 443–455. doi:10.1093/ijpor/edho72
- Hayes, A. F., Scheufele, D. A., & Huge, M. E. (2006). Nonparticipation as self-censorship: Publicly observable political activity in a polarized opinion climate. *Political Behavior*, 28(3), 259–283. doi:10.1007/s11109-006-9008-3
- Hess, D. E. (2002). Discussing controversial public issues in secondary social studies classrooms: Learning from skilled teachers. *Theory and Research in Social Education*, 30(1), 10–41. doi:10.1080/00933104.2002.10473177
- Hess, D. E. (2008a). Controversial issues and democratic discourse. In L. S. Levstik & C. A. Tyson (Eds.), *Handbook of Research in Social Studies Education* (pp. 124–136). New York, NY: Routledge.
- Hess, D. E. (2008b). Democratic education to reduce the divide. *Social Education*, 72(7), 373–376.
- Hess, D. E. (2009). *Controversy in the classroom: The democratic power of discussion*. New York, NY: Routledge.
- Hess, D. E., & McAvoy, P. (2007). The controversial issues of disclosure: Weighing the evidence. *National Social Studies Supervisors Association Leader*, 21(2), 11–16.
- Hess, D. E., & Posselt, J. (2002). How high school students experience and learn from the discussion of controversial public issues. *Journal of Curriculum and Supervision*, 17(4), 283–314.
- Hidi, S., & Harackiewicz, J. M. (2000). Motivating the academically unmotivated: A critical issue for the 21st century. *Review of Educational Research*, 70(2), 151–179. doi:10.3102/00346543070002151
- Hidi, S., & Renninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist*, *41*(2), 111–127. doi:10.1207/s15326985ep4102_4

- Hooghe, M., & Quintelier, E. (2011). School and country-effects on the political participation intentions of adolescents: A multilevel study of open classroom climate and participatory school culture in 34 countries. Paper presented at the 6th ECPR General Conference in Reykjavik, Iceland 25-27 August. Retrieved from http://www.ecprnet.eu/MyECPR/proposals/reykjavik/uploads/papers/1313.pdf
- Horn, A. S. (2012). The cultivation of a prosocial value orientation through community service: An examination of organizational context, social facilitation, and duration. *Journal of Youth and Adolescence*, *41*(7), 948–968. doi:10.1007/s10964-011-9714-y
- Hoy, W. K., Tarter, C. J., & Hoy, A. W. (2006). Academic optimism of schools: A force for student achievement. *American Educational Research Journal*, 43(3), 425–446. doi:10.3102/00028312043003425
- Hyman, J. B., & Levine, P. (2007). *Civic engagement and the disadvantaged: Challenges, opportunities and recommendations* (CIRCLE Working Paper No. 63). College Park, MD: The Center for Information and Research on Civic Learning and Engagement (CIRCLE).
- Jencks, C., & Mayer, S. E. (1990). The social consequences of growing up in a poor neighberhood. In L. E. Lynn, Jr. & M. G. H. McGeary (Eds.), *Inner-city poverty in the United States* (pp. 111–184). Washington, DC: National Academy Press.
- Jennings, M. K. (2007). Political socialization. In R. J. Dalton & H. Klingemann (Eds.), *The Oxford handbook of political behavior* (pp. 29–44). New York, NY: Oxford University Press.
- Jennings, M. K., Stoker, L., & Bowers, J. (2009). Politics across generations: Family transmission reexamined. *The Journal of Politics*, 71(3), 782–799. doi:10.1017/S0022381609090719
- Jensen, L. A. (2010). Immigrant youth in the United States: Coming of age among diverse civic cultures. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research* on civic engagement in youth (pp. 425–443). Hoboken, NJ: Wiley. doi:10.1002/9780470767603.ch16
- Jian, G., & Jeffres, L. (2008). Spanning the boundaries of work: workplace participation, political efficacy, and political involvement. *Communication Studies*, *59*(1), 35–50. doi:10.1080/10510970701849370
- Jugert, P., Eckstein, K., Noack, P., Kuhn, A., & Benbow, A. (2013). Offline and online civic engagement among adolescents and young adults from three ethnic groups. *Journal of Youth and Adolescence*, *42*(1), 123–135. doi:10.1007/s10964-012-9805-4
- Junn, J. (1999). Participation in liberal democracy: The political assimilation of immigrants and ethnic minorities in the United States. *American Behavioral Scientist*, 42(9), 1417–1438. doi:10.1177/00027649921954976
- Kahne, J., & Middaugh, E. (2008). Democracy for some: The civic opportunity gap in high school. Policies for Youth Civic Engagement (CIRCLE Working Paper No. 59). College

Park, MD: The Center for Information and Research on Civic Learning and Engagement (CIRCLE).

- Kahne, J., & Sporte, S. E. (2008). Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation. *American Educational Research Journal*, 45(3), 738–766. doi:10.3102/0002831208316951
- Kahne, J., & Westheimer, J. (2003). Teaching democracy: What schools need to do. *Phi Delta Kappan*, 85(1), 34–40, 57–66.
- Kaid, L. L., McKinney, M. S., & Tedesco, J. C. (2007). Introduction political information efficacy and young voters. *American Behavioral Scientist*, 50(9), 1093–1111. doi:10.1177/0002764207300040
- Kaplan, D. (2009). *Structural equation modeling: Foundations and extensions* (2nd ed.). Thousand Oaks, CA: SAGE Publication.
- Kawashima-Ginsberg, K., & Thomas, N. (2013). Civic engagement and political leadership among women–A call for solutions. College Park, MD: The Center for Information and Research on Civic Learning and Engagement (CIRCLE). Retrieved from http://www.civicyouth.org/wp-content/uploads/2013/05/Gender-and-Political-Leadership-Fact-Sheet-3.pdf
- Kohn, M. L. (1989). Cross-national research as an analytic strategy. In M. L. Kohn (Ed.), *Cross-national research in sociology* (pp. 77–103). Newbury Park, CA: Sage.
- Konstantopoulos, S., & Borman, G. D. (2011). Family background and school effects on student achievement : A multilevel analysis of the Coleman data. *Teachers College Record*, *113*(1), 97–132.
- Larson, B. E., & Keiper, T. A. (2002). Classroom discussion and threaded electronic discussion: Learning in two arenas. *Contemporary Issues in Technology and Teacher Education*, 2(1). Retrieved from http://www.citejournal.org/vol2/iss1/socialstudies/article1.cfm
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.
- Lee, F. L. F. (2006). Collective efficacy, support for democratization, and political participation in Hong Kong. *International Journal of Public Opinion Research*, 18(3), 297–317. doi:10.1093/ijpor/edh105
- Lee, N. J., Shah, D. V., & McLeod, J. M. (2013). Processes of political socialization: A communication mediation approach to youth civic engagement. *Communication Research*, 40(5), 669–697. doi:10.1177/0093650212436712
- Lerner, R. M. (2011). Structure and process in relational, developmental systems theories: A commentary on contemporary changes in the understanding of developmental change across the life span. *Human Development*, *54*, 34–43. doi:10.1007/BF00706058

- Lerner, R. M., & Castellino, D. R. (2002). Contemporary developmental theory and adolescence: developmental systems and applied developmental science. *Journal of Adolescent Health*, *31*(6), 122–135. doi:0.1016/S1054-139X(02)00495-0
- Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development : Thriving as the basis of personhood and civil society. *Applied Developmental Science*, 7(3), 172–180. doi:10.1207/S1532480XADS0703_8
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309–337. doi:10.1037/0033-2909.126.2.309
- Levine, P. (2007). *The future of democracy: Developing the next generation of American citizens*. Medford, MA: Tufts University Press.
- Liem, A. D., Lau, S., & Nie, Y. (2008). The role of self-efficacy, task value, and achievement goals in predicting learning strategies, task disengagement, peer relationship, and achievement outcome. *Contemporary Educational Psychology*, 33(4), 486–512. doi:10.1016/j.cedpsych.2007.08.001
- Linimon, A., & Joslyn, M. R. (2002). Trickle up political socialization: The impact of Kids Voting USA on voter turnout in Kansas. *State Politics & Policy Quarterly*, 2(1), 24–36. doi:10.1177/153244000200200102
- Maiello, C., Oser, F., & Biedermann, H. (2003). Civic knowledge, civic skills and civic engagement. *European Educational Research Journal*, 2(3), 384–395. doi:10.2304/eerj.2003.2.3.5
- McIntosh, H., & Youniss, J. (2010). Toward a political theory of political socialization of youth. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic* engagement in youth (pp. 23–41). Hoboken, NJ: Wiley. doi:10.1002/9780470767603.ch1
- McLellan, J. A., & Youniss, J. (2003). Two systems of youth service : Determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, *32*(1), 47–58. doi:10.1023/A:1021032407300
- Merelman, R. M. (1990). The role of conflict in children's political learning. In O. Ichilov (Ed.), *Political socialization, citizenship education, and democracy* (pp. 47–65). New York, NY: Teachers College Press.
- Metz, E., & Youniss, J. (2003). A demonstration that school-based required service does not deter—but heightens—volunteerism. PS: Political Science & Politics, 36(2), 281–286. doi:10.1017/S1049096503002221
- Middaugh, E., & Kahne, J. (2008). Civic development in context: The influence of local contexts on high school students' beliefs about civic engagement. In J. S. Bixby & J. L. Pace (Eds.), *Educating democratic citizens in troubled times: Qualitative studies of current efforts* (pp. 157–191). Albany, NY: State University of New York Press.
- Newton, K. (2007). Social and political trust. In R. J. Dalton & H. Klingemann (Eds.), *The Oxford handbook of political behavior* (pp. 342–361). New York, NY: Oxford University Press.
- Nicholls, J. G. (1979). Quality and equality in intellectual development: The role of motivation in education. *American Psychologist*, *34*(11), 1071–1084. doi:10.1037/0003-066X.34.11.1071
- Nie, N. H., Junn, J., & Stehlik-Barry, K. (1996). *Education and democratic citizenship in America*. Chicago, IL: The University of Chicago Press.
- Niemi, R. G., Craig, S. C., & Mattei, F. (1991). Measuring internal political efficacy in the 1988 national election study. *The American Political Science Review*, 85(4), 1407–1413. doi:10.2307/1963953
- Norris, P. (2002). *Democratic phoenix: Reinventing political activism*. New York, NY: Cambridge University Press.
- Owen, D. (2008). Political socialization in the twenty-first century: Recommendations for researchers. Paper presented at the Future of civic Education in the 21st Century conference, Montpelier, VT. Retrieved from http://www.civiced.org/pdfs/GermanAmericanConf2009/DianaOwen_2009.pdf
- Parker, W. C. (2008). Knowing and doing in democratic citizenship education. In L. S. Levstik & C. A. Tyson (Eds.), *Handbook of Research in Social Studies Education* (pp. 65–80). New York, NY: Routledge.
- Pasek, J., Feldman, L., Romer, D., & Jamieson, K. H. (2008). Schools as incubators of democratic participation: Building long-term political efficacy with civic education. *Applied Developmental Science*, 12(1), 26–37. doi:10.1080/10888690801910526
- Pew Research Center. (2011). Angry silents, disengaged millennials: The generation gap and the 2012 Election. Retrieved from http://www.people-press.org/2011/11/03/the-generation-gap-and-the-2012-election-3/
- Pew Research Center. (2014). *Millennials in adulthood: Detached from institutions, networked with friends*. Retrieved from http://www.pewsocialtrends.org/2014/03/07/millennials-in-adulthood/
- Pinkleton, B. E., Austin, E. W., & Fortman, K. K. J. (1998). Relationships of media use and political disaffection to political efficacy and voting behavior. *Journal of Broadcasting & Electronic Media*, 42(1), 34–49. doi:10.1093/scan/nsp046
- Pintor, R. L., & Gratschew, M. (Eds.). (2002). Voter turnout since 1945: A global report. Stockholm, Sweden: International Institute for Democracy and Electoral Assistance (International IDEA). Retrieved from http://www.idea.int/publications/vt/upload/VT_screenopt_2002.pdf
- Putnam, R. D. (1995). Bowling alone: Americas's declining social capital. *Journal of Democracy*, 6(1), 65–78. doi:10.1353/jod.1995.0002

- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: SAGE Publication.
- Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., Congdon, Jr., R. T., & Du Toit, M. (2011). *HLM* 7: *Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International.
- Renninger, K. A., & Hidi, S. (2002). Student interest and achievement: Developmental issues raised by a case study. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 173–195). San Diego, CA: Academic Press.
- Ripski, M. B., & Gregory, A. (2009). Unfair, unsafe, and unwelcome: Do high school students' perceptions of unfairness, hostility, and victimization in school predict engagement and achievement? *Journal of School Violence*, 8(4), 355–375. doi:10.1080/15388220903132755
- Sanders, L. M. (1997). Against deliberation. *Political Theory*, 25(3), 347–376. doi:10.1177/0090591797025003002
- Santee, R. T., & Maslach, C. (1982). To agree or not to agree: Personal dissent amid social pressure to conform. *Journal of Personality and Social Psychology*, 42(4), 690–700. doi:10.1037/0022-3514.42.4.690
- Sapiro, V. (2004). Not your parents' political socialization: Introduction for a new generation. *Annual Review of Political Science*, 7, 1–23. doi:10.1146/annurev.polisci.7.012003.104840
- Scheufele, D. A., & Eveland, W. P., Jr. (2001). Perceptions of "public opinion" and "public" opinion expression. *International Journal of Public Opinion Research*, 13(1), 25–44. doi:10.1093/ijpor/13.1.25
- Schiefele, U. (1991). Interest, learning, and motivation. *Educational Psychologist*, 26(3 & 4), 299–323. doi:10.1207/s15326985ep2603&4_5
- Schiefele, U. (2009). Situational and individual interest. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook of motivation in school* (pp. 197–223). New York, NY: Taylor Francis.
- Schildkraut, D. J. (2005). The rise and fall of political engagement among Latinos: The role of identity and perceptions of discrimination. *Political Behavior*, 27(3), 285–312. doi:10.1007/s11109-005-4803-9
- Schlozman, K. L., Burns, N., & Verba, S. (1994). Gender and the pathways to participation: The role of resources. *The Journal of Politics*, 56(4), 963–990. doi:10.2307/2132069
- Schmitter, P. C., & Karl, T. L. (1991). What democracy is. . . and is not. *Journal of Democracy*, 2(3), 75–88. doi:10.1353/jod.1991.0033
- Schulz, W. (2005). Political efficacy and expected political participation among lower and upper secondary students: A comparative analysis with data from the IEA Civic Education

Study. Paper presented at the ECPR General Conference, Budapest, 8-10 September 2005. Retrieved from http://iccs.acer.edu.au/uploads/File/papers/ECPR2005 SchulzW EfficacyParticipation.pdf

- Schulz, W., Ainley, J., & Fraillon, J. (Eds.). (2011). *ICCS 2009 technical report*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). ICCS 2009 international report: Civic knowledge, attitudes and engagement among lower secondary school students in thirty-eight countries. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Schulz, W., & Fraillon, J. (2012). Students' participation in and valuing of civic engagement at school. Paper presented at the Annual Conference of the American Educational Research Association (AERA), Vancouver, 13-17 April 2012. Retrieved from http://research.acer.edu.au/civics/14
- Schulz, W., Fraillon, J., Ainley, J., Losito, B., & Kerr, D. (2008). International Civic and Citizenship Education Study: Assessment framework. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Shin, J., Lee, H., & Kim, Y. (2009). Student and school factors affecting mathematics achievement: International comparisons between Korea, Japan and the USA. *School Psychology International*, 30(5), 520–537. doi:10.1177/0143034309107070
- Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (2nd ed.). Thousand Oaks, CA: SAGE Publication.
- Sobieraj, S., & White, D. (2007). Could civic engagement reproduce political inequality? In S. A. Ostrander & K. E. Portney (Eds.), *Acting civically: From urban neighborhoods to higher education* (pp. 92–110). Lebanon, NH: University Press of New England.
- Solhaug, T. (2006). Knowledge and self-efficacy as predictors of political participation and civic attitudes: with relevance for educational practice. *Policy Futures in Education*, 4(3), 265–278. doi:10.2304/pfie.2006.4.3.265
- The Economy Intelligence Unit. (2008). *The Economist Intelligence Unit's index of democracy* 2008. The Economist.
- The Economy Intelligence Unit. (2010). *Democracy index 2010: Democracy in retreat*. The Economist.
- The Economy Intelligence Unit. (2012). *Democracy index 2012: Democracy at a standstill*. The Economist.
- Thomas, R. J., & McFarland, D. A. (2010). Joining young, voting young: The effects of youth voluntary associations on early adult voting (CIRCLE Working Paper No. 73). College Park, MD: The Center for Information and Research on Civic Learning and Engagement (CIRCLE).

- Torney-Purta, J., Amadeo, J., & Andolina, M. (2010). A conceptual framework and multimethod approach for research on political socialization and civic engagement. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 497–524). Hoboken, NJ: Wiley. doi:10.1002/9780470767603.ch19
- Torney-Purta, J., Barber, C. H., & Wilkenfeld, B. (2007). Latino adolescents' civic development in the United States: Research results from the IEA Civic Education Study. *Journal of Youth and Adolescence*, *36*(2), 111–125. doi:10.1007/s10964-006-9121-y
- Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Torney-Purta, J., & Richardson, W. K. (2004). Anticipated political engagement among adolescents in Australia, England, Norway, and the United States. In J. Demaine (Ed.), *Citizenship and political education today* (pp. 41–58). London, UK: Palgrave/Macmillan.
- Trafford, B. (2008). Democratic schools: Towards a definition. In J. Arthur, I. Davies, & C. Hahn (Eds.), *The Sage handbook of education for citizenship and democracy* (pp. 410–423). Thousand Oaks, CA: Sage.
- Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review*, 1(4), 198–210. doi:10.1111/j.1756-2589.2009.00026.x
- Ulbig, S. G., & Funk, C. L. (1999). Conflict avoidance and political participation. *Political Behavior*, 21(3), 265–282. doi:10.1023/A:1022087617514
- United Nations Development Programme. (2009). *Human Development Report 2009 Overcoming barriers: Human mobility and development*. New York, NY: Palgrave Macmillan. Retrieved from http://hdr.undp.org/en/
- United Nations Development Programme. (2010). *Human Development Report 2010 The real wealth of nations: Pathways to human development*. New York, NY: Palgrave Macmillan. Retrieved from http://hdr.undp.org/en/
- Valenzuela, A. (Ed.). (2005). Leaving children behind: How "Texas-style" accountability fails Latino youth. Albany, NY: State University of New York Press.
- Van de gaer, E., Pustjens, H., Van Damme, J., & De Munter, A. (2009). School engagement and language achievement: A longitudinal study of gender differences across secondary school. *Merrill-Palmer Quarterly*, 55(4), 373–405. doi:10.1353/mpq.0.0034
- Verba, S., Schlozman, K. L., & Brady, H. E. (1995). Voice and equality: Civic voluntarism in American politics. Cambridge, MA: Harvard University Press.
- Vercellotti, T., & Matto, E. C. (2010). *The classroom-kitchen table connection: The effects of political discussion on youth knowledge and efficacy* (CIRCLE Working Paper No. 72).

College Park, MD: The Center for Information and Research on Civic Learning and Engagement (CIRCLE).

- Warm, T. A. (1989). Weighted likelihood estimation of ability in item response theory. *Psychometrika*, *54*(3), 427–520. doi:10.1007/BF02294627
- Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, 132(2), 249–268. doi:10.1037/0033-2909.132.2.249
- Wells, S. D., & Dudash, E. A. (2007). Wha'd'ya know? Examining young voters' political information and efficacy in the 2004 election. *American Behavioral Scientist*, 50(9), 1280– 1289. doi:10.1177/0002764207300053
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.
- Wenger, E. (2006). Community of practice: A brief introduction. *Etienne Wenger home page*. Retrieved June 15, 2012, from http://www.ewenger.com/theory/
- Wentzel, K. R. (1997). Student motivation in middle school : The role of perceived pedagogical caring. *Journal of Educational Psychology*, 89(3), 411–419. doi:10.1037/0022-0663.89.3.411
- Wentzel, K. R. (2006). Developing and nurturing interesting and researchable ideas. In *The Sage handbook for research in education: Engaging ideas and enriching inquiry* (pp. 315–331). Thousand Oaks, CA: SAGE Publication.
- Westheimer, J., & Kahne, J. (2004). What kind of citizen: The politics of educating for democracy. *American Educational Research Journal*, 41(2), 237–269. doi:10.3102/00028312041002237
- Wigfield, A., & Cambria, J. (2010). Students' achievement values, goal orientations, and interest: Definitions, development, and relations to achievement outcomes. *Developmental Review*, 30(1), 1–35. doi:10.1016/j.dr.2009.12.001
- Wilkenfeld, B. (2009). A multilevel analysis of context effects on adolescent civic engagement: The role of family, peers, school, and neighborhood (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. 3359321)
- Wu, S., & Keysar, B. (2007). The effect of culture on perspective taking. *Psychological Science*, *18*(7), 600–606. doi:10.1111/j.1467-9280.2007.01946.x
- Wyatt, R. O., Katz, E., Levinsohn, H., & Al-Haj, M. (1996). The dimensions of expression inhibition: Perceptions of obstacles to free speech in three cultures. *International Journal of Public Opinion Research*, 8(3), 229–247. doi:10.1093/ijpor/8.3.229
- Yeich, S., & Levine, R. (1994). Political efficacy: Enhancing the construct and its relationship to mobilization of people. *Journal of Community Psychology*, 22(3), 259–271. doi:10.1002/1520-6629(199407)22:3<259::AID-JCOP2290220306>3.0.CO;2-H

APPENDICES

Austria				
Variable	М	SD	Min	Max
X-1. Gender ($1 = Female$)	0.53	0.50	0.00	1.00
X-2. Immigrant background (1 = Yes)	0.19	0.39	0.00	1.00
X-3. Civic knowledge	150.89	9.87	111.17	192.71
X-4. Civic participation at school	49.23	9.18	28.23	78.47
X-5. Discussion of political and social issues outside of school	50.91	9.85	32.62	82.96
X-6. Participation in organized activities outside of school	50.44	9.31	38.68	86.34
X-7. Family SES	0.06	1.01	-2.82	2.92
X-8. Parents: Quite interested in social and political issues (1 = Yes)	0.49	0.50	0.00	1.00
X-9. Parents: Very interested in social and political issues (1 = Yes)	0.32	0.47	0.00	1.00
X-10. Openness in classroom discussions	47.78	10.33	14.83	78.98
X-11. Students' influence on decisions about school	46.94	9.17	26.86	73.84
X-12. Student-teacher relationships	46.79	10.39	17.62	73.53
X-13. Political interest	52.21	9.79	26.58	73.81
X-14. Internal political efficacy	50.47	10.88	22.94	79.74
X-15. Collective school efficacy	45.73	9.36	15.18	69.83
Outcome variables				
Y-1. Expected electoral participation	50.83	9.45	23.85	63.05
Y-2. Expected informal political participation	48.08	10.12	27.57	74.09

Appendix A: Descriptive Statistics for Student-level Variables

	Belgi	um (Fle	mish)				Bulgari	a				Chile		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.50	0.50	0.00	1.00	X-1	0.52	0.50	0.00	1.00	X-1	0.52	0.50	0.00	1.00
X-2	0.11	0.31	0.00	1.00	X-2	0.01	0.08	0.00	1.00	X-2	0.01	0.09	0.00	1.00
X-3	150.59	9.70	104.20	200.35	X-3	151.84	9.39	106.89	194.32	X-3	151.74	9.97	117.59	200.52
X-4	46.09	10.64	28.23	78.47	X-4	47.91	10.30	28.23	78.47	X-4	51.99	8.57	28.23	78.47
X-5	45.42	9.78	32.62	82.96	X-5	50.30	9.98	32.62	82.96	X-5	49.64	9.94	32.62	82.96
X-6	49.07	8.31	38.68	86.34	X-6	51.37	9.71	38.68	86.34	X-6	50.70	9.53	38.68	86.34
X-7	0.00	0.99	-4.09	3.15	X-7	0.14	0.95	-3.14	2.62	X-7	0.20	1.05	-3.06	3.56
X-8	0.55	0.50	0.00	1.00	X-8	0.53	0.50	0.00	1.00	X-8	0.37	0.48	0.00	1.00
X-9	0.19	0.40	0.00	1.00	X-9	0.18	0.38	0.00	1.00	X-9	0.21	0.41	0.00	1.00
X-10	49.35	8.74	14.83	78.98	X-10	48.44	10.00	14.83	78.98	X-10	52.46	10.07	14.83	78.98
X-11	47.34	9.24	26.86	73.84	X-11	48.46	10.73	26.86	73.84	X-11	52.77	8.89	26.86	73.84
X-12	48.80	8.71	17.62	73.53	X-12	50.49	9.51	17.62	73.53	X-12	51.14	10.37	17.62	73.53
X-13	45.42	10.08	26.58	73.81	X-13	49.07	9.27	26.58	73.81	X-13	51.03	9.72	26.58	73.81
X-14	45.34	10.08	22.94	79.74	X-14	49.80	9.79	22.94	79.74	X-14	51.25	10.06	22.94	79.74
X-15	49.80	9.10	15.18	69.83	X-15	48.88	10.46	15.18	69.83	X-15	56.61	9.91	15.18	69.83
Y-1	45.86	9.15	23.85	63.05	Y-1	47.69	10.62	23.85	63.05	Y-1	50.08	12.41	23.85	63.05
Y-2	46.13	8.99	27.57	74.09	Y-2	51.30	9.32	27.57	74.09	Y-2	49.87	11.19	27.57	74.09

	Ch	inese Ta	ipei			(Colombia	ı				Cyprus		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.48	0.50	0.00	1.00	X-1	0.54	0.50	0.00	1.00	X-1	0.52	0.50	0.00	1.00
X-2	0.01	0.09	0.00	1.00	X-2	0.00	0.06	0.00	1.00	X-2	0.06	0.24	0.00	1.00
X-3	150.49	9.82	105.29	189.28	X-3	152.08	9.57	96.10	207.07	X-3	151.01	9.80	102.66	182.44
X-4	49.98	9.12	28.23	78.47	X-4	53.30	8.78	28.23	78.47	X-4	52.65	11.46	28.23	78.47
X-5	49.52	10.35	32.62	82.96	X-5	50.82	10.01	32.62	82.96	X-5	50.11	10.22	32.62	82.96
X-6	43.78	7.68	38.68	86.34	X-6	54.63	9.85	38.68	86.34	X-6	51.76	10.35	38.68	86.34
X-7	0.04	1.01	-3.13	3.03	X-7	0.11	0.99	-2.43	3.94	X-7	0.04	1.00	-3.36	2.66
X-8	0.38	0.49	0.00	1.00	X-8	0.26	0.44	0.00	1.00	X-8	0.46	0.50	0.00	1.00
X-9	0.10	0.30	0.00	1.00	X-9	0.30	0.46	0.00	1.00	X-9	0.27	0.45	0.00	1.00
X-10	50.54	10.03	14.83	78.98	X-10	50.65	8.90	14.83	78.98	X-10	50.95	11.17	14.83	78.98
X-11	51.87	8.04	26.86	73.84	X-11	56.01	7.44	26.86	73.84	X-11	48.91	9.53	26.86	73.84
X-12	50.60	10.99	17.62	73.53	X-12	53.55	10.08	17.62	73.53	X-12	44.81	10.52	17.62	73.53
X-13	47.48	9.86	26.58	73.81	X-13	51.91	9.65	26.58	73.81	X-13	46.90	11.76	26.58	73.81
X-14	48.85	9.74	22.94	79.74	X-14	52.06	8.66	22.94	79.74	X-14	51.02	11.17	22.94	79.74
X-15	50.80	10.61	15.18	69.83	X-15	54.23	9.22	15.18	69.83	X-15	51.08	10.88	15.18	69.83
Y-1	51.04	9.65	23.85	63.05	Y-1	53.81	8.89	23.85	63.05	Y-1	48.76	10.94	23.85	63.05
Y-2	48.93	9.72	27.57	74.09	Y-2	54.26	9.95	27.57	74.09	Y-2	50.89	11.56	27.57	74.09

	Cze	ch Repu	blic			Ι	Denmarl	k			Domin	ican Re	public	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.47	0.50	0.00	1.00	X-1	0.53	0.50	0.00	1.00	X-1	0.56	0.50	0.00	1.00
X-2	0.02	0.15	0.00	1.00	X-2	0.09	0.29	0.00	1.00	X-2	0.02	0.15	0.00	1.00
X-3	150.32	9.86	95.61	193.67	X-3	150.44	9.65	118.76	185.62	X-3	151.99	10.07	98.54	198.73
X-4	47.83	9.56	28.23	78.47	X-4	48.45	9.92	28.23	78.47	X-4	52.79	10.31	28.23	78.47
X-5	47.72	9.14	32.62	82.96	X-5	50.29	9.93	32.62	82.96	X-5	51.71	10.26	32.62	82.96
X-6	46.08	8.37	38.68	86.34	X-6	44.77	7.67	38.68	86.34	X-6	58.85	9.81	38.68	86.34
X-7	0.01	1.00	-5.10	3.23	X-7	0.02	1.01	-4.49	2.68	X-7	0.12	1.00	-2.49	3.85
X-8	0.49	0.50	0.00	1.00	X-8	0.59	0.49	0.00	1.00	X-8	0.16	0.37	0.00	1.00
X-9	0.12	0.33	0.00	1.00	X-9	0.18	0.38	0.00	1.00	X-9	0.30	0.46	0.00	1.00
X-10	48.96	8.25	14.83	78.98	X-10	54.67	9.43	14.83	78.98	X-10	47.76	9.95	14.83	78.98
X-11	45.85	8.88	26.86	73.84	X-11	45.58	6.39	26.86	73.84	X-11	58.85	7.53	26.86	73.84
X-12	47.11	8.66	17.62	73.53	X-12	51.55	9.44	17.62	73.53	X-12	58.85	10.44	17.62	73.53
X-13	47.26	9.17	26.58	73.81	X-13	47.86	9.70	26.58	73.81	X-13	56.59	10.14	26.58	73.81
X-14	44.48	9.17	22.94	79.74	X-14	50.06	10.48	22.94	79.74	X-14	54.49	10.13	22.94	79.74
X-15	46.82	8.90	15.18	69.83	X-15	49.87	9.02	15.18	69.83	X-15	55.42	10.33	15.18	69.83
Y-1	43.80	10.71	23.85	63.05	Y-1	49.16	8.99	23.85	63.05	Y-1	52.62	9.50	23.85	63.05
Y-2	46.23	9.53	27.57	74.09	Y-2	47.45	8.73	27.57	74.09	Y-2	57.32	10.67	27.57	74.09

		England	ł				Estonia					Finland		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.53	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00	X-1	0.52	0.50	0.00	1.00
X-2	0.14	0.35	0.00	1.00	X-2	0.07	0.25	0.00	1.00	X-2	0.02	0.15	0.00	1.00
X-3	151.09	9.53	120.78	190.19	X-3	150.49	9.77	97.49	192.26	X-3	150.37	9.82	101.31	187.81
X-4	50.69	10.14	28.23	78.47	X-4	46.87	8.92	28.23	78.47	X-4	48.47	8.83	28.23	78.47
X-5	47.80	10.46	32.62	82.96	X-5	49.21	9.53	32.62	82.96	X-5	45.86	10.03	32.62	82.96
X-6	49.13	9.41	38.68	86.34	X-6	47.81	8.58	38.68	86.34	X-6	43.44	7.12	38.68	86.34
X-7	0.02	1.00	-4.10	2.64	X-7	0.04	0.99	-3.10	2.50	X-7	0.00	0.99	-3.76	2.75
X-8	0.50	0.50	0.00	1.00	X-8	0.51	0.50	0.00	1.00	X-8	0.60	0.49	0.00	1.00
X-9	0.19	0.39	0.00	1.00	X-9	0.16	0.37	0.00	1.00	X-9	0.14	0.35	0.00	1.00
X-10	53.36	10.30	14.83	78.98	X-10	50.31	8.82	14.83	78.98	X-10	49.61	7.95	14.83	78.98
X-11	45.46	8.97	26.86	73.84	X-11	47.17	8.92	26.86	73.84	X-11	46.00	8.42	26.86	73.84
X-12	48.37	9.19	17.62	73.53	X-12	47.39	8.43	17.62	73.53	X-12	48.00	8.43	17.62	73.53
X-13	48.85	10.36	26.58	73.81	X-13	50.34	8.36	26.58	73.81	X-13	45.74	9.58	26.58	73.81
X-14	49.69	10.25	22.94	79.74	X-14	50.22	8.15	22.94	79.74	X-14	45.17	10.15	22.94	79.74
X-15	48.26	9.56	15.18	69.83	X-15	50.27	9.50	15.18	69.83	X-15	49.89	9.63	15.18	69.83
Y-1	47.69	10.14	23.85	63.05	Y-1	46.72	8.90	23.85	63.05	Y-1	49.42	8.68	23.85	63.05
Y-2	49.11	9.45	27.57	74.09	Y-2	48.35	8.31	27.57	74.09	Y-2	45.25	8.38	27.57	74.09

		Greece				G	luatema	la			I	ndonesi	a	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.52	0.50	0.00	1.00	X-1	0.49	0.50	0.00	1.00	X-1	0.53	0.50	0.00	1.00
X-2	0.10	0.30	0.00	1.00	X-2	0.02	0.14	0.00	1.00	X-2	0.01	0.11	0.00	1.00
X-3	150.87	9.81	121.55	185.03	X-3	150.92	9.57	97.10	182.22	X-3	151.23	9.87	98.18	207.90
X-4	55.29	9.33	28.23	78.47	X-4	55.21	8.55	28.23	78.47	X-4	52.45	8.53	28.23	78.47
X-5	51.29	9.56	32.62	82.96	X-5	53.10	9.98	32.62	82.96	X-5	54.66	9.79	32.62	82.96
X-6	50.10	9.83	38.68	86.34	X-6	57.32	9.56	38.68	86.34	X-6	54.41	9.56	38.68	86.34
X-7	0.06	1.00	-3.61	2.46	X-7	0.03	0.98	-1.86	4.27	X-7	0.07	1.01	-2.71	3.52
X-8	0.47	0.50	0.00	1.00	X-8	0.26	0.44	0.00	1.00	X-8	0.50	0.50	0.00	1.00
X-9	0.27	0.44	0.00	1.00	X-9	0.31	0.46	0.00	1.00	X-9	0.32	0.47	0.00	1.00
X-10	51.14	9.55	14.83	78.98	X-10	53.28	9.67	14.83	78.98	X-10	54.94	9.47	14.83	78.98
X-11	47.05	9.19	26.86	73.84	X-11	56.99	8.57	26.86	73.84	X-11	59.22	10.01	26.86	73.84
X-12	49.19	10.04	17.62	73.53	X-12	56.48	9.44	17.62	73.53	X-12	54.20	7.83	31.15	73.53
X-13	49.89	10.01	26.58	73.81	X-13	54.87	8.08	26.58	73.81	X-13	55.17	7.05	26.58	73.81
X-14	52.55	9.45	22.94	79.74	X-14	54.48	7.91	22.94	79.74	X-14	55.82	7.39	22.94	79.74
X-15	53.00	10.51	15.18	69.83	X-15	56.32	9.44	25.59	69.83	X-15	52.01	8.08	32.08	69.83
Y-1	50.02	10.52	23.85	63.05	Y-1	55.34	8.32	23.85	63.05	Y-1	53.05	7.96	23.85	63.05
Y-2	52.90	9.57	27.57	74.09	Y-2	55.36	10.11	27.57	74.09	Y-2	55.86	7.92	27.57	74.09
		Ireland					Italy				Kore	a, Repul	olic of	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.50	0.50	0.00	1.00	X-1	0.49	0.50	0.00	1.00	X-1	0.43	0.50	0.00	1.00
X-2	0.11	0.31	0.00	1.00	X-2	0.07	0.25	0.00	1.00	X-2	0.00	0.02	0.00	1.00
X-3	151.19	9.61	120.31	187.87	X-3	150.63	9.83	118.16	195.15	X-3	150.29	9.82	108.21	192.09
X-4	50.48	9.12	28.23	78.47	X-4	47.37	9.03	28.23	78.47	X-4	45.49	11.10	28.23	78.47
X-5	48.30	10.12	32.62	82.96	X-5	52.32	9.35	32.62	82.96	X-5	50.26	9.46	32.62	82.96
X-6	49.38	8.79	38.68	86.34	X-6	47.40	8.83	38.68	86.34	X-6	42.44	7.21	38.68	86.34
X-7	0.05	0.99	-3.80	3.31	X-7	0.04	1.01	-2.47	2.88	X-7	0.03	1.00	-3.77	2.74

X-1	0.52	0.50	0.00	1.00	X-1	0.50	0.50	0.00	1.00	X-1	0.48	0.50	0.00	1.00
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
		Latvia				L	ithuania	a				Malta		
<u> </u>	10.05	2.00	27.57	,	1 2	50.20	7.37	27.57	, 1.07	12	17.42	2.00	27.57	, 1.07
Y-2	48.85	9.68	27.57	74.09	Y-2	50.28	9.39	27.57	74.09	Y- 2	47.42	9.00	27.57	74.09
Y-1	52.63	9.61	23.85	63.05	Y-1	54.45	9.04	23.85	63.05	Y-1	48.58	8.90	23.85	63.05
X-15	51.35	9.98	15.18	69.83	X-15	49.34	9.04	15.18	69.83	X-15	45.72	10.41	15.18	69.83
X-14	50.81	10.26	22.94	79.74	X-14	51.76	9.49	22.94	79.74	X-14	47.91	8.86	22.94	79.74
X-13	49.48	10.28	26.58	73.81	X-13	52.98	8.68	26.58	73.81	X-13	50.25	8.70	26.58	73.81
X-12	49.11	9.61	17.62	73.53	X-12	51.32	9.46	17.62	73.53	X-12	45.87	8.59	17.62	73.53
X-11	44.01	10.24	26.86	73.84	X-11	51.13	7.51	26.86	73.84	X-11	43.15	10.25	26.86	73.84
X-10	52.79	10.75	14.83	78.98	X-10	54.46	8.87	14.83	78.98	X-10	38.09	10.55	14.83	78.98
X-9	0.31	0.46	0.00	1.00	X-9	0.30	0.46	0.00	1.00	X-9	0.30	0.46	0.00	1.00
X-8	0.51	0.50	0.00	1.00	X-8	0.55	0.50	0.00	1.00	X-8	0.61	0.49	0.00	1.00
11 /	0.05	0.77	5.00	5.51	11 /	0.01	1.01	2	2.00	11 /	0.05	1.00	5.11	2.7 1

	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.52	0.50	0.00	1.00	X-1	0.50	0.50	0.00	1.00	X-1	0.48	0.50	0.00	1.00
X-2	0.05	0.23	0.00	1.00	X-2	0.04	0.21	0.00	1.00	X-2	0.02	0.13	0.00	1.00
X-3	150.80	10.11	110.26	193.43	X-3	149.42	10.20	110.29	201.95	X-3	151.25	9.90	112.97	192.91
X-4	49.01	9.47	28.23	78.47	X-4	48.98	9.19	28.23	78.47	X-4	47.88	9.49	29.04	76.70
X-5	53.08	8.98	32.62	82.96	X-5	51.38	8.96	32.62	82.96	X-5	51.05	9.23	32.62	82.96
X-6	49.60	8.99	38.68	86.34	X-6	49.65	9.32	38.68	86.34	X-6	49.13	9.35	38.68	86.34
X-7	0.10	0.98	-5.27	2.59	X-7	0.05	1.01	-3.68	2.92	X-7	0.11	1.00	-2.96	2.86
X-8	0.58	0.49	0.00	1.00	X-8	0.62	0.48	0.00	1.00	X-8	0.50	0.50	0.00	1.00
X-9	0.27	0.44	0.00	1.00	X-9	0.22	0.41	0.00	1.00	X-9	0.23	0.42	0.00	1.00
X-10	50.48	8.54	14.83	78.98	X-10	49.25	8.76	14.83	78.98	X-10	46.73	9.10	14.83	78.98
X-11	48.63	9.19	26.86	73.84	X-11	52.23	9.15	26.86	73.84	X-11	50.38	9.33	26.86	73.84
X-12	45.15	8.28	17.62	73.53	X-12	49.76	8.57	17.62	73.53	X-12	52.27	10.51	17.62	73.53
X-13	50.74	8.29	26.58	73.81	X-13	51.47	8.67	26.58	73.81	X-13	48.60	9.68	26.58	73.81
X-14	50.68	8.02	22.94	79.74	X-14	51.14	7.69	22.94	79.74	X-14	51.03	10.10	22.94	79.74
X-15	48.46	8.97	15.18	69.83	X-15	48.07	8.74	15.18	69.83	X-15	51.54	9.84	15.18	69.83
Y-1	50.20	9.80	23.85	63.05	Y-1	51.12	9.27	23.85	63.05	Y-1	49.64	9.08	23.85	63.05
Y-2	51.60	8.99	27.57	74.09	Y-2	51.36	8.63	27.57	74.09	Y-2	48.71	10.33	27.57	74.09

		Mexico				Ne	w Zeala	nd				Norway	,	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.53	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00	X-1	0.52	0.50	0.00	1.00
X-2	0.01	0.12	0.00	1.00	X-2	0.23	0.42	0.00	1.00	X-2	0.10	0.30	0.00	1.00
X-3	151.46	9.70	117.16	186.90	X-3	151.05	9.71	104.23	188.10	X-3	151.54	9.56	111.70	191.58
X-4	49.53	9.89	28.23	78.47	X-4	49.68	10.33	28.23	78.47	X-4	54.60	9.30	28.23	78.47
X-5	47.44	9.60	32.62	82.96	X-5	50.48	10.25	32.62	82.96	X-5	49.17	10.09	32.62	82.96
X-6	52.38	9.70	38.68	86.34	X-6	50.12	9.42	38.68	86.34	X-6	48.04	8.69	38.68	86.34
X-7	0.10	0.98	-2.08	3.54	X-7	0.03	1.00	-4.54	2.71	X-7	0.09	0.98	-3.75	2.32
X-8	0.22	0.41	0.00	1.00	X-8	0.55	0.50	0.00	1.00	X-8	0.56	0.50	0.00	1.00
X-9	0.23	0.42	0.00	1.00	X-9	0.24	0.43	0.00	1.00	X-9	0.23	0.42	0.00	1.00
X-10	50.34	9.50	14.83	78.98	X-10	53.81	10.57	14.83	78.98	X-10	52.87	9.96	14.83	78.98
X-11	54.90	7.73	26.86	73.84	X-11	47.19	8.74	26.86	73.84	X-11	51.91	8.05	26.86	73.84
X-12	53.09	10.10	17.62	73.53	X-12	48.98	9.11	17.62	73.53	X-12	52.62	10.32	17.62	73.53
X-13	51.60	9.71	26.58	73.81	X-13	49.87	10.41	26.58	73.81	X-13	47.34	10.52	26.58	73.81
X-14	51.71	9.46	22.94	79.74	X-14	50.18	10.00	22.94	79.74	X-14	48.36	10.50	22.94	79.74
X-15	51.21	10.04	15.18	69.83	X-15	48.86	9.53	15.18	69.83	X-15	52.43	9.61	15.18	69.83
Y-1	53.30	9.33	23.85	63.05	Y-1	49.28	9.58	23.85	63.05	Y-1	52.60	10.14	23.85	63.05
Y-2	53.54	10.67	27.57	74.09	Y-2	48.73	9.33	27.57	74.09	Y-2	48.77	9.58	27.57	74.09

	F	Paragua	у		_		Poland				Russia	an Fede	ration	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.54	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00
X-2	0.02	0.14	0.00	1.00	X-2	0.01	0.12	0.00	1.00	X-2	0.05	0.23	0.00	1.00
X-3	152.97	9.27	104.10	186.18	X-3	150.52	9.88	120.52	190.36	X-3	150.62	9.80	114.56	186.05
X-4	54.61	8.87	28.23	78.47	X-4	54.18	8.67	28.23	78.47	X-4	48.94	9.95	28.23	78.47
X-5	51.45	9.92	32.62	82.96	X-5	50.60	9.60	32.62	82.96	X-5	49.93	9.78	32.62	82.96
X-6	56.15	9.42	38.68	86.34	X-6	51.47	9.61	38.68	86.34	X-6	52.61	9.65	38.68	86.34
X-7	0.18	1.02	-2.25	4.58	X-7	0.03	1.01	-2.23	2.82	X-7	0.07	0.98	-3.76	2.89
X-8	0.24	0.43	0.00	1.00	X-8	0.61	0.49	0.00	1.00	X-8	0.54	0.50	0.00	1.00
X-9	0.23	0.42	0.00	1.00	X-9	0.23	0.42	0.00	1.00	X-9	0.25	0.43	0.00	1.00
X-10	50.20	8.51	14.83	78.98	X-10	50.98	9.82	14.83	78.98	X-10	49.03	9.73	14.83	78.98
X-11	55.40	8.66	26.86	73.84	X-11	44.47	9.33	26.86	73.84	X-11	56.35	10.55	26.86	73.84
X-12	55.83	9.59	17.62	73.53	X-12	46.93	8.80	17.62	73.53	X-12	50.90	9.35	17.62	73.53
X-13	52.00	9.18	26.58	73.81	X-13	49.54	9.52	26.58	73.81	X-13	53.47	7.86	26.58	73.81
X-14	51.79	9.18	22.94	79.74	X-14	51.62	8.88	22.94	79.74	X-14	51.63	7.70	22.94	79.74
X-15	54.64	9.01	15.18	69.83	X-15	50.83	9.82	15.18	69.83	X-15	50.05	9.34	15.18	69.83
Y-1	53.15	9.08	23.85	63.05	Y-1	48.27	9.84	23.85	63.05	Y-1	51.36	9.30	23.85	63.05
Y-2	52.96	10.07	27.57	74.09	Y-2	49.70	9.18	27.57	74.09	Y-2	52.43	9.42	27.57	74.09

	Slova	ak Repu	ıblic				Slovenia					Spain		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.51	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00
X-2	0.01	0.08	0.00	1.00	X-2	0.10	0.30	0.00	1.00	X-2	0.10	0.30	0.00	1.00
X-3	150.32	9.72	116.53	191.50	X-3	150.50	9.87	93.84	196.41	X-3	150.79	9.73	108.93	195.35
X-4	51.89	9.03	28.23	78.47	X-4	50.99	9.75	28.23	78.47	X-4	52.50	8.85	28.23	78.47
X-5	49.52	9.51	32.62	82.96	X-5	47.82	9.26	32.62	82.96	X-5	47.86	9.64	32.62	82.96
X-6	47.20	8.81	38.68	86.34	X-6	49.54	9.51	38.68	86.34	X-6	47.13	9.08	38.68	86.34
X-7	0.01	0.99	-2.91	3.22	X-7	0.03	1.00	-2.60	2.59	X-7	0.06	1.01	-2.22	2.53
X-8	0.49	0.50	0.00	1.00	X-8	0.56	0.50	0.00	1.00	X-8	0.47	0.50	0.00	1.00
X-9	0.11	0.31	0.00	1.00	X-9	0.14	0.35	0.00	1.00	X-9	0.19	0.39	0.00	1.00
X-10	50.06	8.27	14.83	78.98	X-10	50.16	9.44	14.83	78.98	X-10	48.20	9.29	14.83	78.98
X-11	49.05	9.23	26.86	73.84	X-11	46.52	9.28	26.86	73.84	X-11	47.84	10.11	26.86	73.84
X-12	47.59	8.93	17.62	73.53	X-12	46.87	9.07	17.62	73.53	X-12	50.28	9.89	17.62	73.53
X-13	47.00	9.16	26.58	73.81	X-13	45.13	10.91	26.58	73.81	X-13	49.33	9.83	26.58	73.81
X-14	47.56	9.01	22.94	79.74	X-14	47.12	10.83	22.94	79.74	X-14	48.79	10.18	22.94	79.74
X-15	47.00	8.27	15.18	69.83	X-15	50.23	10.44	15.18	69.83	X-15	50.93	9.83	15.18	69.83
Y-1	47.93	9.91	23.85	63.05	Y-1	49.78	10.38	23.85	63.05	Y-1	51.39	9.80	23.85	63.05
Y-2	48.38	9.02	27.57	74.09	Y-2	49.80	9.19	27.57	74.09	Y-2	48.38	10.07	27.57	74.09

		Sweden	l			Sv	vitzerla	nd			•	Fhailand	l	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	0.52	0.50	0.00	1.00	X-1	0.51	0.50	0.00	1.00	X-1	0.55	0.50	0.00	1.00
X-2	0.18	0.38	0.00	1.00	X-2	0.25	0.43	0.00	1.00	X-2	0.01	0.10	0.00	1.00
X-3	150.68	9.87	109.25	190.14	X-3	150.25	9.55	113.72	183.68	X-3	151.10	9.94	96.57	195.84
X-4	50.88	9.47	28.23	78.47	X-4	47.67	9.42	28.23	78.47	X-4	49.60	9.33	28.23	78.47
X-5	47.08	10.64	32.62	82.96	X-5	50.79	9.41	32.62	82.96	X-5	55.28	8.58	32.62	82.96
X-6	44.26	8.52	38.68	86.34	X-6	48.06	8.41	38.68	86.34	X-6	58.18	10.04	38.68	86.34
X-7	-0.01	1.02	-4.98	2.43	X-7	0.04	0.98	-2.68	2.66	X-7	0.09	1.04	-1.78	4.40
X-8	0.52	0.50	0.00	1.00	X-8	0.56	0.50	0.00	1.00	X-8	0.57	0.49	0.00	1.00
X-9	0.17	0.38	0.00	1.00	X-9	0.23	0.42	0.00	1.00	X-9	0.31	0.46	0.00	1.00
X-10	51.39	9.61	14.83	78.98	X-10	47.80	9.40	14.83	78.98	X-10	51.58	8.02	14.83	78.98
X-11	49.63	7.60	26.86	73.84	X-11	45.97	9.39	26.86	73.84	X-11	58.38	6.41	26.86	73.84
X-12	51.24	10.02	17.62	73.53	X-12	49.54	9.24	17.62	73.53	X-12	52.32	7.90	17.62	73.53
X-13	45.79	11.37	26.58	73.81	X-13	50.89	9.19	26.58	73.81	X-13	56.01	6.67	26.58	73.81
X-14	47.86	11.22	22.94	79.74	X-14	48.45	10.25	22.94	79.74	X-14	54.53	7.17	22.94	79.74
X-15	49.17	9.83	15.18	69.83	X-15	46.69	9.35	15.18	69.83	X-15	51.40	8.25	15.18	69.83
Y-1	49.47	9.47	23.85	63.05	Y-1	48.43	10.08	23.85	63.05	Y-1	54.58	8.77	23.85	63.05
Y-2	48.46	8.90	27.57	74.09	Y-2	46.73	9.10	27.57	74.09	Y-2	55.73	8.01	27.57	74.09

Note. X-1: Gender (Female), X-2: Immigrant background, X-3: Civic knowledge, X-4: Civic participation at school, X-5: Discussion of political and social issues outside of school, X-6: Participation in organized activities outside of school, X-7: Family SES, X-8: Parents: Quite interested in social and political issues, X-9: Parents: Very interested in social and political issues, X-10: Openness in classroom discussions, X-11: Students' influence on decisions about school, X-12: Student-teacher relationships, X-13: Political interest, X-14: Internal political efficacy, X-15: Collective school efficacy, Y-1: Expected electoral participation, Y-2: Expected informal political participation.

Austria				
Variable	M	SD	Min	Max
X-1. School mean of civic participation at school	49.16	2.89	39.70	58.75
X-2. School mean of discussion of political and social issues outside of school	50.76	3.59	39.92	60.33
X-3. School mean of civic participation outside of school	50.45	2.98	43.36	58.23
X-4. Average school SES	-0.01	0.56	-1.11	1.86
X-5. Collective perceptions of openness in classroom discussions	47.58	3.84	36.41	61.68
X-6. Collective perceptions of students' influence on decisions about school	47.27	2.82	41.30	54.42
X-7. Collective perceptions of student-teacher relationships	46.94	3.80	36.31	57.10
X-8. Availability of resources in the local community ^a	52.11	7.45	32.23	64.34
X-9. Social tension in the community ^a	46.99	9.17	22.56	72.17
Outcome variables				
Y-1. School mean of expected electoral participation	50.53	3.32	39.81	60.01
Y-2. School mean of expected informal political	48.15	2.64	39.29	57.08

Appendix B: Descriptive Statistics for School-level Variables

participation
^a Missing values were imputed with the national mean of the country.

	Belgi	um (Flei	mish)]	Bulgaria	ı				Chile		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	45.74	4.70	31.46	54.62	X-1	47.34	4.31	37.09	57.35	X-1	52.11	3.11	44.57	70.21
X-2	45.29	3.47	37.18	54.03	X-2	50.48	3.28	40.84	60.03	X-2	49.56	3.06	40.93	65.01
X-3	48.88	2.42	41.32	54.44	X-3	51.44	3.86	41.47	60.88	X-3	51.08	3.26	43.50	65.42
X-4	-0.08	0.52	-1.56	1.64	X-4	-0.06	0.68	-1.93	1.41	X-4	0.14	0.81	-1.60	2.03
X-5	49.27	3.57	35.89	59.58	X-5	47.44	4.43	35.23	61.94	X-5	52.23	4.14	38.22	65.96
X-6	47.96	3.79	39.49	62.16	X-6	50.01	5.29	38.11	63.63	X-6	52.97	3.67	42.19	63.17
X-7	48.87	3.48	39.43	57.20	X-7	51.00	4.37	37.64	64.96	X-7	51.28	4.46	33.13	69.62
X-8	53.90	7.65	32.23	64.34	X-8	55.88	8.49	32.23	64.34	X-8	48.94	10.05	32.23	64.34
X-9	45.59	10.31	22.56	69.70	X-9	47.80	7.52	22.56	65.54	X-9	54.94	10.49	22.56	77.18
Y-1	45.46	3.27	37.03	53.93	Y-1	47.40	3.71	36.32	54.96	Y-1	50.18	4.26	38.34	61.16
Y-2	46.15	2.87	38.61	55.40	Y-2	51.74	3.10	43.29	64.07	Y-2	50.11	3.16	33.72	58.69

	Chi	nese Ta	ipei			C	olombia	a				Cyprus		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	49.85	2.31	41.01	54.89	X-1	53.07	2.99	44.86	61.16	X-1	52.14	2.25	46.94	57.96
X-2	49.35	2.46	41.87	55.76	X-2	50.91	2.98	43.93	62.10	X-2	50.08	1.93	45.59	54.62
X-3	43.74	1.87	39.72	50.75	X-3	55.20	3.70	43.46	66.97	X-3	51.67	2.22	45.49	56.74
X-4	0.00	0.51	-0.96	1.73	X-4	0.01	0.58	-1.26	1.82	X-4	-0.02	0.37	-0.69	0.82
X-5	50.44	3.24	41.32	57.88	X-5	50.01	3.35	42.85	61.91	X-5	50.80	2.92	42.70	58.23
X-6	51.94	2.02	47.40	58.28	X-6	56.24	2.39	45.87	65.33	X-6	49.14	2.29	43.47	54.65
X-7	50.61	3.28	40.53	58.97	X-7	53.97	3.92	42.25	67.66	X-7	44.86	2.93	36.82	51.64
X-8	49.26	6.77	32.23	64.34	X-8	46.73	9.39	32.23	64.34	X-8	52.46	9.53	32.23	64.34
X-9	49.88	9.25	22.56	69.70	X-9	58.54	9.10	22.56	79.67	X-9	49.23	9.82	22.56	77.18
Y-1	50.84	2.55	43.58	57.43	Y-1	53.52	2.54	45.41	61.35	Y-1	48.19	2.43	38.46	53.43
Y-2	48.89	2.28	41.66	55.41	Y-2	54.54	2.97	46.85	65.51	Y-2	50.63	2.62	42.16	56.09

	Czec	ch Repu	blic			D	enmark	<u> </u>			Domini	can Rep	oublic	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	48.00	4.48	34.97	57.12	X-1	48.46	3.31	36.92	57.48	X-1	52.77	3.14	44.59	65.86
X-2	47.92	2.51	42.97	56.09	X-2	50.25	3.75	39.74	62.75	X-2	51.90	2.61	43.08	58.96
X-3	46.15	2.68	40.24	52.94	X-3	44.80	2.41	40.09	53.86	X-3	59.58	3.40	50.04	68.29
X-4	-0.02	0.49	-0.89	1.81	X-4	-0.02	0.46	-1.44	1.10	X-4	-0.01	0.55	-1.42	1.71
X-5	49.04	2.95	41.84	61.32	X-5	54.61	4.08	43.47	68.67	X-5	47.03	3.41	36.80	57.01
X-6	45.95	2.71	38.73	53.48	X-6	45.60	2.13	39.88	52.40	X-6	58.61	2.16	52.73	65.85
X-7	47.42	2.86	38.41	54.80	X-7	51.58	3.97	41.67	61.42	X-7	58.58	3.23	48.84	70.83
X-8	55.69	7.79	39.62	64.34	X-8	53.11	8.91	32.23	64.34	X-8	43.38	9.60	32.23	64.34
X-9	50.03	8.34	22.56	77.18	X-9	47.58	8.51	22.56	69.70	X-9	57.80	9.86	22.56	90.96
Y-1	43.94	3.91	35.53	56.79	Y-1	48.96	2.82	38.33	56.46	Y-1	52.37	2.83	43.36	59.26
Y-2	46.31	2.57	40.27	53.35	Y-2	47.34	2.44	41.39	53.87	Y-2	57.06	3.87	41.21	69.06

	1	England]	Estonia]	Finland		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	50.08	3.92	40.78	61.15	X-1	46.98	4.15	36.03	59.37	X-1	48.36	3.23	37.70	55.62
X-2	47.59	3.31	40.94	58.11	X-2	49.00	3.39	41.85	56.03	X-2	45.69	2.96	37.45	52.84
X-3	49.32	3.06	41.94	57.40	X-3	48.20	3.22	41.96	56.96	X-3	43.45	2.19	39.15	52.12
X-4	-0.04	0.51	-0.90	1.80	X-4	-0.05	0.48	-1.16	1.51	X-4	-0.01	0.42	-0.91	1.21
X-5	52.87	3.95	42.60	63.72	X-5	50.05	3.58	38.83	62.36	X-5	49.49	2.84	43.73	58.08
X-6	45.87	3.26	37.12	53.55	X-6	47.64	3.62	40.82	60.54	X-6	46.11	2.51	40.19	54.00
X-7	48.13	3.21	37.82	56.41	X-7	47.36	3.27	33.07	54.51	X-7	47.84	3.01	38.67	55.42
X-8	52.95	6.58	32.23	64.34	X-8	55.26	7.71	39.62	64.34	X-8	54.89	7.34	39.62	64.34
X-9	53.69	8.81	22.56	77.18	X-9	50.56	5.93	35.40	73.60	X-9	45.98	8.12	22.56	64.58
Y-1	47.10	3.97	37.45	60.15	Y-1	46.38	3.10	38.84	53.40	Y-1	49.21	2.70	41.25	55.80
Y-2	49.01	2.78	42.15	57.86	Y-2	48.42	2.81	40.96	56.60	Y-2	45.14	2.42	39.10	52.93

		Greece				G	uatemal	a			Ir	ndonesia	1	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	54.98	3.04	47.50	62.58	X-1	55.47	3.04	48.69	66.25	X-1	52.33	2.75	45.39	59.46
X-2	51.00	2.79	43.71	58.78	X-2	53.24	3.23	43.70	59.83	X-2	54.64	2.55	47.13	60.95
X-3	50.15	3.59	42.27	61.46	X-3	58.06	3.50	49.21	67.24	X-3	54.66	2.99	46.78	62.10
X-4	-0.01	0.52	-1.39	1.32	X-4	-0.06	0.60	-1.10	1.98	X-4	0.04	0.57	-1.22	1.54
X-5	50.79	3.21	40.65	58.25	X-5	52.50	3.64	42.55	66.77	X-5	54.53	3.86	44.36	66.45
X-6	47.27	3.47	35.89	54.39	X-6	57.09	3.06	45.97	63.97	X-6	59.16	3.00	51.52	66.53
X-7	49.20	3.52	41.75	62.19	X-7	56.44	3.03	47.96	68.48	X-7	54.06	2.06	49.43	59.31
X-8	53.84	7.55	32.23	64.34	X-8	43.59	9.37	32.23	64.34	X-8	45.20	9.61	32.23	64.34
X-9	46.38	9.33	22.56	69.70	X-9	61.97	7.95	31.01	83.32	X-9	45.91	8.72	22.56	75.23
Y-1	49.93	3.27	41.16	58.47	Y-1	55.10	2.57	46.96	63.05	Y-1	52.82	2.38	47.41	59.01
Y-2	52.87	2.76	45.55	61.62	Y-2	55.77	3.72	44.86	67.82	Y-2	56.08	2.29	50.99	63.48

]	Ireland					Italy				Korea	ı, Repub	lic of	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	50.04	3.93	38.06	60.44	X-1	47.21	4.74	37.43	58.04	X-1	45.48	2.73	39.98	55.63
X-2	48.09	2.94	39.75	55.34	X-2	52.16	3.27	41.16	60.34	X-2	50.20	2.24	43.62	61.68
X-3	49.48	2.96	42.69	57.79	X-3	47.51	3.31	41.16	61.98	X-3	42.46	1.79	39.55	52.25
X-4	-0.03	0.53	-1.45	1.20	X-4	-0.01	0.56	-1.36	1.65	X-4	0.00	0.43	-0.98	1.53
X-5	52.01	3.85	41.25	60.84	X-5	54.19	3.30	46.10	62.43	X-5	38.11	2.76	31.79	44.29
X-6	44.51	4.05	36.90	58.46	X-6	51.20	2.91	43.00	60.47	X-6	43.27	2.23	36.95	49.09
X-7	48.89	3.21	39.99	60.39	X-7	51.34	3.74	43.95	64.30	X-7	45.88	2.37	39.19	50.97
X-8	52.08	8.20	32.23	64.34	X-8	53.63	8.31	32.23	64.34	X-8	49.58	8.28	32.23	64.34
X-9	50.04	8.58	22.56	73.60	X-9	50.09	9.98	22.56	69.70	X-9	46.06	10.13	22.56	69.70
Y-1	51.76	4.00	35.92	58.34	Y-1	54.11	2.73	45.98	59.55	Y-1	48.52	1.98	42.70	54.88
Y-2	48.65	3.03	36.98	58.37	Y-2	50.22	3.19	42.37	60.09	Y-2	47.46	1.84	42.31	52.73

		Latvia				L	ithuania	a				Malta		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	49.03	4.34	36.61	59.74	X-1	49.40	4.26	39.31	64.32	X-1	47.54	3.75	40.57	55.19
X-2	52.76	2.72	46.59	58.54	X-2	51.39	3.15	38.71	60.99	X-2	50.92	1.98	46.80	54.69
X-3	49.69	3.37	38.68	60.07	X-3	49.99	3.85	41.81	61.58	X-3	49.03	2.51	44.02	55.05
X-4	-0.01	0.54	-1.86	1.04	X-4	-0.07	0.55	-1.42	1.46	X-4	0.01	0.55	-0.93	1.05
X-5	50.38	3.78	40.01	63.97	X-5	49.18	3.54	40.36	59.71	X-5	46.13	4.62	38.93	56.34
X-6	49.21	4.20	40.78	65.20	X-6	52.77	3.75	43.06	68.24	X-6	50.87	3.33	44.17	57.74
X-7	45.38	3.84	38.34	57.43	X-7	49.95	3.30	38.39	63.73	X-7	52.29	3.23	45.81	59.67
X-8	51.38	8.24	32.23	64.34	X-8	50.25	8.49	32.23	64.34	X-8	47.57	8.31	32.23	64.34
X-9	49.42	7.24	22.56	72.17	X-9	51.18	7.07	22.56	67.53	X-9	41.89	12.47	22.56	69.70
Y-1	49.92	3.82	36.83	58.88	Y-1	50.60	3.73	32.96	59.48	Y-1	49.19	2.69	41.80	53.52
Y-2	51.62	2.58	45.99	59.61	Y-2	51.58	2.90	38.86	61.38	Y-2	48.87	3.25	42.98	58.72

		Mexico				Nev	w Zeala	nd			1	Norway		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	49.81	3.34	39.33	67.75	X-1	49.43	4.10	38.71	61.33	X-1	53.95	2.92	46.44	62.94
X-2	47.83	2.97	41.73	58.44	X-2	49.97	3.32	42.72	60.66	X-2	48.46	3.75	37.83	59.19
X-3	52.94	3.50	44.68	67.10	X-3	50.28	2.81	44.37	57.56	X-3	48.15	2.43	41.50	55.15
X-4	-0.03	0.61	-1.37	1.76	X-4	-0.05	0.51	-1.02	1.65	X-4	0.01	0.42	-0.83	1.34
X-5	49.92	3.22	40.78	58.60	X-5	53.17	4.26	39.69	64.83	X-5	52.17	3.95	40.19	69.70
X-6	55.10	2.44	45.73	64.29	X-6	47.64	3.58	39.83	58.34	X-6	51.84	2.56	43.16	57.82
X-7	53.17	3.34	43.87	61.70	X-7	48.69	3.78	35.22	62.19	X-7	52.16	3.93	37.61	62.30
X-8	49.46	10.05	32.23	64.34	X-8	56.73	6.32	32.23	64.34	X-8	54.43	7.21	32.23	64.34
X-9	57.00	8.86	22.56	77.18	X-9	52.15	7.28	22.56	69.70	X-9	50.93	7.15	22.56	65.54
Y-1	52.88	2.73	45.13	60.37	Y-1	48.48	3.83	39.04	57.89	Y-1	51.77	3.47	39.00	58.99
Y-2	53.79	2.77	46.11	61.46	Y-2	48.79	2.72	40.10	55.90	Y-2	48.34	2.75	39.32	55.69

	M SD Min M -1 54.21 3.25 39.48 61 -2 51.93 2.98 43.11 60 -3 57.45 3.78 44.00 66 -4 -0.07 0.61 -1.07 1 -5 49.00 3.27 36.21 57 -6 55.74 2.59 49.02 65						Poland				Russia	n Feder	ation	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	54.21	3.25	39.48	61.09	X-1	54.04	2.91	46.67	61.84	X-1	49.11	4.68	39.68	69.67
X-2	51.93	2.98	43.11	60.04	X-2	50.45	2.88	42.35	59.23	X-2	49.94	3.74	41.42	65.46
X-3	57.45	3.78	44.00	66.77	X-3	51.46	3.33	43.76	59.15	X-3	52.96	4.44	45.68	69.80
X-4	-0.07	0.61	-1.07	1.86	X-4	-0.01	0.55	-0.96	1.71	X-4	-0.02	0.49	-1.64	1.36
X-5	49.00	3.27	36.21	57.82	X-5	50.87	3.56	41.54	62.06	X-5	49.04	4.85	39.95	76.35
X-6	55.74	2.59	49.02	65.32	X-6	44.68	2.87	34.99	53.41	X-6	56.89	4.50	45.53	70.42
X-7	56.50	3.67	47.87	68.72	X-7	46.94	3.47	38.92	59.06	X-7	51.34	4.11	40.55	71.30
X-8	44.31	9.32	32.23	64.34	X-8	51.78	8.68	32.23	64.34	X-8	52.39	8.30	32.23	64.34
X-9	55.97	6.70	38.57	77.18	X-9	52.25	5.77	31.01	65.54	X-9	51.35	7.89	22.56	70.89
Y-1	52.37	3.25	40.97	63.05	Y-1	48.08	3.43	37.25	54.75	Y-1	51.31	3.16	38.06	60.12
Y-2	53.24	3.43	42.14	63.62	Y-2	49.59	2.60	43.13	58.79	Y-2	52.45	2.91	40.39	59.03

	M SD Min M 1 51.75 3.92 39.16 60 2 49.53 2.82 42.66 55 3 47.39 3.59 40.99 61 4 -0.05 0.56 -1.45 1 5 49.95 3.02 40.00 57 5 49.34 3.85 40.83 59					5	Slovenia					Spain		
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	51.75	3.92	39.16	60.19	X-1	51.00	2.98	40.77	58.21	X-1	52.28	3.08	45.19	60.74
X-2	49.53	2.82	42.66	55.57	X-2	47.93	2.60	41.82	55.76	X-2	47.68	2.77	39.75	56.45
X-3	47.39	3.59	40.99	61.98	X-3	49.61	2.97	42.66	58.12	X-3	47.03	2.88	39.28	55.35
X-4	-0.05	0.56	-1.45	1.62	X-4	0.01	0.41	-0.94	1.38	X-4	-0.04	0.60	-0.98	1.53
X-5	49.95	3.02	40.00	57.30	X-5	49.97	3.62	38.31	59.85	X-5	47.88	3.32	33.77	54.79
X-6	49.34	3.85	40.83	59.08	X-6	46.65	3.23	36.83	55.93	X-6	47.98	3.96	38.54	56.14
X-7	47.77	4.00	37.88	61.11	X-7	46.84	3.45	35.97	58.76	X-7	50.08	4.02	38.67	62.86
X-8	55.08	8.61	32.23	64.34	X-8	53.86	9.81	32.23	64.34	X-8	54.41	8.61	32.23	64.34
X-9	46.78	9.02	22.56	64.58	X-9	49.64	7.88	22.56	63.64	X-9	49.62	8.83	22.56	66.52
Y-1	47.69	3.25	37.89	55.62	Y-1	49.58	3.21	38.94	57.42	Y-1	50.99	3.46	41.51	57.47
Y-2	48.44	2.60	41.64	56.88	Y-2	49.70	2.71	42.61	59.29	Y-2	48.38	2.85	40.96	58.96

		Sweden				Sw	vitzerlar	nd			1	Fhailand	l	
	М	SD	Min	Max		М	SD	Min	Max		М	SD	Min	Max
X-1	50.66	3.59	42.57	62.15	X-1	47.57	4.18	35.98	57.03	X-1	50.04	3.37	41.90	61.58
X-2	47.02	3.99	38.34	58.01	X-2	50.79	3.51	41.01	64.59	X-2	55.09	2.54	47.13	64.66
X-3	44.36	2.53	38.68	57.39	X-3	48.20	3.30	41.00	58.84	X-3	58.62	3.43	48.73	67.63
X-4	-0.05	0.47	-1.31	1.19	X-4	-0.01	0.51	-0.97	1.38	X-4	-0.02	0.64	-1.13	2.07
X-5	51.11	3.91	40.73	61.59	X-5	47.87	4.96	35.25	59.84	X-5	51.16	3.04	43.10	58.56
X-6	49.71	2.45	42.47	55.60	X-6	46.26	4.15	36.02	54.91	X-6	58.45	1.77	53.64	63.14
X-7	51.03	3.92	40.65	60.17	X-7	49.45	4.13	39.52	61.58	X-7	52.42	2.21	45.51	58.96
X-8 ^a	55.28	7.24	39.62	64.34	X-8 ^a	55.17	8.07	32.23	64.34	X-8 ^a	44.94	10.68	32.23	64.34
X-9 ^a	48.50	10.23	22.56	77.18	X-9 ^a	49.08	8.79	22.56	69.70	X-9 ^a	55.43	5.71	22.56	70.89
Y-1	49.03	3.53	33.59	58.33	Y-1	48.05	4.34	34.54	58.87	Y-1	53.93	3.16	43.01	60.85
Y-2	48.35	2.71	40.09	54.91	Y-2	46.72	2.59	41.22	54.61	Y-2	55.88	1.93	51.31	60.90

Note. X-1: School mean of civic participation at school, X-2: School mean of discussion of political and social issues outside of school, X-3: School mean of civic participation outside of school, X-4: Average school SES, X-5: Collective perceptions of openness in classroom discussions, X-6: Collective perceptions of students' influence on decisions about school, X-7: Collective perceptions of student-teacher relationships, X-8: Availability of resources in the local community, X-9: Social tension in the community, Y-1: School mean of expected electoral participation, Y-2: School mean of expected informal political participation.

^a Missing values were imputed with the national mean of the country.

Appendix	C:	Correlations	among	Student-	level	Variables
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Austria															
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.009	.073**	.055**	035	$.079^{**}$.012	.039*	010	.145**	$.045^{*}$.117**	089**	187**	.094**
X-2		1	207**	034	.083**	072**	223**	026	.017	018	.083**	$.059^{**}$	$.039^{*}$	017	004
X-3			1	.112**	.198**	002	.362**	.031	.121**	.165**	216***	.077**	.191**	.229**	.181**
X-4				1	.287**	.346**	.137**	007	$.140^{**}$	$.187^{**}$.138**	$.097^{**}$.245**	.241**	.192**
X-5					1	.251**	.183**	063**	.269**	.240**	$.090^{**}$.116**	.487**	.441**	$.198^{**}$
X-6						1	$.079^{**}$.007	.110**	.113**	.163**	.072**	$.187^{**}$	$.205^{**}$.131**
X-7							1	089**	.235**	$.048^{**}$	128**	047^{*}	$.142^{**}$.184**	.112**
X-8								1	680**	.001	.027	.004	028	064**	030
X-9									1	$.084^{**}$	018	$.052^{**}$.258**	.282**	.125**
X-10										1	.169**	.374**	.196**	$.168^{**}$.224**
X-11											1	.262**	.121**	.081**	$.076^{**}$
X-12												1	.204**	.104**	.139**
X-13													1	.606**	.247**
X-14														1	.231**
X-15															1
	*	**	**	**	**	**	**		**	**		**	**	**	**
Y-1	043*	179 **	.332**	.218**	.283**	.184**	.229**	011	.248**	.186**	.000	.137**	.396**	.415**	.272**
Y-2	030	.038*	.031	.203**	.315**	.221**	.084**	025	.168**	$.148^{**}$.155**	.106**	.414**	.429**	.193**

Note. X-1: Gender (Female), X-2: Immigrant background, X-3: Civic knowledge, X-4: Civic participation at school, X-5: Discussion of political and social issues outside of school, X-6: Participation in organized activities outside of school, X-7: Family SES, X-8: Parents: Quite interested in social and political issues, X-9: Parents: Very interested in social and political issues, X-10: Openness in classroom discussions, X-11: Students' influence on decisions about school, X-12: Student-teacher relationships, X-13: Political interest, X-14: Internal political efficacy, X-15: Collective school efficacy, Y-1: Expected electoral participation , Y-2: Expected informal political participation. * p < .05, ** p < .01

	Belgium (Flemish)														
-	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	$.050^{**}$.022	.121**	$.078^{**}$.064**	018	$.040^{*}$.012	.170**	073**	$.047^{*}$	002	126**	010
X-2		1	141***	.014	.159**	.018	225***	029	.092**	$.082^{**}$	$.079^{**}$.008	.135**	.090**	.018
X-3			1	.205**	.143**	.036	$.298^{**}$.033	.077**	$.079^{**}$	277**	.031	.016	$.188^{**}$	$.180^{**}$
X-4				1	$.270^{**}$	$.280^{**}$.161**	$.040^{*}$.106**	.193**	.000	$.082^{**}$.189**	.216**	.204**
X-5					1	.257**	$.088^{**}$	$.085^{**}$.169**	.205**	.057**	$.118^{**}$.441**	.392**	.141**
X-6						1	.099**	.008	.094**	.083**	.076**	.053**	.196**	.176**	.083**
X-7							1	.027	.168**	004	141**	048^{*}	.019	.089**	$.088^{**}$
X-8								1	546**	.053**	.011	.025	$.110^{**}$.077**	015
X-9									1	.033	004	.043*	$.178^{**}$.182**	.113**
X-10										1	.144**	.253**	.162**	.109**	.123**
X-11											1	.229**	.126**	.069**	.000
X-12												1	$.188^{**}$.128**	.161**
X-13													1	.599**	$.102^{**}$
X-14														1	$.170^{**}$
X-15															1
Y-1	012	010	.275**	.239**	.269**	.189**	$.168^{**}$	$.079^{**}$.183**	.129**	024	$.178^{**}$.380**	.414**	.222**
Y-2	.011	$.089^{**}$	$.038^{*}$.202**	.322**	.228**	$.050^{**}$.074**	.119**	.152**	.133**	.119**	.440***	.453**	.112**

Bulgaria															
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.015	.109**	.155**	.014	.094**	031	.079**	017	.186**	061**	$.040^{*}$.015	075**	.111**
X-2		1	028	.007	.003	001	.008	023	$.044^{*}$	001	003	023	005	.010	009
X-3			1	.193**	.104**	081**	.414**	.144**	034	.315**	361**	.008	$.066^{**}$.043*	.249**
X-4				1	.253**	.427**	.113**	.082**	$.076^{**}$.277**	.021	.116**	$.198^{**}$.231**	.294**
X-5					1	.284**	$.075^{**}$.052**	.196**	.214**	.069**	$.085^{**}$.377**	.347**	$.102^{**}$
X-6						1	033	.015	.102**	.140**	.154**	.132**	.242**	.217**	.135**
X-7							1	$.085^{**}$.061**	.122**	233**	100**	010	.011	$.147^{**}$
X-8								1	497**	.094**	037	.016	$.084^{**}$	$.050^{**}$.004
X-9									1	.019	.053**	$.039^{*}$	$.240^{**}$.231**	.101**
X-10										1	039*	.181**	$.147^{**}$.131**	.230**
X-11											1	.247**	.122**	.118**	.005
X-12												1	.165**	.139**	$.174^{**}$
X-13													1	$.590^{**}$.169**
X-14														1	.213**
X-15															1
Y-1	$.068^{**}$.003	.239**	.212**	.191**	.131**	.082**	.091**	.187**	.177**	010	.152**	.373**	.355**	.239**
Y- 2	.004	.004	057**	.195**	.233**	.238**	013	.024	.179**	.098**	.139**	.136**	.387**	.427**	.175**

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	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	018	.059**	.135**	.047**	.104**	020	010	.048**	.173**	020	.007	.043**	026	.120**
X-2		1	.004	014	.024	001	.013	.002	005	018	008	010	.001	.012	014
X-3			1	.185**	.162**	105**	.424**	$.148^{**}$.031*	$.208^{**}$	312**	017	.043**	$.140^{**}$.226**
X-4				1	.279**	$.352^{**}$.115**	$.084^{**}$	$.068^{**}$	$.242^{**}$.053**	$.090^{**}$	$.220^{**}$.265**	.243**
X-5					1	$.276^{**}$	$.160^{**}$.137**	.196**	.238**	.091**	.104**	.388**	.403**	.179**
X-6						1	027	.028	.094**	.119**	.162**	.095**	.237**	.252**	.104**
X-7							1	.135**	.139**	.063**	202**	076**	$.055^{**}$	$.114^{**}$.094**
X-8								1	396**	$.077^{**}$	018	.022	$.110^{**}$.092**	$.052^{**}$
X-9									1	.053**	.024	$.032^{*}$.234**	.224**	$.100^{**}$
X-10										1	.185**	.343**	.192**	$.190^{**}$.303**
X-11											1	.337**	$.167^{**}$.094**	$.120^{**}$
X-12												1	.227**	.169**	.293**
X-13													1	.592**	.229**
X-14														1	.221**
X-15															1
Y-1	.018	011	.171**	$.208^{**}$.248**	.145**	.139**	$.077^{**}$.154**	.163**	.045**	.165**	$.378^{**}$.386**	.220**
Y-2	.018	.013	.011	.237**	.330**	.264**	.025	$.079^{**}$.169**	.179**	.139**	.172**	.482**	.530**	.199**

	Chinese Taipei														
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	006	.123**	.140**	.066**	.036**	001	018	033*	.137**	047**	$.080^{**}$	017	089**	.009
X-2		1	.011	.010	021	.024	.023	.021	.002	011	007	024	014	021	.009
X-3			1	.224**	.162**	046**	.344**	$.074^{**}$.019	.164**	209**	$.092^{**}$.196**	$.081^{**}$.204**
X-4				1	$.289^{**}$.284**	.163**	$.086^{**}$	$.060^{**}$.254**	.053**	$.140^{**}$.229**	.212**	.204**
X-5					1	.196**	$.205^{**}$.151**	.125**	.232**	$.065^{**}$.094**	.397**	.359**	.156**
X-6						1	.064**	.051**	.034*	$.089^{**}$	$.066^{**}$.073**	$.168^{**}$.173**	.092**
X-7							1	$.072^{**}$	$.085^{**}$.083**	078**	.043**	$.178^{**}$.123**	.131**
X-8								1	263**	$.059^{**}$.015	$.032^{*}$.172**	$.128^{**}$.017
X-9									1	.039**	.027	$.029^{*}$.167**	.166**	$.108^{**}$
X-10										1	.185**	.327**	$.180^{**}$	$.168^{**}$.202**
X-11											1	.267**	.083**	$.110^{**}$.095**
X-12												1	.197**	$.179^{**}$.283**
X-13													1	.566**	.219**
X-14														1	.220**
X-15															1
Y-1	$.030^{*}$	022	.312**	.246**	.237**	.106**	.177**	.111***	.131**	.183**	.042**	.213**	.406**	.373**	.283**
Y-2	115**	*004	$.058^{**}$.181**	.292**	$.182^{**}$.104**	.132**	.120**	.159**	$.109^{**}$	$.140^{**}$	$.487^{**}$	$.498^{**}$.183**

							Color	nbia							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.005	.021	.077**	.031*	.074**	077**	017	.081**	.085**	009	$.050^{**}$.024	061**	.021
X-2		1	056**	.007	.017	.034*	012	.001	005	002	.013	007	.031*	.004	.004
X-3			1	.203**	001	160**	.245**	.136**	002	.266**	204**	043**	056**	.071**	.119**
X-4				1	$.280^{**}$.360**	.109**	$.092^{**}$.104**	$.280^{**}$	$.050^{**}$.130**	.206**	.301**	.167**
X-5					1	.328**	$.065^{**}$	$.090^{**}$.191**	.196**	.115**	$.142^{**}$.355**	.331**	.116**
X-6						1	064**	.021	.136**	.121**	$.180^{**}$.183**	.272**	$.278^{**}$.111***
X-7							1	.157**	.109**	.132**	122**	095**	.015	.072**	.031*
X-8								1	385**	.082**	044**	020	.055**	.075**	.022
X-9									1	.105**	.051**	.098**	.242**	.188**	.101**
X-10									-	1	.134**	.209**	.192**	.209**	.234**
X-11										-	1	.362**	.201**	.117**	.198**
X-12											•	1	.234**	.185**	.358**
X-13												-	1	479**	.189**
X-14													1	1	.205**
X-15														•	1
Y-1	- 017	- 028*	204^{**}	188^{**}	146^{**}	097^{**}	076**	072^{**}	145**	197^{**}	081**	213**	277**	322**	298**
Y-2	002	.017	078**	.222**	.283**	.285**	014	.042**	.161**	.157**	.164**	.218**	.429**	.470**	.230**
	.002	.017	.070		.200	.200	1011		1101	1107		.210	>		.200
							Сур	rus							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	$.040^{*}$.192**	.141**	$.052^{*}$.038	019	.065**	072**	.127**	033	.038	106**	110**	.200**
X-2		1	038	046*	.037	.007	047*	.011	081**	.005	$.050^{*}$.002	.030	010	019
X-3			1	.314**	.147**	036	.266**	$.104^{**}$.013	.217**	139**	$.102^{**}$	014	.106**	.320**
X-4				1	.300**	.341**	.185**	.060**	.092**	.227**	.002	.126**	.191**	.268**	.303**
X-5					1	.301**	.093**	.016	.192**	.227**	.139**	.169**	.374**	.351**	.138**
X-6						1	.012	015	.135**	.092**	.110**	.094**	.269**	.263**	.079**
X-7						•	1	.010	.151**	.029	135**	054**	.067**	.101**	.112**
X-8							•	1	- 562**	041*	- 027	012	- 008	034	047^*
X-9								1	.502	039	034	046^*	238**	231**	073**
X-10									1	1	201**	346**	146**	142^{**}	245^{**}
X-11										1	.201	387**	205**	128**	109**
X-11 X-12											1	.507	219**	136**	.109 269 ^{**}
X-12 X-13												1	.217	.150 558 ^{**}	120
X-13 X-14													1	.558	.120
X-14 X 15														1	.175
л-15 V 1	021	065**	200**	200**	221**	145**	145**	061**	169**	102**	091**	227**	222**	202**	1 270 ^{**}
1-1 V_2	- 016	005	.299 047*	.290 258 ^{**}	288**	.14J 248 ^{**}	.145	034	163**	.192 140**	155**	132**	.555	.393	.278
1-2	010	.000	.047	.238	.200	.240	.074	.034	.105	.140	.155	.132	.401	.405	.152
							Czech R	epublic							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	<u>X</u> -11	X-12	<u>X</u> -13	<u>X</u> -14	X-15
X-1	1	008	.094**	.189**	.040**	.153**	.002	.056**	.030*	.210**	026	.092**	.041**	061**	.086**
X-2		1	014	040**	.034*	014	031*	035*	.026	004	.033*	.003	.016	009	.000
X-3			1	.259**	.115**	030*	.306**	.124**	.091**	.151**	322**	.006	.194**	.190**	.227**
X-4				1	.259**	.302**	.165**	$.102^{**}$.095**	.275**	.002	.092**	.255**	.240**	$.275^{**}$
X-5					1	.251**	.132**	$.097^{**}$.221**	.205**	$.056^{**}$	$.097^{**}$.459**	.413**	$.150^{**}$
X-6						1	.016	.014	$.100^{**}$.149**	.115**	.074**	.237**	.200**	.112**
X-7							1	.116**	.193**	.043**	115**	040**	.165**	.155**	$.107^{**}$
X-8								1	370**	.052**	023	.020	.157**	.146**	$.070^{**}$
X-9								-	1	.109**	.004	.063**	.237**	.181**	$.082^{**}$
X-10									-	1	.131**	.311**	.206**	.148**	.216**
X-11										-	1	.251**	.094**	.030*	.037*
X-12											•	1	.185**	.097**	.208**
X-13												1	.105	609**	245^{**}
X-14													1	.565	226**
X-14 X-15														1	.220
Y-1	017	- 047**	384**	275**	279**	124**	254**	181**	230**	176**	- 102**	114^{**}	429^{**}	414**	275**
Y-2	.041**	015	.133**	.257**	.319**	.238**	.103**	.116**	.153 ^{**}	.161**	.060**	.105**	.430**	.449**	.200**

Y-2

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	Denmark														
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	008	.046**	$.090^{**}$.052**	.124**	027	.025	.018	.101**	.007	.055**	.067**	062**	.025
X-2		1	163**	031	.094**	.095**	251**	047**	$.066^{**}$	022	.102**	024	$.076^{**}$.031	028
X-3			1	.226**	.274**	.009	.365**	.076**	.111**	.209**	116***	.167**	.275**	.362**	.156**
X-4				1	.307**	.251**	.156**	.016	.122**	.235**	.071**	.127**	.294**	.366**	.226**
X-5					1	.244**	.231**	.049**	.265**	.272**	.122**	$.185^{**}$.572**	$.522^{**}$.127**
X-6						1	$.057^{**}$.004	$.110^{**}$	$.086^{**}$.099**	.031	.196**	$.162^{**}$	$.100^{**}$
X-7							1	.031	.234**	.131**	044**	.129**	.221**	$.276^{**}$.073**
X-8								1	550***	.024	006	.010	.064**	.044**	026
X-9									1	$.097^{**}$.027	$.076^{**}$.253**	$.268^{**}$	$.117^{**}$
X-10										1	$.120^{**}$.319**	.216**	.234**	$.200^{**}$
X-11											1	$.259^{**}$.137**	$.065^{**}$	$.075^{**}$
X-12												1	.225**	.201**	$.190^{**}$
X-13													1	.674**	$.162^{**}$
X-14														1	.195**
X-15															1
Y-1	.085*	*064**	.374**	.295**	.376**	.125**	.264**	$.090^{**}$.205**	.253**	$.036^{*}$.258**	.455**	$.484^{**}$.259**
Y-2	.097*	* .019	.199**	.295**	.424**	.219**	$.152^{**}$.051**	$.192^{**}$.193**	.127**	.133**	$.522^{**}$	$.485^{**}$.121**

Dominican Republic

	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	005	.174**	.076**	.031	$.040^{*}$	023	.032	026	.134**	042*	.043*	048*	104**	.035
X-2		1	061**	016	011	.021	.010	023	.006	058**	020	032	.011	.016	044*
X-3			1	$.044^{*}$.034	131**	.133**	.109**	029	.264**	069**	$.059^{**}$	158**	093**	$.165^{**}$
X-4				1	.190**	.490**	.043*	$.078^{**}$	$.068^{**}$.155**	$.074^{**}$	$.065^{**}$.146**	.227**	$.084^{**}$
X-5					1	.253**	.073**	.064**	$.107^{**}$	$.202^{**}$	$.040^{*}$	005	.194**	$.197^{**}$	011
X-6						1	068**	.026	.099**	.028	.091**	.020	.276**	.281**	018
X-7							1	$.090^{**}$	$.040^{*}$	$.086^{**}$	058**	048^{*}	025	006	.027
X-8								1	285**	$.084^{**}$	059**	024	.035	$.042^{*}$	025
X-9									1	.027	.043*	$.068^{**}$.171**	$.176^{**}$.024
X-10										1	$.059^{**}$	$.098^{**}$	016	.021	.172**
X-11											1	.291**	.199**	$.112^{**}$	$.258^{**}$
X-12												1	.125**	.136**	.487**
X-13													1	.457**	$.112^{**}$
X-14														1	.131**
X-15															1
Y-1	050^{*}	026	.093**	.118**	$.068^{**}$	$.060^{**}$.013	.043*	.123**	.115***	.102**	.224**	.281**	$.299^{**}$.266**
Y-2	094**	* .003	- 104**	.192**	.152**	.236**	058**	.037	.117**	.034	.121**	.161**	.411**	.423**	.164**

	England														
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	022	.064**	.109**	004	.107**	031	.015	.005	.126**	060**	.006	.033	071**	.051*
X-2		1	039	$.045^{*}$.193**	.142**	044*	021	.166**	.021	.126**	$.044^{*}$.173**	.123**	.121**
X-3			1	.306**	$.179^{**}$.004	.392**	$.084^{**}$	$.106^{**}$.309**	269**	.193**	$.162^{**}$.251**	.241**
X-4				1	.360**	.351**	.264**	$.070^{**}$	$.177^{**}$.262**	032	.215**	.315**	.357**	.294**
X-5					1	.341**	.203**	$.071^{**}$.293**	.209**	$.086^{**}$.143**	$.510^{**}$.467**	.229**
X-6						1	$.082^{**}$.023	.159**	$.090^{**}$.133**	$.078^{**}$.296**	$.268^{**}$.164**
X-7							1	$.047^{*}$.216**	.128**	141**	.104**	.165**	.217**	.128**
X-8								1	487**	.115**	009	$.075^{**}$.116**	$.089^{**}$.018
X-9									1	$.058^{**}$.020	.091**	.293**	.277**	.165**
X-10										1	$.090^{**}$.438**	.227**	$.225^{**}$.313**
X-11											1	.226**	.161**	.096**	$.099^{**}$
X-12												1	$.268^{**}$	$.220^{**}$.398**
X-13													1	.611**	$.298^{**}$
X-14														1	$.289^{**}$
X-15															1
Y-1	031	.107**	.392**	$.350^{**}$.349**	$.187^{**}$	$.298^{**}$.142**	.247**	.278**	020	.281**	$.458^{**}$.471**	.329**
Y-2	.043*	$.102^{**}$.125**	.291**	.382**	.283**	$.150^{**}$.099**	.191**	.201**	.141**	.193**	$.498^{**}$.494**	.236**

	Estonia														
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	002	.154**	.218**	.027	$.100^{**}$.028	.083**	007	.174**	119**	.065**	.008	083**	.189**
X-2		1	107**	.016	.031	.035	.000	023	.093**	012	.131**	008	$.055^{**}$	020	048^{*}
X-3			1	.135**	.210***	115**	.316**	.116**	$.064^{**}$.138**	320***	$.068^{**}$.154**	.213**	.275**
X-4				1	.228**	.364**	$.066^{**}$	$.058^{**}$	$.055^{**}$	$.198^{**}$.029	$.055^{**}$.176**	.201**	.239**
X-5					1	.173**	$.174^{**}$	$.105^{**}$.251**	$.198^{**}$.026	$.055^{**}$.469**	.418**	.163**
X-6						1	051*	.014	.051**	.103**	.171**	$.065^{**}$.136**	.130**	$.079^{**}$
X-7							1	$.054^{**}$.162**	$.100^{**}$	120***	.004	$.110^{**}$.121**	.126**
X-8								1	451**	$.068^{**}$	032	.064**	.134**	$.089^{**}$	$.066^{**}$
X-9									1	.063**	.034	$.046^{*}$.260**	$.188^{**}$	$.090^{**}$
X-10										1	.093**	.341**	.204**	$.140^{**}$	$.228^{**}$
X-11											1	.193**	.109**	.017	030
X-12												1	.137**	$.056^{**}$.189**
X-13													1	.534**	$.178^{**}$
X-14														1	.226**
X-15															1
Y-1	.066**	· 028	.317**	.203**	.240***	.114**	.169**	.093**	.201**	.198**	046*	.153**	.390**	.369**	.283**
Y-2	.026	$.046^{*}$	$.059^{**}$.225**	$.298^{**}$.216**	.064**	.081**	.143**	.161**	.126**	$.077^{**}$.455**	.444**	.135**

	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	014	.137**	.120**	.010	.128**	.019	.027	002	.093**	118**	.038*	035	152**	.127**
X-2		1	084**	.011	.069**	.018	030	082**	$.070^{**}$	$.040^{*}$	$.045^{*}$.005	$.058^{**}$.028	.017
X-3			1	.169**	$.208^{**}$	023	.287**	$.079^{**}$.041*	.104**	229**	$.148^{**}$	$.171^{**}$	$.278^{**}$.215**
X-4				1	.302**	.263**	$.172^{**}$.034	$.118^{**}$.197**	.017	.047**	.243**	.277**	.237**
X-5					1	.193**	$.206^{**}$	$.081^{**}$.227**	.223**	$.045^{*}$.137**	$.504^{**}$.464**	$.162^{**}$
X-6						1	.003	.017	$.071^{**}$.076**	$.080^{**}$.027	$.162^{**}$.138**	$.110^{**}$
X-7							1	.083**	.211**	.054**	096**	.081**	.153**	.225**	$.071^{**}$
X-8								1	487**	.057**	$.046^{*}$.075**	$.148^{**}$.095**	.026
X-9									1	$.060^{**}$.011	.049**	.229**	.233**	$.090^{**}$
X-10										1	.199**	.328**	$.179^{**}$.129**	$.188^{**}$
X-11											1	.218**	$.152^{**}$	$.060^{**}$	002
X-12												1	.218**	.164**	$.168^{**}$
X-13													1	$.650^{**}$.156**
X-14														1	.145**
X-15															1
Y-1	.057**	016	.295**	$.250^{**}$.337**	.091**	.263**	.146**	.217**	.173**	.023	$.208^{**}$.429**	.410**	$.289^{**}$
Y-2	$.042^{*}$	$.038^{*}$.141**	.249**	.382**	$.180^{**}$.124**	$.050^{**}$	$.180^{**}$	$.170^{**}$	$.107^{**}$	$.150^{**}$	$.522^{**}$.521**	.128**

	Greece														
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.014	.148**	.069**	.052**	.001	004	002	.004	.126**	070**	.044*	022	065**	.138**
X-2		1	141**	040^{*}	008	$.048^{*}$	191**	020	034	056**	$.092^{**}$.024	019	030	071**
X-3			1	$.190^{**}$.155**	104**	.285**	.061**	.130**	.289**	198**	$.086^{**}$.101**	.043*	.310**
X-4				1	$.240^{**}$.281**	.125**	$.050^{**}$	$.084^{**}$.204**	.026	$.048^{*}$	$.170^{**}$.202**	.189**
X-5					1	.213**	.143**	.025	.207**	.231**	$.072^{**}$.091**	.368**	.339**	.139**
X-6						1	.007	013	$.107^{**}$.001	.171**	.014	.145**	.156**	047^{*}
X-7							1	.016	$.180^{**}$.105**	119**	050**	.134**	.153**	$.110^{**}$
X-8								1	570**	.055**	.024	.033	.023	012	.001
X-9									1	$.090^{**}$.016	.036	.217**	.205**	.099**
X-10										1	$.078^{**}$.282**	.182**	.143**	.264**
X-11											1	.247**	.106**	.043*	054**
X-12												1	.151**	$.087^{**}$	$.184^{**}$
X-13													1	.564**	.126**
X-14														1	.096**
X-15															1
Y-1	$.048^{*}$	126**	.299**	.197**	.202**	.023	.171**	$.050^{**}$.153**	.235**	066**	.179**	.329**	.319**	.234**
Y-2	014	.004	$.082^{**}$.203**	$.260^{**}$.191**	.135**	005	.176**	.137**	$.058^{**}$	$.056^{**}$.367**	.405**	.133**

							Guate	mala							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.010	.020	.065**	.069**	.090**	032	010	.049**	.126**	.032	.044*	.076**	052**	.043*
X-2		1	035	.008	.008	.022	.031	.010	.020	006	.013	027	.008	.005	022
X-3			1	012	152	243	.310	.115	034	.189	286	047	115	116	.160
X-4 X 5				1	.238	.443	.018	.006	.122	.215	.161	.099	.224	.269	.138
л-3 Х б					1	.300	044 002**	.051	.202	.140	.170 214^{**}	.101	.349	.333	.030
л-0 Х-7						1	092	002	101**	.090	.214 - 167 ^{**}	- 084**	- 053**	- 010	020
X-8							1	.070	402**	.018	064**	015	.034	.018	.020
X-9								-	1	.061**	.091**	.043*	.239**	.206**	.047**
X-10										1	.161**	.227**	.142**	.112**	.249**
X-11											1	.311**	.227***	.155***	.136**
X-12												1	.184**	.162**	.313**
X-13													1	.464**	.163**
X-14														1	.124
X-15	000	0.40**	176**	1 < 0**	101**	074**	020*	050**	110**	105**	050**	150**	220**	225**	1
Y-1 V 2	.023 037^*	049	.1/0 151 ^{**}	.160 274**	.101	.074 331 ^{**}	.039	.056	.112	.195	.059	.155	.239	.225	.213
1-2	.037	.000	131	.274	.320	.331	075	.010	.162	.155	.190	.139	.432	.469	.140
							Indo	nesia							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	014	.134**	.028	.112**	110**	008	004	.041**	.191**	.046**	.038*	.034*	053**	.053**
X-2		1	066**	013	027	.030	024	.001	017	059***	.017	037*	021	.003	055***
X-3			1	.120**	.036***	186**	.197**	.054**	.003	.234***	102**	.051**	.037*	203**	.174**
X-4				1	.196	.345	.177	.004	.092**	.228	.035	.093	.163	.110***	.127**
X-5					1	.220	.079	045	.188	.255	.053	.101	.279	.217	.103
X-6 X 7						1	007	029	.109	.03/	.059	.062	.158	.204	013
Λ-/ V 8							1	027	.107	.119	070	.037	.009	041 078 ^{**}	.072
л-8 Х-9								1	098	0.011 0.67^{**}	028	035	213**	078 170 ^{**}	075**
X-10									1	.007	.113**	.180**	.174**	.084**	.250**
X-11										-	1	.164**	.100**	.161**	.168**
X-12												1	$.148^{**}$.214**	.426**
X-13													1	.378**	$.171^{**}$
X-14														1	$.170^{**}$
X-15		*	**	**	**		**		**	**	**	**	**	**	1
Y-1	.029	034*	.218**	.149**	.109**	.023	.104**	.002	.073**	.242**	.044**	.198**	.195**	.144**	.269**
Y- 2	071	.011	059	.140	.192	.208	.036	028	.135	.128	.083	.126	.308	.353	.131
							Irel	and							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.000	.061**	.214**	.105**	.166**	.012	.033	.042*	.186**	005	.073**	.056**	051**	.153**
X-2		1	108**	.017	.111**	004	.034	008	.009	.012	.102**	.042*	.072***	019	.002
X-3			1	.132**	.160**	013	.355***	034	.143**	.224***	331***	.099***	.141**	.263**	.234***
X-4				1	.303**	.363**	.163**	005	.115***	.265***	.104***	.162**	.272***	.264**	.269**
X-5					1	.260	.192	048	.252	.245	.110	.190	.495	.440	.179
X-6						1	.068	.013	.118	.131	.169	.119	.242	.199	.157
X-/ V 0							1	0//	.246	.106	133	.057	.138	.197	.135
л-о Х_0								1	084	.019	.043 - 041*	.012	.028 233**	042 285 ^{**}	025 110 ^{**}
X-10									1	.004	041 119 ^{**}	.070 373 ^{**}	.235 236**	.205 180**	.119 280**
X-11										1	.117	.228**	.137**	.028	.005
X-12											1	1	.251**	.174**	.293**
X-13												-	1	.614**	.200**
X-14														1	.220**
X-15															1
Y-1	$.098^{**}$	083**	.353**	.231**	.268**	.146**	.229**	.003	.217**	.242**	084**	.206**	.394**	.405**	.291**
Y-2	.072**	.049**	.114**	.263**	.375**	.265**	.143**	008	.185**	.226**	.119**	.177**	.515**	.516**	.202**

	Italy														
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.019	$.087^{**}$.063**	.023	$.048^{**}$.006	006	.015	.158**	.023	$.070^{**}$.010	098**	.063**
X-2		1	109**	031	.002	.028	107**	003	049**	040^{*}	.017	022	.014	073**	009
X-3			1	.096**	.146**	035	.346**	008	$.086^{**}$.207**	242**	022	$.062^{**}$	$.172^{**}$	$.218^{**}$
X-4				1	.237**	.294**	.099**	019	.073**	.164**	.122**	$.085^{**}$	$.188^{**}$.213**	.161**
X-5					1	.215**	.162**	064**	$.205^{**}$.239**	$.088^{**}$.126**	.411**	$.400^{**}$	$.200^{**}$
X-6						1	.066***	045*	.094**	.092**	.135**	$.100^{**}$	$.192^{**}$.183**	$.079^{**}$
X-7							1	069**	.223**	$.084^{**}$	122**	039*	$.102^{**}$	$.181^{**}$	$.108^{**}$
X-8								1	718***	039*	.010	029	025	084**	083**
X-9									1	.114**	.019	$.068^{**}$.211**	.273**	.113**
X-10										1	$.144^{**}$.299**	$.202^{**}$	$.178^{**}$.215**
X-11											1	$.322^{**}$	$.181^{**}$	$.089^{**}$.033
X-12												1	.218**	.144**	$.152^{**}$
X-13													1	.571**	.211**
X-14														1	.237**
X-15															1
Y-1	.036*	173**	.352**	.133**	.196**	$.052^{**}$.212**	007	$.187^{**}$.215**	026	$.160^{**}$.247**	.317**	.227**
Y-2	.021	060**	.139**	.226**	.373**	.214**	.177**	019	$.187^{**}$.236**	$.097^{**}$.125**	.449**	.499**	.232**

Korea, Republic of

	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	005	.110**	.091**	$.108^{**}$.010	035*	.037**	023	.051**	062**	017	017	071**	.083**
X-2		1	040**	022	017	.041**	018	.003	016	033*	009	003	034*	039**	008
X-3			1	.253**	.191**	023	.271**	015	$.072^{**}$.051**	193**	$.089^{**}$.225**	.231**	.217**
X-4				1	.329**	.201**	$.229^{**}$	049**	.143**	.226**	$.105^{**}$.125**	.277**	.334**	.211**
X-5					1	.150**	.173**	078**	.227**	.258**	.125**	.123**	.475**	.454**	.199**
X-6						1	$.097^{**}$	037**	$.080^{**}$.095**	$.110^{**}$	$.035^{*}$	$.101^{**}$.135**	$.055^{**}$
X-7							1	112**	.211**	.042**	053**	001	$.178^{**}$.201**	$.097^{**}$
X-8								1	819**	015	026	023	093**	104**	039**
X-9									1	.083**	$.059^{**}$	$.068^{**}$.223**	.223**	.094**
X-10										1	.269**	.274**	$.172^{**}$.199**	.189**
X-11											1	.203**	.122**	.144**	$.046^{**}$
X-12												1	$.205^{**}$.192**	.294**
X-13													1	$.599^{**}$.253**
X-14														1	.249**
X-15															1
Y-1	.057**	[*] 018	.327**	.252**	.262**	$.079^{**}$	$.170^{**}$	068**	.175**	.159**	.015	.223**	$.382^{**}$.363**	.311**
Y- 2	006	.007	.066**	.223**	.316**	.155**	$.100^{**}$	050**	.136**	.211**	$.180^{**}$.162**	$.428^{**}$.466**	$.202^{**}$

							Lat	via							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	033	.158**	.252**	.051**	.112**	026	.029	.018	.149**	.003	.004	004	045*	.172**
X-2		1	001	065**	019	.012	.000	074**	.032	071**	.061**	.035	$.052^{**}$	$.081^{**}$	027
X-3			1	.171**	.137**	053**	.264**	.026	$.049^{*}$.174**	225***	.008	$.089^{**}$.159**	$.178^{**}$
X-4				1	.235**	.357**	$.114^{**}$.013	$.107^{**}$.265**	.061**	.106**	$.140^{**}$.194**	.306**
X-5					1	.211**	.131**	065**	.244**	.245**	$.081^{**}$	$.056^{**}$	$.410^{**}$.364**	.167**
X-6						1	003	019	.091**	.130**	$.174^{**}$.106**	$.158^{**}$.173**	.133**
X-7							1	.002	.157**	$.057^{**}$	141**	103**	$.062^{**}$.134**	$.059^{**}$
X-8								1	702**	018	020	.011	031	064**	014
X-9									1	.125**	.027	.030	.195**	.218**	.095**
X-10										1	.083**	.171**	.151**	.159**	.292**
X-11											1	$.298^{**}$.143**	$.082^{**}$.073**
X-12												1	$.179^{**}$	$.107^{**}$.235**
X-13													1	.551**	.182**
X-14														1	.175**
X-15															1
Y-1	.071**	083**	.261**	.215**	$.209^{**}$	$.079^{**}$.155**	.010	.133**	.175**	077**	.120**	.283**	$.279^{**}$.269**
Y-2	.013	.032	.018	.191**	.294**	.201**	$.041^{*}$	022	$.148^{**}$.125**	.164**	$.108^{**}$.409**	.425**	$.182^{**}$

Lithuania															
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	020	.151**	.258**	.073**	.112**	016	$.050^{**}$	001	.227**	082**	.081**	.105**	041*	.139**
X-2		1	029	027	001	.008	$.041^{*}$	044**	.020	068**	$.058^{**}$	021	.027	.007	$.037^{*}$
X-3			1	.129**	$.077^{**}$	064**	.324**	$.037^{*}$.046**	.139**	300**	.019	$.102^{**}$.119**	.241**
X-4				1	.244**	.394**	$.086^{**}$.007	$.110^{**}$.277**	.046**	.137**	.241**	$.240^{**}$.224**
X-5					1	$.220^{**}$.109**	015	.205**	.217**	.009	.063**	.401**	.362**	.124**
X-6						1	.026	014	$.086^{**}$.162**	.095**	$.074^{**}$.221**	.215**	.116**
X-7							1	024	.162**	.006	139**	030	$.072^{**}$.113**	.141**
X-8								1	680**	.041*	008	.013	.000	041*	046**
X-9									1	.077**	.012	.019	.224**	.218**	.109**
X-10										1	.137**	.289**	.222**	.164**	$.150^{**}$
X-11											1	.297**	.132**	.053**	.000
X-12												1	.162**	$.097^{**}$.136**
X-13													1	$.550^{**}$.210**
X-14														1	.194**
X-15															1
Y-1	.105**	080**	.275**	$.190^{**}$	$.190^{**}$.081**	.147**	.045**	.139**	.196**	019	.175**	.301**	.286**	.234**
Y-2	.026	.012	046**	.178**	.258**	.230**	$.040^{*}$	043**	.148**	.153**	.142**	.096**	.385**	.399**	.173**

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	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.026	.115**	.018	068**	.012	.005	.054*	.007	.161**	060**	.023	110***	156**	$.070^{**}$
X-2		1	037	012	.018	$.052^{*}$.025	003	049*	$.051^{*}$	019	038	.009	007	029
X-3			1	$.187^{**}$.123**	038	.320**	$.085^{**}$.019	.255**	269**	.132**	.024	$.059^{**}$.308**
X-4				1	.247**	.324**	.172**	.042	$.060^{**}$.205**	.043	$.147^{**}$	$.209^{**}$.244**	.229**
X-5					1	.204**	.095**	.027	.137**	.167**	.095**	$.104^{**}$.384**	.358**	.122**
X-6						1	.145**	.033	$.055^{*}$.130**	$.076^{**}$.042	.216**	.138**	.072**
X-7							1	.019	$.076^{**}$.186**	161**	.008	.036	.011	.063**
X-8								1	538**	$.049^{*}$.000	.029	.024	.014	.072**
X-9									1	$.089^{**}$	010	.011	.226**	$.240^{**}$.035
X-10										1	.018	.157**	.103**	$.092^{**}$.216**
X-11											1	$.305^{**}$.151**	.123**	$.079^{**}$
X-12												1	.127**	$.085^{**}$.383**
X-13													1	.634**	.134**
X-14														1	.146**
X-15															1
Y-1	030	050^{*}	$.278^{**}$.233**	.214**	$.118^{**}$	$.108^{**}$.075**	.195**	.172**	009	$.181^{**}$	$.358^{**}$	$.378^{**}$.306**
Y-2	194**	010	.022	.217**	.319**	.186**	$.047^{*}$.021	.183**	.044	.134**	.106**	.517**	.526**	.131**

							Me	kico							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.014	.123**	$.086^{**}$.064**	.059**	035*	032*	$.028^{*}$.149**	007	.032*	.008	096**	$.085^{**}$
X-2		1	077**	.009	$.058^{**}$.051**	034*	031*	.039**	013	.008	018	$.048^{**}$.018	030*
X-3			1	$.090^{**}$.025	123**	$.252^{**}$	$.110^{**}$	045**	.165**	220**	.013	147**	.004	$.188^{**}$
X-4				1	.307**	.413**	$.028^{*}$	$.056^{**}$	$.092^{**}$.249**	$.082^{**}$.119**	.163**	.230**	$.185^{**}$
X-5					1	.305**	$.030^{*}$.103**	.159**	.232**	$.065^{**}$	$.056^{**}$	$.282^{**}$.294**	$.128^{**}$
X-6						1	028*	.031*	$.100^{**}$.101**	.122**	$.044^{**}$	$.209^{**}$.217**	$.064^{**}$
X-7							1	.115**	.121**	.062**	124**	079**	046**	.064**	$.064^{**}$
X-8								1	287**	$.087^{**}$	031*	.014	$.074^{**}$.091**	$.055^{**}$
X-9									1	.061**	.038**	.042**	$.210^{**}$.166**	.061**
X-10										1	.209**	.267**	.171**	.156**	.267**
X-11											1	.347**	$.206^{**}$.073**	.193**
X-12												1	.193**	.120**	.396**
X-13													1	.458**	$.174^{**}$
X-14														1	.169**
X-15															1
Y-1	$.028^{*}$	024	.215***	.184**	.146**	.074**	.093**	.112**	.111***	.228**	.072**	.204**	.235**	.279**	.300**
Y-2	039**	.019	139**	.153**	.231**	.234**	032*	.036**	.141**	.119**	.165**	.143**	.428**	.404**	.158**

							New Z	ealand							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	017	.101**	$.180^{**}$.056**	.127**	017	.000	.041*	.155**	002	.035*	$.068^{**}$	022	.127**
X-2		1	028	.005	.130**	$.052^{**}$	$.052^{**}$	018	$.075^{**}$	$.054^{**}$.095**	$.058^{**}$	$.147^{**}$.032	$.080^{**}$
X-3			1	.262**	$.140^{**}$	057**	.351**	$.067^{**}$	$.052^{**}$	$.258^{**}$	281**	$.148^{**}$.099**	.232**	$.179^{**}$
X-4				1	.337**	.311**	.253**	.012	$.142^{**}$	$.248^{**}$.007	.138**	.265**	.331**	$.272^{**}$
X-5					1	$.282^{**}$.205**	.014	.246**	.224**	.131**	.136**	$.500^{**}$.466**	$.209^{**}$
X-6						1	$.054^{**}$	006	.129**	.130**	$.147^{**}$	$.048^{**}$.223**	.203**	.141**
X-7							1	021	$.188^{**}$.110**	160**	$.055^{**}$.129**	.207**	.128**
X-8								1	623**	.008	012	.018	.016	004	038*
X-9									1	.101**	.047**	.096**	$.270^{**}$.240**	.172**
X-10										1	.124**	.332**	.235**	.244**	.319**
X-11											1	.214**	.203**	$.082^{**}$.137**
X-12												1	.257**	.206**	.348**
X-13													1	.586**	$.280^{**}$
X-14														1	$.278^{**}$
X-15															1
Y-1	.085**	.047**	.382**	.336**	.313**	.119**	.256**	.032	.216**	.276**	030	.262**	.397**	.465**	.335**
Y-2	.082**	.084**	.078**	.302**	.365**	.255**	.116**	012	.200**	.191**	.156**	.193**	.480**	.484**	.227**
		1001	.070	1002	10 00	.200		.012	.200			.170			,
							Nor	way							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	012	.102**	.112**	.035	.102**	.033	.031	.053**	.118**	036	.054**	.027	074**	.044*
X-2		1	157**	038	.110**	.053**	226***	067**	.063**	013	.071**	.022	.084**	.038	033
X-3			1	.271**	.176**	033	.373**	.075**	$.089^{**}$.207**	216**	$.086^{**}$.201**	.274**	.183**
X-4				1	.307**	.273**	.216**	.013	$.118^{**}$.216**	.001	.023	.224**	.281**	.216**
X-5					1	.219**	.191**	.003	.247**	.236**	.066**	$.080^{**}$.517**	.454**	.164**
X-6						1	.035	.001	$.057^{**}$	$.105^{**}$	$.067^{**}$.035	$.198^{**}$	$.170^{**}$.043*
X-7							1	.043*	.218**	.127**	123**	.029	.190**	.256**	.100**
X-8								1	626**	007	041*	.019	.002	011	031
X-9								-	1	.150**	.041*	.064**	.279**	.249**	.135**
X-10									-	1	.264**	.357**	.234**	.223**	.238**
X-11										-	1	380**	101**	008	178**
X-12											•	1	.152**	.089**	.248**
X-13												•	1	620**	155**
X-14													1	.020	.203**
X-15														1	.205
Y-1	079**	- 097**	398**	304**	295**	090**	288^{**}	078^{**}	204^{**}	265**	- 048*	165**	332**	382**	242^{**}
Y-2	056**	035	124**	256**	360**	210**	153**	004	195**	.203	087**	065**	465**	475^{**}	164**
<u> </u>	.050	.055	.124	.230	.500	.210	.155	.004	.175	.222	.007	.005	.405	.475	.104
							Para	guay							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.038	.107**	.068**	.015	.045*	009	006	.015	.096**	024	.012	033	075**	.066**
X-2		1	014	.005	017	002	059**	.036	032	.005	.007	.001	.027	010	016
X-3			1	.153**	.087**	145**	.364**	.144**	.056**	.229**	138**	032	024	$.048^{*}$.230**
X-4			-	1	.241**	.378**	.095**	.094**	.043*	.235**	.068**	.074**	.149**	.197**	.143**
X-5					1	257**	061**	070**	150**	200**	021	052*	334**	300**	105**

X-3			1	.153**	.087**	145**	.364***	.144***	.056***	.229 ***	138***	032	024	.048	.230**
X-4				1	.241**	$.378^{**}$.095**	.094**	$.043^{*}$.235**	$.068^{**}$	$.074^{**}$.149**	$.197^{**}$.143**
X-5					1	.257**	.061**	$.070^{**}$	$.150^{**}$	$.200^{**}$.021	$.052^{*}$.334**	$.300^{**}$.105**
X-6						1	083**	002	$.068^{**}$	$.076^{**}$.081**	.073**	.199**	.221**	.019
X-7							1	.173**	$.085^{**}$.129**	064**	122**	003	.026	.103**
X-8								1	311***	$.051^{*}$	004	014	$.076^{**}$.063**	.061**
X-9									1	$.068^{**}$	001	017	.196**	$.181^{**}$.030
X-10										1	$.082^{**}$.181**	.122**	$.104^{**}$.231**
X-11											1	.230**	.063**	.039	$.108^{**}$
X-12												1	.133**	$.100^{**}$.318**
X-13													1	.471**	.128**
X-14														1	$.150^{**}$
X-15															1
Y-1	.005	.004	.275**	$.172^{**}$.155**	$.059^{**}$.129**	$.105^{**}$.115**	.145**	.010	$.098^{**}$.247**	.264**	.231**
Y-2	062**	.006	017	.214**	.290**	.233**	.013	$.052^{*}$.146**	.136**	.083**	.086**	.426**	.441**	.155**

							Pol	and							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	054**	.133**	.221**	054**	.232**	029	.075**	039*	.196**	.005	.059**	021	117**	.154**
X-2		1	.023	007	.047**	013	.008	046*	$.067^{**}$.004	.013	.003	$.041^{*}$	$.058^{**}$	011
X-3			1	.299**	.131**	032	.344**	.003	$.075^{**}$.189**	178**	$.045^{*}$.141**	$.197^{**}$	$.248^{**}$
X-4				1	.264**	.374**	.152**	.036*	$.080^{**}$.242**	.095**	$.110^{**}$.221**	.236**	$.268^{**}$
X-5					1	$.200^{**}$.127**	003	.207**	.184**	$.144^{**}$.141**	.463**	$.408^{**}$	$.167^{**}$
X-6						1	.004	.024	$.050^{**}$.142**	$.170^{**}$.069**	.191**	.153**	.151**
X-7							1	072**	.165**	.029	084**	074**	$.086^{**}$.163**	$.086^{**}$
X-8								1	686***	.012	.010	.022	.019	025	032
X-9									1	$.097^{**}$	$.075^{**}$	$.082^{**}$.220**	.234**	.135**
X-10										1	.221**	.337**	.155**	.125**	.254**
X-11											1	.327**	.166**	.117**	.113**
X-12												1	.218**	.145**	$.272^{**}$
X-13													1	.605**	$.188^{**}$
X-14														1	$.207^{**}$
X-15															1
Y-1	.083**	*010	.280**	.303**	.255**	.137**	.153**	001	.198**	.204**	.075**	.154**	.341**	.334**	.289**
Y-2	.003	.020	.145**	.276**	.307**	.227**	.127**	008	.166**	.176**	.162**	.113**	.411**	.433**	$.198^{**}$

Russian Federation

	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	024	.107**	.238**	.060**	.087**	.011	.028	.034*	.242**	022	.045**	002	070**	.132**
X-2		1	018	.005	013	002	022	008	.027	.001	.030	.015	.021	.023	.019
X-3			1	$.160^{**}$.161**	036*	$.290^{**}$	$.087^{**}$.015	.263**	320***	.011	.131**	.131**	$.100^{**}$
X-4				1	.318**	.442**	.071**	.022	.155**	.392**	$.101^{**}$.236**	$.252^{**}$.253**	.319**
X-5					1	$.270^{**}$	$.114^{**}$.008	.252**	.303**	.045**	.169**	.461**	$.410^{**}$.201**
X-6						1	018	.018	.112**	.225**	$.179^{**}$	$.197^{**}$.221**	.229**	.189**
X-7							1	004	.125**	.071**	184**	044**	.094**	.122**	.021
X-8								1	616**	.047**	015	010	$.032^{*}$.005	.011
X-9									1	.103**	$.044^{**}$.126**	.231**	$.209^{**}$.132**
X-10										1	.033*	$.278^{**}$.266**	.221**	.323**
X-11											1	.262**	.111**	$.060^{**}$.219**
X-12												1	.275**	.191**	.442**
X-13													1	.546**	.294**
X-14														1	.240**
X-15															1
Y-1	.066**	005	.203**	.256**	.222**	.139**	.081**	.052**	.125**	.239**	.006	.224**	.358**	.293**	.296**
Y-2	.053**	.015	$.076^{**}$	$.270^{**}$.326**	.274**	.047**	.041**	$.160^{**}$.231**	.116**	.167**	.461**	$.470^{**}$.247**

						5	Slovak F	Republic	:						
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	016	.076**	.197**	.009	.107**	042*	.032	015	.207**	063**	.071**	.014	068**	.075**
X-2		1	010	012	009	021	004	012	027	.006	017	005	023	017	019
X-3			1	.120**	.081**	018	$.298^{**}$	$.144^{**}$.004	.159**	366**	010	.083**	.119**	$.181^{**}$
X-4				1	.261**	.326**	$.089^{**}$	$.084^{**}$	$.078^{**}$.217**	$.039^{*}$	$.112^{**}$	$.220^{**}$.272**	.231**
X-5					1	.235**	$.058^{**}$.143**	.146**	.212**	.091**	.116**	$.408^{**}$	$.400^{**}$	$.188^{**}$
X-6						1	028	.054**	$.068^{**}$.125**	.124**	$.117^{**}$.249**	.246**	.132**
X-7							1	.120**	.138**	.007	189**	120**	.041*	.083**	$.088^{**}$
X-8								1	344**	$.090^{**}$	038*	$.055^{**}$.179**	.149**	$.055^{**}$
X-9									1	.036	$.039^{*}$	$.050^{**}$.192**	.182**	$.104^{**}$
X-10										1	$.075^{**}$.273**	.214**	.205**	$.262^{**}$
X-11											1	.271**	.141**	$.080^{**}$	$.049^{**}$
X-12												1	.241**	.136**	.251**
X-13													1	.585**	.237**
X-14														1	.234**
X-15															1
Y-1	.025	017	$.282^{**}$.245**	.223**	.154**	.149**	$.178^{**}$.157**	.204**	046*	$.174^{**}$.394**	.375**	$.288^{**}$
Y-2	.003	.004	.051**	.222**	.305**	.238**	$.067^{**}$.113**	.129**	.156**	$.074^{**}$	$.117^{**}$.441**	.444**	$.225^{**}$

							Slov	enia							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	001	.150**	.157**	017	.062**	001	.030	.001	.200**	087**	.054**	115**	137**	.112**
X-2		1	111***	043*	.027	.021	132**	016	038*	001	$.060^{**}$.014	019	025	053**
X-3			1	.257**	.173**	047*	.267**	.094**	.073**	.212**	242**	$.082^{**}$.113**	.193**	$.279^{**}$
X-4				1	.277**	.333**	$.174^{**}$.051**	.116**	$.180^{**}$	003	$.100^{**}$.236**	$.290^{**}$.254**
X-5					1	.216**	.101**	$.066^{**}$.191**	.240**	$.078^{**}$.136**	.404**	.390**	$.167^{**}$
X-6						1	$.046^{*}$.015	$.110^{**}$	$.066^{**}$	$.097^{**}$	006	.189**	$.188^{**}$	$.077^{**}$
X-7							1	$.056^{**}$.163**	.001	115***	036	.032	$.140^{**}$	$.074^{**}$
X-8								1	453**	$.074^{**}$.022	$.078^{**}$	$.086^{**}$	$.067^{**}$	$.071^{**}$
X-9									1	.035	.015	.002	$.172^{**}$.225**	$.092^{**}$
X-10										1	.063**	.301**	.183**	.162**	.247**
X-11											1	.294**	.207**	$.075^{**}$	$.045^{*}$
X-12												1	$.198^{**}$.147**	.219**
X-13													1	.599**	$.190^{**}$
X-14														1	.231**
X-15															1
Y-1	.027	058**	.308**	.227**	$.240^{**}$	$.071^{**}$	$.166^{**}$.128**	.167**	.173**	047*	$.146^{**}$.276**	.351**	$.296^{**}$
Y-2	029	006	.071**	$.228^{**}$.267**	.223**	.034	.053**	.143**	.118**	$.108^{**}$.124**	$.370^{**}$.446**	.213**

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	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	005	$.088^{**}$.101**	.062**	$.040^{*}$.006	024	.011	.209**	003	.104**	.023	067**	.096**
X-2		1	146**	042*	.073**	$.055^{**}$	143**	049**	.028	.010	.081**	.005	.066**	.021	028
X-3			1	$.182^{**}$.157**	049**	.357**	.129**	$.056^{**}$.140**	314**	$.050^{**}$.061**	.185**	$.208^{**}$
X-4				1	.281**	.281**	.131**	$.077^{**}$	$.075^{**}$.259**	.061**	.064**	$.172^{**}$.234**	.204**
X-5					1	.267**	.167**	$.108^{**}$.196**	.239**	$.062^{**}$	$.074^{**}$.371**	.405**	$.170^{**}$
X-6						1	$.046^{*}$.039*	$.060^{**}$.125**	$.110^{**}$	$.040^{*}$	$.184^{**}$	$.190^{**}$	$.042^{*}$
X-7							1	$.107^{**}$	$.148^{**}$	$.036^{*}$	215**	001	.031	.153**	.112**
X-8								1	450***	.091**	.001	$.057^{**}$	$.100^{**}$.103**	$.042^{*}$
X-9									1	$.037^{*}$.012	$.039^{*}$.184**	.203**	$.074^{**}$
X-10										1	.146**	.265**	.202**	$.178^{**}$	$.228^{**}$
X-11											1	.245**	.154**	.031	$.098^{**}$
X-12												1	.177**	$.075^{**}$	$.270^{**}$
X-13													1	.513**	.210**
X-14														1	.189**
X-15															1
Y-1	.014	076**	.275**	.213**	.217**	.103**	$.167^{**}$.135**	.127**	.139**	030	.144**	$.320^{**}$.371**	.260**
Y-2	.033	$.050^{**}$.027	$.206^{**}$.307**	.221**	$.067^{**}$.069**	.137**	.149**	.115**	.099**	.427**	.457**	.169**

							Swe	den							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.001	$.078^{**}$	$.086^{**}$.020	.065**	011	.030	.014	.164**	035	.053**	.016	111***	$.108^{**}$
X-2		1	185**	$.047^{**}$.204**	.051**	272**	028	.146**	.033	.122**	.020	$.175^{**}$.123**	$.067^{**}$
X-3			1	$.255^{**}$.175**	023	.387**	$.075^{**}$	$.059^{**}$.227**	199**	.147**	.181**	.292**	.259**
X-4				1	.337**	.298**	$.208^{**}$.049**	.128**	.266**	$.050^{**}$	$.097^{**}$	$.286^{**}$.335**	$.286^{**}$
X-5					1	.229**	$.170^{**}$.095**	.251**	.242**	.099**	.145**	.541**	$.500^{**}$.240**
X-6						1	$.044^{*}$.023	.092**	.057**	.035	018	.225**	.211**	$.116^{**}$
X-7							1	$.101^{**}$.125**	.104**	094**	$.065^{**}$	$.140^{**}$.212**	.130**
X-8								1	477**	$.062^{**}$.018	$.078^{**}$.119**	$.090^{**}$.036
X-9									1	$.070^{**}$.025	.021	.263**	.238**	$.140^{**}$
X-10										1	$.177^{**}$.379**	.212**	$.200^{**}$	$.287^{**}$
X-11											1	.298**	.096**	$.037^{*}$	$.144^{**}$
X-12												1	.167**	.126**	.346**
X-13													1	.649**	$.228^{**}$
X-14														1	.257**
X-15															1
Y-1	.075**	003	.358**	$.279^{**}$.318**	.103**	.237**	.116**	$.190^{**}$.226**	009	$.180^{**}$.413**	.437**	.310**
Y-2	$.076^{**}$	$.062^{**}$	$.150^{**}$.294**	.393**	.242**	$.118^{**}$	$.074^{**}$.156**	.205**	.051**	$.069^{**}$.475**	.469**	$.222^{**}$

							Switze	erland							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	.031	.051**	.098**	017	.113**	005	004	.024	.064**	033	.044*	020	170***	.068**
X-2		1	209**	.017	.032	047*	237**	010	020	025	.138**	025	$.102^{**}$	006	.023
X-3			1	.123**	.166**	$.086^{**}$.328**	.016	.099**	$.087^{**}$	291**	$.048^{*}$	$.092^{**}$.251**	.162**
X-4				1	.225**	$.270^{**}$.115**	.001	.101**	.166**	$.049^{*}$	$.042^{*}$.156**	$.178^{**}$.203**
X-5					1	.256**	.131**	002	.205**	.228**	.038	$.077^{**}$.403**	.419**	.149**
X-6						1	$.078^{**}$	008	.113**	.149**	.063**	.053**	.199**	$.144^{**}$.113**
X-7							1	038	$.198^{**}$	024	215**	073**	.032	.194**	.061**
X-8								1	622**	.005	.017	.007	$.050^{*}$.008	016
X-9									1	$.068^{**}$	035	$.040^{*}$.206**	.261**	.094**
X-10										1	$.180^{**}$.297**	$.148^{**}$.127**	$.118^{**}$
X-11											1	.226**	$.085^{**}$	036	001
X-12												1	.137**	.056**	.091**
X-13													1	$.558^{**}$.159**
X-14														1	$.150^{**}$
X-15															1
Y-1	018	151**	.321**	$.170^{**}$.215**	.134**	.277**	.033	$.228^{**}$.053**	113**	.120**	.337**	.443**	.221**
Y-2	007	033	.094**	.196**	.310**	.252**	.103**	.054**	.131**	.132**	$.060^{**}$.061**	.427**	.439**	.158**
							Thai	land							

	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9	X-10	X-11	X-12	X-13	X-14	X-15
X-1	1	014	.290**	.112**	.113**	.034*	.007	.041**	002	.234**	.013	006	016	143**	.094**
X-2		1	015	.016	.015	.022	038**	.000	.010	.021	014	.019	.022	.026	.019
X-3			1	.051**	.123**	115***	.272**	$.029^{*}$.019	.292**	093**	011	058**	202**	$.178^{**}$
X-4				1	.245**	.450**	$.032^{*}$	009	$.085^{**}$.204**	$.086^{**}$.113**	.165**	.174**	.150**
X-5					1	.228**	$.118^{**}$	025	.166**	.322**	$.084^{**}$	$.084^{**}$.296**	.230**	.131**
X-6						1	077***	011	$.082^{**}$.141**	.126**	$.108^{**}$.213**	.243**	.110**
X-7							1	050**	.107**	.093**	067**	064**	020	066**	.041**
X-8								1	775***	002	041**	042**	045***	081**	048**
X-9									1	.083**	.075**	$.085^{**}$.169**	.157**	.114**
X-10										1	.175**	.234**	.166**	$.077^{**}$.291**
X-11											1	.335**	.220**	.184**	.253**
X-12												1	.230**	.253**	.433**
X-13													1	.450**	.203**
X-14														1	$.180^{**}$
X-15															1
Y-1	.103**	*028	.360**	.121**	.153**	.036*	.131**	013	.073**	.256**	$.076^{**}$.153**	.146**	.014	.264**
Y-2	109**	* .011	117**	.131**	.167**	.195**	043**	040**	.091**	.113**	.152**	.159**	.304**	.368**	.154**

Note. X-1: Gender (Female), X-2: Immigrant background, X-3: Civic knowledge, X-4: Civic participation at school, X-5: Discussion of political and social issues outside of school, X-6: Participation in organized activities outside of school, X-7: Family SES, X-8: Parents: Quite interested in social and political issues, X-9: Parents: Very interested in social and political issues, X-10: Openness in classroom discussions, X-11: Students' influence on decisions about school, X-12: Student-teacher relationships, X-13: Political interest, X-14: Internal political efficacy, X-15: Collective school efficacy, Y-1: Expected electoral participation, Y-2: Expected informal political participation. * p < .05, ** p < .01

	Austria												
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9				
X-1	1	.372**	.364**	.114	.150	.086	.153	.001	022				
X-2		1	.224**	.086	.477**	$.200^{*}$.219**	072	138				
X-3			1	045	.087	.050	041	159*	052				
X-4				1	.070	060	039	.336**	022				
X-5					1	.139	.441**	.071	046				
X-6						1	.329**	102	027				
X-7							1	060	195*				
X-8 ^a								1	.149				
X-9 ^a									1				
Y-1	.275**	.292**	.129	.197*	.209**	002	.204**	.036	037				
Y-2	.257**	.210**	.378**	.044	010	.119	.038	.063	.053				

Appendix D: Correlations among School-level Variables

Note. X-1: School mean of civic participation at school, X-2: School mean of discussion of political and social issues outside of school, X-3: School mean of civic participation outside of school, X-4: Average school SES, X-5: Collective perceptions of openness in classroom discussions, X-6: Collective perceptions of students' influence on decisions about school, X-7: Collective perceptions of student-teacher relationships, X-8: Availability of resources in the local community, X-9: Social tension in the community, Y-1: School mean of expected electoral participation, Y-2: School mean of expected informal political participation.

^a Missing values were imputed with the national mean of the country.

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

	Belgium (Flemish)												
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9				
X-1	1	.504**	.311**	.377**	.415**	183*	.262**	.064	.048				
X-2		1	.385**	.106	$.402^{**}$	138	$.166^{*}$.109	$.205^{*}$				
X-3			1	.259**	.119	164*	.009	018	135				
X-4				1	.083	522**	.032	.080	273**				
X-5					1	.042	.365**	087	.070				
X-6						1	.320**	082	$.248^{**}$				
X-7							1	042	.071				
$X-8^{a}$								1	$.176^{*}$				
X-9 ^a									1				
Y-1	.518**	.514**	.412**	.477**	.365**	207*	.322**	038	022				
Y-2	.298**	.559**	.312**	.040	.316**	.109	.201*	117	.185*				

	Bulgaria												
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9				
X-1	1	.355**	.452**	.236**	.518**	174*	.216**	.054	059				
X-2		1	.336**	093	$.197^{*}$.137	.349**	007	.130				
X-3			1	175*	.077	.283**	.223**	131	.044				
X-4				1	.451**	749**	355**	.491**	285**				
X-5					1	427**	.107	$.175^{*}$	093				
X-6						1	$.479^{**}$	392**	$.195^{*}$				
X-7							1	235**	.065				
X-8 ^a								1	171*				
X-9 ^a									1				
Y-1	.340**	.356**	.118	.228**	.363**	111	.357**	.025	163*				
Y-2	.141	.229**	.271**	303**	123	.333**	.309**	089	.113				

Chile												
X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9				
1	.529**	.494**	.095	.401**	.059	.267**	062	186*				
	1	.362**	.343**	.397**	024	$.188^{*}$.064	151*				
		1	351**	.073	.414**	.266**	330**	.001				
			1	$.210^{**}$	680**	277**	.549**	332**				
				1	.018	$.488^{**}$.027	146				
					1	.497**	533**	.216**				
						1	286**	022				
							1	050				
								1				
$.450^{**}$.563**	.301**	.337**	$.258^{**}$	093	.197**	.116	175*				
.482**	.452**	$.509^{**}$	116	.235**	$.285^{**}$.332**	153*	087				
			Chinese	e Taipei								
X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9				
1	.457**	.364**	.381**	.395**	.054	.267**	.152	138				
	1	.132	.432**	.324**	076	.048	.273**	116				
		1	.100	.038	$.185^{*}$.091	.090	124				
			1	$.188^{*}$	137	.083	.383**	230**				
				1	.301**	.546**	.120	051				
					1	.491**	115	.025				
						1	119	033				
							1	031				
**	sk sk	×	**	sk sk		**	*	1				
.487	.428	.170	.436	.235	086	.274	.200*	288				
.327**	.397**	.298**	.170*	.233**	.138	.256	.104	117				
V 1	N O	V 2	Color	nbia N 5	V (V 7	V O	V.O				
X-1	X-2 212**	X-3	X-4	X-3 420**	X-6	X-/	X-8 029	<u>X-9</u>				
1	.313	.274	.196	.420	.079	.223	028	154				
	1	.521	.007	.214	.298	.374	133	012				
		1	482	096	.598	.619	366	.052				
			1	.456	485	380	.432	244				
				1	026	.134 749**	.248	102 164*				
					1	./48	381	.104				
						1	274	.077				
							1	064				
464**	270**	117	240**	440**	066	220**	000	1 215 ^{**}				
.404 200 ^{**}	.328 56°**	.11/ 507 ^{**}	.249 207**	.449	.000 450 ^{**}	.238 472**	.089	215				
.500	.308	.371	207	.110	.430	.4/3	211	.029				
			Сур	rus								
X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9				
1	.372**	.343**	.295*	.129	001	.115	.066	075				
	1	.225	$.266^{*}$	$.265^{*}$.168	.202	.027	.006				
		1	099	.052	.255*	.116	079	.165				

-.424**

.474**

-.034

.010

1

-.209

.628**

.648**

.130

-.085

1

.248*

-.041

-.195

-.209

1

 $.265^{*}$

.292*

-.015

.085

.205

.005

-.071

-.022

.320**

1

1

.309*

.291*

-.099

.040

-.133

1

X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8^a X-9^a Y-1 Y-2

X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8^a X-9^a Y-1 Y-2

X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8^a X-9^a Y-1 Y-2

X-1 X-2 X-3

X-4

X-5

X-6

X-7

X-8^a

X-9^a

Y-1

Y-2

.360**

.429**

-.076

.089

.061

.289*

				Czech R	epublic				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.206*	.230**	.302**	.370**	022	.119	.009	119
X-2		1	$.240^{**}$.324**	.321**	070	.130	058	066
X-3			1	027	.365**	.096	.133	188*	043
X-4				1	$.167^{*}$	440***	165*	.377**	044
X-5					1	$.192^{*}$.473**	.005	017
X-6						1	.329**	031	.149
X-7							1	140	076
X-8 ^a								1	.136
X-9 ^a									1
Y-1	.532**	.434**	$.250^{**}$.676**	.385**	316**	.050	.135	167*
Y-2	.346**	$.504^{**}$	$.279^{**}$.372**	.348**	011	$.188^{*}$.024	099
				Denn	nark				
	X-l	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.333	.205	.162	.454	.205	.270	078	.012
X-2		1	.424	.361	.509	.223	.391	.236	054
X-3			1	.153*	.206***	.213***	.207***	.006	059
X-4				1	.229	101	.284	.204	354
X-5					1	.159*	.555	.055	.065
X-6						1	.401	042	028
X-7							1	.035	122
X-8 ^a								1	.062
$X-9^a$	**	**	*	**	**		**	**	1
Y-1	.313**	.555**	.175**	.505**	.502**	.011	.440***	.246**	158*
Y-2	.311***	.556**	.315***	.254**	.360**	.307**	.313***	.145*	129
				Dominican	Republic				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.164*	.388**	136	.363**	.207*	.133	183*	.080
X-2		1	.151	.035	.232**	015	.057	.074	.016
X-3			1	496**	186*	.082	.061	381**	.183*
X-4				1	.357**	038	193*	.485**	275**
X-5					1	.255**	.171*	.144	003
X-6						1	.473**	104	.126
X-7							1	260**	.165*
X-8 ^a								1	164*
X-9 ^a									1
Y-1	.121	.124	.000	.082	$.208^{*}$.213*	.273**	.095	.044
Y-2	.330**	.173*	.217**	214**	.038	.211*	$.209^{*}$	072	.084
				Engl	and		•• -	.	
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.569	.395	.515	.502	186	.348	.170	306
X-2			A 199 A 1		505		407	155	- 224
X_3		1	.468	.398	.505	011	.427	.155	
X-3		1	.468	.398 .037	.505 .092	011 .166	.135	.130	170
X-3 X-4		1	.468	.398 .037 1	.505 .092 .437 ^{**}	011 .166 505 ^{**}	.427 .135 .304**	.130 005	170 481 ^{**}
X-3 X-4 X-5		1	.468	.398 .037 1	.505 .092 .437** 1	011 .166 505 ^{**} 075	.135 .304** .637**	.133 .130 005 .001	170 481 ^{**} 146
X-3 X-4 X-5 X-6		1	.468	.398 .037 1	.505 .092 .437** 1	011 .166 505 ^{**} 075 1	.427 .135 .304** .637** .152	.130 005 .001 .010	170 481 ^{**} 146 .298 ^{**}
X-5 X-4 X-5 X-6 X-7		1	.468	.398 .037 1	.305 .092 .437 ^{**} 1	011 .166 505 ^{**} 075 1	.427 .135 .304 ^{**} .637 ^{**} .152 1	.130 005 .001 .010 .015	170 481** 146 .298** 075
X-3 X-4 X-5 X-6 X-7 X-8 ^a		1	.468	.398 .037 1	.305 .092 .437 ^{**} 1	011 .166 505 ^{**} 075 1	.427 .135 .304 ^{**} .637 ^{**} .152 1	.135 .130 .005 .001 .010 .015 1	170 481** 146 .298** 075 011
X-3 X-4 X-5 X-6 X-7 X-8 ^a X-9 ^a		1	.468	.398 .037 1	.305 .092 .437** 1	011 .166 505** 075 1	.427 .135 .304 ^{**} .637 ^{**} .152 1	.135 .130 .005 .001 .010 .015 1	170 481** 146 .298** 075 011 1
X-3 X-4 X-5 X-6 X-7 X-8 ^a X-9 ^a Y-1	.624**	.687**	.241**	.398 .037 1 .633**	.505 .092 .437** 1	011 .166 505** 075 1	.427 .135 .304 ^{**} .637 ^{**} .152 1	.135 .130 005 .001 .010 .015 1	170 481** 146 .298** 075 011 1 333**

				Esto	nia				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.109	.392**	.026	.317**	021	.160	118	170*
X-2		1	.100	.456**	.391**	007	.111	.077	189*
X-3			1	349**	017	.293**	.123	261**	$.167^{*}$
X-4				1	.361**	380**	.007	.246**	252**
X-5					1	232**	$.382^{**}$.098	379**
X-6						1	.136	030	.412**
X-7							1	005	168^{*}
X-8 ^a								1	120
X-9 ^a		ate ate		ale ale					1
Y-1	.254**	.455***	066	.489**	.401***	229***	.219**	.091	228***
Y-2	.213*	.506	.245	.172	.245	.317	.114	.015	.043
				Finle	and				
	X _1	X _2	X -3	Y_4	X-5	X-6	X _7	V _8	V _0
X-1	1	378**	194*	284**	335**	125	196**	036	- 030
X-1 X-2	1	.578	.124	.204 430**	357**	005	310**	174^*	050
X-3		1	.075	- 100	113	.000	106	- 083	- 161*
X-4			1	.100	103	- 112	140	.005 250 ^{**}	- 018
X-5				1	.105	.276**	.543**	018	.057
X-6					1	.278	.3 13 341 ^{**}	085	- 121
X-7						-	1	.148*	063
$X-8^{a}$								1	017
$X-9^a$								-	1
Y-1	.347**	.529**	.063	.450**	.355**	.066	.429**	.119	044
Y-2	.241**	.510**	.094	.362**	.280**	.168*	.356**	.162*	.047
				Gre	ece				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.174*	.195*	.163*	.369**	048	.019	.046	229**
X-2		1	.283	.191*	.429	.294	.103	.121	.135
X-3			1	.020	.058	.397	133	.015	130
X-4				1	.105	094	241	.262	.022
X-5					1	.169	.477	058	.003
X-6						1	.205	029	.019
X-7							I	148	016
X-8 X-8								1	.110
X-9	155	111	0.62	240**	220**	225**	104	064	1
1-1 V 2	.100	.111 242 ^{**}	003 250 ^{**}	.249	.229	225 176 [*]	.124	.004 166*	.032
1-2	.220	.545	.558	.291	.200	.170	042	.100	.073
				Guate	mala				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.355**	.514**	117	.246**	.271**	.218**	159	109
X-2		1	.673**	414**	032	$.460^{**}$.091	300**	254**
X-3			1	492**	068	.406**	.130	226**	203*
X-4				1	$.448^{**}$	537**	296**	.415**	.214*
X-5					1	.022	$.195^{*}$	$.272^{**}$.147
X-6						1	.416**	170^{*}	047
X-7							1	089	044
X-8 ^a								1	015
X-9 ^a	باد باد	باد باد			-10 alla		ىلە		1
Y-1	.325***	.304***	.083	.186*	.474**	.165*	.172*	.123	.042
Y-2	$.469^{**}$	$.600^{**}$	$.592^{**}$	330**	.045	.404**	.276**	134	223**

				Indo	nesia				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.329**	.238**	$.408^{**}$.459**	.078	.398**	$.202^{*}$	070
X-2		1	$.168^{*}$.264**	.380**	057	.230**	.147	.012
X-3			1	170*	184*	.250**	.099	142	.125
X-4				1	.390**	340**	.161	.554**	098
X-5					1	.069	.441**	.332**	101
X-6						1	.323**	036	.022
X-7							1	$.200^{*}$	087
X-8 ^a								1	.008
X-9 ^a									1
Y-1	.436**	.403**	214*	.429**	.601**	074	.437**	.307**	046
Y-2	$.189^{*}$.388**	.416**	079	052	.068	.201*	087	.022
					-				
	37.1			Irela	and			N. O	TL O
V 1	X-1	X-2	X-3	X-4	X-5	X-6	X-/	X-8	X-9
X-1 X-2	1	.308	.377	.278	.551	028	.158	001	060
X-2		1	.261	.360	.478	096	.211	.373	032
X-3			1	.083	.297	.143	.186	027	.101
X-4				1	.477	466	.165	.183	436
X-5					1	216	.510	.112	248
X-6						1	.16/	024	.379
X-/							1	.152	037
X-8 X-8								1	.146
X-9	266**	265**	1.60*	(2 0**	<00 ^{**}	200**	0.65**	007	1
Y-1 X-2	.366	.365	.168	.038	.609	398	.265	.097	332
1-2	.572	.304	.338	.343	.391	.094	.229	.075	035
				Ita	lv				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.239**	.354**	.085	.159*	.211**	.131	.025	.069
X-2		1	.349**	.253**	.397**	$.182^{*}$.277**	.026	024
X-3			1	029	.206**	$.298^{**}$.318**	163*	.010
X-4				1	.059	391**	222**	.446**	327**
X-5					1	$.209^{**}$.415**	.069	137
X-6						1	.575**	239**	$.162^{*}$
X-7							1	145	.203**
X-8 ^a								1	199**
X-9 ^a									1
Y-1	.144	.293**	.117	.439**	.412**	078	.213**	$.186^{*}$	238**
Y-2	.145	.597**	.347**	.265**	.382**	.175*	.275**	.106	097
				IZ D	11. 6				
	V 1	v ۲	V 2	Korea, Re	v 5	V 6	V 7	٧Ŷ	V 0
X _1	<u>Λ-1</u> 1	<u>Λ-2</u> 518 ^{**}	<u>A-3</u> 322**	<u> </u>	<u>A-J</u> <u>407</u> **	003	<u></u> 220**	<u></u> 076	<u>- 164</u> *
л-1 Х_2	1	.510	.322 272**	.243 313 ^{**}	.+07 380**	1095	.220	070	104
Λ-2 X_3		1	.∠75 1	.515 177 [*]	.300 200**	.122	.107	.037	130
л-5 Х_Л			1	.1//	040	.004 _ 720**	000	110	230
Λ-4 X-5				1	.049	250 //55 ^{**}	141 508 ^{**}	.152	390
л-J Х_б					1	.455	.500 252 ^{**}	.012	125
л-0 Х-7						1	.552	04/	.145
Λ^{-}							1	010	.127
л-о X-9 ^a								1	000
Y-1	.426**	.418**	.131	.168*	340***	.014	.321**	.013	110
v o	348**	.463**	.213**	.067	.449**	.301**	.317**	007	079

Latvia												
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9			
X-1	1	.201*	.431**	.000	.531**	070	.166*	068	077			
X-2		1	.116	.324**	.255**	202*	054	.032	181*			
X-3			1	182*	$.248^{**}$.227**	$.250^{**}$	028	.090			
X-4				1	.046	516**	384**	.224**	168*			
X-5					1	179*	$.179^{*}$.053	100			
X-6						1	.532**	064	.092			
X-7							1	036	073			
X-8 ^a								1	213**			
X-9 ^a									1			
Y-1	.435**	.338**	.126	.240**	$.518^{**}$	456**	017	023	.018			
Y-2	007	.309**	.142	025	001	$.177^{*}$.118	068	053			
				Lithu	ania							
	X-1	X-2	X-3	X-4	X-5	<u>X-6</u>	X-'/	X-8	X-9			
X-1	1	.380	.661	198	.336	.142	.255	253	.131			
X-2		1	.318	.034	.266	065	.038	104	.025			
X-3			1	226	.135	.191	.226	166	.082			
X-4				1	.034	347	182	.151	201			
X-5					1	.089	.471**	051	029			
X-6						1	.474	.026	.102			
X-7							1	.021	.034			
X-8 ^a								1	099			
X-9 ^a									1			
Y-1	.175*	.216***	.021	.220**	.468**	204**	.183**	032	096			
Y-2	.379**	.211***	.441**	045	.305**	.358**	.355**	137	.023			
				Ма	lto							
	X-1	X-2	X-3	X-4	11a X-5	X-6	X-7	X-8	X-9			
X-1	1	373**	363**	467**	434**	- 144	345**	092	- 131			
X-2	1	.575	026	404**	177	- 185	090	- 067	- 260			
X-2 X-3		1	.020	388**	.177 364**	105	- 185	007	200			
X-3 X-4			1	.500	.304 748 ^{**}	220	- 129	- 022	- 312*			
X-5				1	.740	- 641 ^{**}	- 023	- 141	- 257			
X-5 X-6					1	0+1	023	150	257			
X-7						1	.240	235	- 020			
X-7 X 8 ^a							1	.235	020 315 [*]			
$X = 0^{a}$								1	.515			
л-э V 1	401**	470**	176	468**	422**	360**	243	114	110			
1-1 V_2	202	.479 476 ^{**}	.170	- 116	.422 - 336 [*]	309 376 ^{**}	.243	114	110			
1-2	.202	.+70	.025	110	550	.570	.015	.124	.145			
				Mex	rico							
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9			
X-1	1	.529**	.559**	184**	.355**	.260**	.210**	144*	089			
X-2		1	.569**	140*	.261**	.089	.091	136*	135*			
X-3			1	369**	.058	.181***	.100	288**	.007			
X-4				1	.244**	520**	319**	.574**	307**			
X-5					1	.176**	.384**	.141*	266**			
X-6						1	$.590^{**}$	242**	.153*			
X-7							1	165*	059			
X-8 ^a								1	154*			
X-9 ^a									1			
Y-1	$.152^{*}$	$.158^{*}$	018	.365**	.495**	032	.221**	.240**	324**			
Y-2	.211**	$.280^{**}$.394**	210**	.101	.315**	$.178^{**}$	185**	.061			

				New Ze	aland				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.500**	.120	.518**	$.570^{**}$	236**	.295**	.217**	278**
X-2		1	$.276^{**}$.363**	.333**	.033	$.248^{**}$.211*	138
X-3			1	113	.073	$.248^{**}$.114	072	.093
X-4				1	.449**	502**	.340**	.371**	401**
X-5					1	195*	.549**	.161	179*
X-6						1	.042	102	$.276^{**}$
X-7							1	.129	099
X-8 ^a								1	200^{*}
X-9 ^a									1
Y-1	.614**	.509**	024	$.588^{**}$	$.585^{**}$	364**	$.470^{**}$	$.250^{**}$	357**
Y-2	.292**	.446**	$.177^{*}$.067	.137	.077	.157	059	083
	37 1	X/ 0	N/ O	Norv	vay	N/ C	37.7	V. O	37.0
37.1	X-1	X-2	X-3	X-4	X-5	X-6	X-/	X-8	<u>X-9</u>
X-1 X-2	1	.460	.365	.334	.275	077	.053	.025	106
X-2		1	.151	.493	.522	.180	.262	.175	.020
X-3			1	.030	.024	039	075	.047	169
X-4				1	.331	184	.059	.215	143
X-5					1	.415	.607	024	073
X-6						1	.583	.034	.013
X-7							1	.094	.125
X-8"								1	.141
X-9"	00 •**	505 **	000		400**	051	27 0 ^{**}	110	1
Y-1	.378	.585	008	.556	.480	.051	.278	.118	001
Y- 2	.273	.652	.140	.324	.370	.196	.188	.116	.049
				Paras	mav				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.158	.146	.194*	.330**	.017	.082	.122	123
X-2		1	.375**	048	.052	.102	.027	212**	.061
X-3			1	533**	397**	.053	$.278^{**}$	363**	.025
X-4				1	.531**	226**	391**	.572**	042
X-5					1	005	064	.304**	015
X-6						1	.329**	059	.021
X-7							1	242**	123
X-8 ^a								1	014
X-9 ^a									1
Y-1	$.176^{*}$.057	210^{*}	$.404^{**}$.382**	051	.011	.244**	102
Y-2	.171*	.402**	.144	076	.161	.224**	.269**	073	053
	37 1	37.0	37.0	Pola	ind	X 7 /	37 7	37.0	N 0
X 7 1	X-1	X-2 440**	X-3	X-4	X-5 422 ^{**}	X-6	X-/	<u>X-8</u>	<u>X-9</u>
X-1	1	.440	.358	.250	.422	.092	.278	118	145
X-2		1	.112	.327	.355	.108	.222	.163	060
X-5			1	069	.158	.232	.206	252	189
X-4				1	.249	258	208	.40/	.080
X-3					1	.326	.508	.168	034
X-0 X-7						1	.565	140	068
$\Lambda - /$							1	138	10/
$X-8^{-}$								1	.529
Х-9 У 1	522**	170**	721**	200**	411**	082	205**	059	1 167 [*]
1-1 V 2	.333 520**	.4/0 465 ^{**}	.231	.298 221**	.411	.083	.303 160*	.038	10/ 166*
¥ - /	.332	.405	.289	.321	.339	.125	.109	.030	100

				Russian F	ederation				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.559**	.639**	.025	.591**	.258**	.505**	092	135
X-2		1	.463**	$.286^{**}$.576**	.020	.378**	.132	190**
X-3			1	150*	.378**	.455**	$.501^{**}$	130	116
X-4				1	.130	475**	251**	.344**	172*
X-5					1	.008	$.520^{**}$.114	135
X-6						1	$.470^{**}$	263**	.017
X-7							1	182**	039
X-8 ^a								1	103
X-9 ^a									1
Y-1	.431**	.475**	.287**	$.202^{**}$.413**	.104	.390**	.018	018
Y-2	.437**	.494**	.447**	.156*	.409**	.216**	.384**	.073	150*
				Slovak F	Republic				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.378**	.326**	.192*	.286**	026	.136	060	083
X-2		1	.368**	.088	.332**	.092	$.185^{*}$.061	.060
X-3			1	218*	$.182^{*}$	$.290^{**}$	$.288^{**}$	200^{*}	.112
X-4				1	.118	621**	395**	$.480^{**}$	390**
X-5					1	.071	.358**	.016	090
X-6						1	.526**	320**	.263**
X-7							1	347**	.071
X-8 ^a								1	262**
X-9 ^a									1
Y-1	.317**	.389**	$.210^{*}$.310**	.365**	190*	.238**	.135	170*
Y-2	.324**	.508**	.419**	.081	.308**	.092	.217*	.019	029
	V 1	v 2	V 2		enia v 5	V 6	V 7	vo	V 0
<u>V 1</u>	1	<u>A-2</u> 372 ^{**}	A-3 364**	<u> </u>	150	086	153	001	022
X-1 X 2	1	.572	.304	.114	.130	.080 200*	.155 210 ^{**}	.001	022
л-2 Х 3		1	.224	.080	.477	.200	.219	072 150 [*]	138
X-3 X-4			1	045	.037	- 060	041	157 336**	032
X-4 X-5				1	.070	000	037	.550	022
л-5 Х-6					1	.139	.441 320 ^{**}	- 102	040
X-0 X 7						1	.52)	102	027
X^{-7}							1	000	195
Λ-0 V 0 ^a								1	.149
Λ-9 V 1	275**	202**	120	107*	200**	002	204**	026	027
1-1 V 2	.275	.292	.129 279 ^{**}	.197	.209	002	.204	.030	037
1-2	.231	.210	.370	.044	010	.119	.038	.005	.033
				Spa	ain				
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.271**	.331**	.154	.424**	.106	.144	044	158
X-2		1	.245**	.434**	$.440^{**}$	081	.224**	.072	123
X-3			1	.119	$.204^{*}$	$.201^{*}$.108	011	026
X-4				1	.247**	488**	.083	.077	262**
X-5					1	.082	.447**	.045	120
X-6						1	.271**	.095	.116
X-7							1	016	008
X-8 ^a								1	.126
X-9 ^a									1
Y-1	$.409^{**}$.350**	.134	.342**	$.278^{**}$	155	$.206^{*}$	124	330***
Y-2	.193*	.360**	$.198^{*}$	015	.210*	.090	.219**	033	.012

	Swe	den					
X-3	X-4	X-5	X-6	X-7	X-8	X-9	
.363**	$.268^{**}$	$.500^{**}$.204**	.264**	.235**	071	
.401**	$.179^{*}$.438**	.229**	.249**	.111	.126	
1	.008	$.169^{*}$.099	.038	029	.037	
	1	.262**	251**	.094	.235**	340**	
		1	.343**	.549**	.130	074	
			1	.499**	.055	.032	
				1	.074	088	
					1	088	
						1	
013	$.485^{**}$	$.408^{**}$.069	$.258^{**}$.266**	100	
.221**	.247**	.378**	$.166^{*}$.156*	.102	.063	
	Switze	rland					
X-3	X-4	X-5	X-6	X-7	X-8	X-9	
.292**	.203*	.307**	.086	.041	.017	.076	
545**	130	435**	- 110	189^{*}	- 133	- 156	

	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.257**	$.292^{**}$	$.203^{*}$.307**	.086	.041	.017	.076
X-2		1	.545**	.130	.435**	110	$.189^{*}$	133	156
X-3			1	.026	.349**	.042	$.195^{*}$	203*	120
X-4				1	074	518**	107	.271**	103
X-5					1	$.218^{**}$.463**	171*	136
X-6						1	.196*	058	$.197^{*}$
X-7							1	110	111
X-8 ^a								1	.255**
X-9 ^a									1
Y-1	$.187^{*}$.142	010	$.640^{**}$	181*	464**	.005	.161*	116
Y-2	.216**	.385**	.295**	.212**	.052	025	.053	.082	040

Тh	ail	lar	Ы	

1 nanang									
	X-1	X-2	X-3	X-4	X-5	X-6	X-7	X-8	X-9
X-1	1	.305**	$.610^{**}$	126	.122	.121	.141	244**	.006
X-2		1	.214**	.346**	$.562^{**}$.038	025	$.182^{*}$	020
X-3			1	378**	049	$.248^{**}$.217**	154	.086
X-4				1	.310**	240***	263**	.554**	186*
X-5					1	.128	.152	.138	173*
X-6						1	$.490^{**}$	076	045
X-7							1	081	.043
$X-8^{a}$								1	049
X-9 ^a									1
Y-1	012	.444**	220***	$.479^{**}$	$.700^{**}$	065	.060	.302**	150
Y-2	$.202^{*}$.070	.437**	312**	179 [*]	.226**	.240**	135	.120

Note. X-1: School mean of civic participation at school, X-2: School mean of discussion of political and social issues outside of school, X-3: School mean of civic participation outside of school, X-4: Average school SES, X-5: Collective perceptions of openness in classroom discussions, X-6: Collective perceptions of students' influence on decisions about school, X-7: Collective perceptions of student-teacher relationships, X-8: Availability of resources in the local community, X-9: Social tension in the community, Y-1: School mean of expected electoral participation, Y-2: School mean of expected informal political participation.

^a Missing values were imputed with the national mean of the country.

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

X-1

.258**

.378**

1

X-1

X-2

X-3 X-4 X-5 X-6 X-7 X-8^a X-9^a

Y-1

Y-2

X-2

1

.333**

.485**

.562

Country	Between-school	Within-school variance	Intraclass correlation	
	variance	component (σ 2)	coefficient (ICC) $\times 100^{a}$	
	component (τ)			
Austria	7.30***	84.00	8.00	
Belgium (Flemish)	6.33***	78.51	7.46	
Bulgaria	6.37***	99.89	6.00	
Chile	8.67***	144.38	5.66	
Chinese Taipei	4.43***	91.72	4.61	
Colombia	2.88***	73.74	3.76	
Cyprus	1.61**	117.91	1.35	
Czech Republic	10.79***	104.73	9.34	
Denmark	4.16***	76.20	5.17	
Dominican Republic	1.06***	90.90	1.15	
England	13.90***	89.32	13.47	
Estonia	4.49***	72.07	5.87	
Finland	4.16***	72.80	5.41	
Greece	5.16***	106.46	4.62	
Guatemala	0.69***	65.66	1.04	
Indonesia	2.87***	62.36	4.40	
Ireland	7.72***	88.83	7.99	
Italy	3.26***	77.22	4.06	
Korea, Republic of	1.56***	77.14	1.98	
Latvia	6.89***	85.05	7.50	
Lithuania	3.66***	80.61	4.35	
Malta	5.26***	77.57	6.35	
Mexico	3.31***	81.22	3.91	
New Zealand	10.22***	81.59	11.13	
Norway	5.39***	99.99	5.11	
Paraguay	3.72***	77.45	4.58	
Poland	6.08***	89.32	6.37	
Russian Federation	4.89***	81.81	5.64	
Slovak Republic	5.31***	92.37	5.44	
Slovenia	3.43***	105.10	3.16	
Spain	7.03***	88.95	7.32	
Sweden	8.45***	79.57	9.60	
Switzerland	11.26***	79.16	12.45	
Thailand	4.89***	74.36	6.17	

Appendix E: Intraclass Correlation for Adolescents' Expected Electoral Participation

Note. All values were rounded off to the second decimal point.

^a The proportion (%) of the difference in expected electoral participation among adolescents that can be explained by school differences. ** p < .01, *** p < .001
Appendix F: HLM Results - Expected Electoral Participation

Austria

FIXED EFFECTS	
Intercept	48.990***
Z-1. School mean of civic participation at school	0.049
Z-2. School mean of discussion of political and social issues outside of school	0.029
Z-3. School mean of civic participation outside of school	0.192**
Z-4. Average school SES	0.060
Z-5. Collective perceptions of openness in classroom discussions	0.041
Z-6. Collective perceptions of students' influence on decisions about school	-0.101
Z-7. Collective perceptions of student-teacher relationships	-0.009
Z-8. Availability of resources in the local community	-0.117***
Z-9. Social tension in the community	-0.011
X-1. Gender (Female)	-0.719*
X-2. Immigrant background	-2.828***
X-3. Civic knowledge	0.168***
X-4. Civic participation at school	0.020
X-5. Discussion of political and social issues outside of school	0.006
X-6. Participation in organized activities outside of school	0.052*
X-7. Family SES	0.334†
X-8. Parents: Quite interested in social and political issues	2.871***
X-9. Parents: Very interested in social and political issues	4.028***
X-10. Openness in classroom discussions	0.020
X-11. Students' influence on decisions about school	-0.009
X-12. Student-teacher relationships	0.033
X-13. Political interest	0.161***
X-14. Internal political efficacy	0.153***
X-15. Collective school efficacy	0.133***
RANDOM EFFECTS	
<i>u</i> ₀ . Between-school (Intercept)	0.315*
u_1 . Gender (Female) slope	—
u7. Family SES slope	_
r. Within-school variance component	59.225
$\dagger p < .1, *p < .05, **p < .01, ***p < .001$	

веідіит	(Flemish)	Bul	lgaria	(Chile	Chines	se Taipei
Intercept	44.933***	Intercept	45.885***	Intercept	49.894***	Intercept	50.365***
Z-1	0.054	Z-1	-0.031	Z-1	0.134	Z-1	0.064
7-2	0.127*	7-2	0.176†	7-2	0 368**	7-2	0.052
7-3	0.159*	7-3	-0.076	7-3	0.129	7-3	0.124
74	0.352	Z 3 7 4	0.076	Z 3 7 4	0.066	Z 3 7 4	0.880*
Z-4	0.552	Z-4	-0.403	Z-4	-0.000	Z-4	-0.009
Z-3	0.015	Z-3	0.023	Z-5	-0.16/†	Z-3	0.003
Z-6	0.036	Z-6	-0.130*	Z-6	-0.1/6†	Z-6	-0.189*
Z-7	0.077	Z-7	0.165*	Z-7	0.211*	Z-7	0.088
Z-8	-0.015	Z-8	-0.061†	Z-8	-0.006	Z-8	-0.005
Z-9	0.003	Z-9	-0.057†	Z-9	0.024	Z-9	-0.044*
X-1	-0.543†	X-1	-0.199	X-1	-0.308	X-1	0.282
X-2	-1.546*	X-2	1.290	X-2	-1.874	X-2	-3.440
X-3	0.159***	X-3	0.168^{***}	X-3	0.070**	X-3	0.205***
X-4	0.064**	X-4	0.045	X-4	0.123***	X-4	0.095***
X-5	-0.008	X-5	-0.009	X-5	0.040	X-5	-0.006
X 6	0.063**	X 6	0.007	X 6	0.040*	X 6	0.006
X-0 X 7	0.005	X-0 X 7	0.101	X-0 X 7	-0.0491	X-0 X 7	0.000
Λ-/ Χ.ο	0.234	Λ-/ V 0	-0.161	Λ-/ Χ.Ο	-0.039	Λ-/ V 0	0.040
X-8	1.568**	X-8	2.368***	X-8	0.386	X-8	1.08/**
X-9	2.626***	X-9	4.494***	X-9	1.020†	X-9	2.048***
X-10	0.018	X-10	0.013	X-10	0.010	X-10	0.024
X-11	-0.020	X-11	-0.009	X-11	0.005	X-11	0.039†
X-12	0.091***	X-12	0.031	X-12	0.085**	X-12	0.052**
X-13	0.172***	X-13	0.152***	X-13	0.245***	X-13	0.190***
X-14	0.158***	X-14	0.175***	X-14	0.241***	X-14	0.144***
X-15	0.086***	X-15	0 105***	X-15	0 108***	X-15	0 121***
11 15	0.018	11 15	6 833***	11 10	1 100**	11 15	2 220***
u ₀	0.010	<i>u</i> ₀	4 360***	<i>u</i> ₀	1.170	<i>u</i> ₀	1 310*
u_1		u_1	4.309	u ₁	1.117*	u_1	1.310
u_7	<u> </u>	u_7	-	u_7	0.500*	u_7	1.043
r	59.484	r	80.005	r	115./44	r	04.932
Colo	ombia	Су	prus	Czech	Republic	Den	ımark
Colo Intercept	ombia 53.748***	Cy Intercept	prus 47.549***	Czech Intercept	Republic 42.225***	Der Intercept	mark 46.800***
Colo Intercept Z-1	ombia 53.748*** 0.182**	Cy Intercept Z-1	prus 47.549*** -0.028	Czech Intercept Z-1	Republic 42.225*** 0.104*	Den Intercept Z-1	46.800*** -0.051
Cold Intercept Z-1 Z-2	53.748*** 0.182** 0.042	Cy Intercept Z-1 Z-2	prus 47.549*** -0.028 0.194	Czech Intercept Z-1 Z-2	Republic 42.225*** 0.104* 0.005	Den Intercept Z-1 Z-2	46.800*** -0.051 0.084
Colo Intercept Z-1 Z-2 Z-3	53.748*** 0.182** 0.042 0.033	Cy Intercept Z-1 Z-2 Z-3	prus 47.549*** -0.028 0.194 -0.020	Czech Intercept Z-1 Z-2 Z-3	Republic 42.225*** 0.104* 0.005 0.113†	Den Intercept Z-1 Z-2 Z-3	46.800*** -0.051 0.084 0.001
Cold Intercept Z-1 Z-2 Z-3 Z-4	53.748*** 0.182** 0.042 0.033 -0.059	Cy Intercept Z-1 Z-2 Z-3 Z-3 Z-4	prus 47.549*** -0.028 0.194 -0.020 0.051	Czech Intercept Z-1 Z-2 Z-3 Z-4	Republic 42.225*** 0.104* 0.005 0.113† 1.308**	Den Intercept Z-1 Z-2 Z-3 Z-3 Z-4	46.800*** -0.051 0.084 0.001 0.165
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5	53.748*** 0.182** 0.042 0.033 -0.059 -0.051	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5	prus 47.549*** -0.028 0.194 -0.020 0.051 -0 184*	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5	46.800*** -0.051 0.084 0.001 0.165 0.079†
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 0.047	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	prus 47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 0.096	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	46.800*** -0.051 0.084 0.001 0.165 0.079†
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-6	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.082‡
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-9	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-0	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.022†
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8 Z-0	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.010	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 0.2211	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032†
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 Z-9	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042*	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.031†	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042* -0.864**	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.031† -0.960****	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042* -0.864** -3.079	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.031† -0.960**** -2.979***	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007*
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145***	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.220***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.031† -0.960**** -2.979*** 0.219***	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.200*** 0.079***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960**** -2.979**** 0.219**** 0.061****	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.070***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.220*** 0.079*** -0.005	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	46.800*** -0.051 0.084 0.001 0.165 0.079^{\dagger} -0.094 0.032^{\dagger} -0.006 1.160^{***} -1.007^{*} 0.130^{***} 0.030
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.200*** 0.079*** -0.005 0.003	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.030 0.014
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042* -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.200*** 0.079*** -0.005 0.003 0.263	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440**	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	amark 46.800^{***} -0.051 0.084 0.001 0.165 0.079^{\dagger} -0.094 0.032^{\dagger} -0.006 1.160^{***} -1.007^{*} 0.130^{***} 0.030 0.014
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042* -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984**	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.200*** 0.079*** -0.005 0.003 0.263 1,751***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003***	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.030 0.014 0.225 2.226***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761*	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.079*** -0.003 0.263 1.751*** 2.395***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221***	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.030 0.014 0.225 2.226*** 2.574***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040*	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.2079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.030 0.014 0.225 2.226*** 2.574*** 0.019
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 Y 11	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.220*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.055	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023 0.074***	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-7 X-8 X-9 X-10 X-11	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.070*** 0.030 0.014 0.225 2.226*** 2.574*** 0.019 0.029
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.220*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.005	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-1 X-2 X-3 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-8 X-1 X-2 X-8 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-8 X-1 X-2 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.031† -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023 -0.074*** 0.057**	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-8 X-9 X-10 XX-10 XX	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.070*** 0.030 0.014 0.225 2.226*** 2.574*** 0.019 -0.028 0.105***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-12	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025 0.055**	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-12 X-12 X-12 X-12 X-12 X-12	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.220*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.005	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-8 X-9 X-1 X-2 X-8 X-9 X-1 X-8 X-9 X-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10X	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023 -0.074*** 0.57** 0.57**	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-12	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.070*** 0.030 0.014 0.225 2.226*** 2.574*** 0.019 -0.028 0.105***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025 0.055** 0.102***	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.220*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.005 0.106*** 0.130***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023 -0.074*** 0.057** 0.192***	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.030 0.014 0.225 2.226*** 2.574*** 0.019 -0.028 0.105*** 0.133***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.42* -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761 [†] 0.040 [†] 0.025 0.055** 0.102*** 0.206***	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	$\begin{array}{c} 47.549^{***} \\ -0.028 \\ 0.194 \\ -0.020 \\ 0.051 \\ -0.184^{*} \\ -0.046 \\ 0.220 \\ 0.025 \\ 0.019 \\ -0.255 \\ -2.163^{***} \\ 0.220^{***} \\ 0.079^{***} \\ -0.005 \\ 0.003 \\ 0.263 \\ 1.751^{***} \\ 2.395^{***} \\ 0.024 \\ 0.005 \\ 0.106^{***} \\ 0.130^{***} \\ 0.202^{***} \end{array}$	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	Republic 42.225^{***} 0.104^* 0.005 0.113^{\dagger} 1.308^{**} 0.058 -0.96 0.020 0.016 -0.031^{\dagger} -0.960^{***} 2.979^{***} 0.219^{***} 0.061^{***} 0.027 0.015 0.440^{**} 3.003^{***} 5.221^{***} 0.023 -0.074^{***} 0.057^{**} 0.192^{***} 0.183^{***}	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	46.800*** -0.051 0.084 0.001 0.165 0.079^{\dagger} -0.094 0.083^{\dagger} 0.032^{\dagger} -0.006 1.160^{***} -1.007^{*} 0.130^{***} 0.030 0.014 0.225 2.226^{***} 2.574^{***} 0.019 -0.028 0.105^{***} 0.133^{***} 0.173^{***}
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025 0.055** 0.102*** 0.206*** 0.181***	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	$\begin{array}{c} 47.549^{***} \\ -0.028 \\ 0.194 \\ -0.020 \\ 0.051 \\ -0.184^{*} \\ -0.046 \\ 0.220 \\ 0.025 \\ 0.019 \\ -0.255 \\ -2.163^{***} \\ 0.220^{***} \\ 0.079^{***} \\ -0.005 \\ 0.003 \\ 0.263 \\ 1.751^{***} \\ 2.395^{***} \\ 0.024 \\ 0.005 \\ 0.106^{***} \\ 0.130^{***} \\ 0.202^{***} \\ 0.094^{***} \end{array}$	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	Republic 42.225^{***} 0.104^* 0.005 0.113^{\dagger} 1.308^{**} 0.058 -0.96 0.020 0.016 -0.031^{\dagger} -0.960^{***} -2.979^{***} 0.219^{***} 0.061^{***} 0.027 0.015 0.440^{**} 3.003^{***} 5.221^{***} 0.023 -0.074^{***} 0.057^{**} 0.192^{***} 0.183^{***} 0.106^{***}	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 Z-9 X-1 X-1 X-2 X-3 X-1 X-2 X-3 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-1 X-2 X-7 X-8 X-9 X-10 X-10 X-11 X-12 X-10 X-11 X-12 X-11 X-12 X-11 X-12 X-11 X-12 X-13 X-11 X-12 X-13 X-14 X-12 X-13 X-14 X-12 X-13 X-14 X-12 X-13 X-14 X-12 X-13 X-14 X-15	46.800*** -0.051 0.084 0.001 0.165 0.079^{\dagger} -0.094 0.083^{\dagger} 0.032^{\dagger} -0.006 1.160^{***} -1.007^{*} 0.130^{***} 0.070^{***} 0.030 0.014 0.225 2.226^{***} 2.574^{***} 0.019 -0.028 0.105^{***} 0.133^{***} 0.173^{***} 0.123^{***}
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042* -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025 0.055** 0.102*** 0.206*** 0.181*** 0.769***	$\begin{array}{c} Cy\\ Intercept\\ Z-1\\ Z-2\\ Z-3\\ Z-4\\ Z-5\\ Z-6\\ Z-7\\ Z-8\\ Z-9\\ X-1\\ X-2\\ X-3\\ X-4\\ X-5\\ X-6\\ X-7\\ X-8\\ X-9\\ X-10\\ X-11\\ X-12\\ X-13\\ X-14\\ X-15\\ u_0\\ \end{array}$	Prus $47.549***$ -0.028 0.194 -0.020 0.051 $-0.184*$ -0.046 0.220 0.025 0.019 -0.255 $-2.163***$ $0.220***$ $0.079***$ -0.005 0.003 0.263 $1.751***$ $2.395***$ 0.024 0.005 $0.106***$ $0.130***$ $0.202***$ $0.094***$ $0.296*$	CzechInterceptZ-1Z-2Z-3Z-4Z-5Z-6Z-7Z-8Z-9X-1X-2X-3X-4X-5X-6X-7X-8X-9X-10X-11X-12X-13X-14X-15 u_0	Republic 42.225^{***} 0.104^* 0.005 0.113^{\dagger} 1.308^{**} 0.058 -0.96 0.020 0.016 -0.031^{\dagger} -0.960^{***} -2.979^{***} 0.219^{***} 0.061^{***} 0.027 0.015 0.440^{**} 3.003^{***} 5.221^{***} 0.023 -0.074^{***} 0.057^{**} 0.192^{***} 0.183^{***} 0.106^{***} 0.435^{**}	$\begin{array}{c} \text{Der} \\ \hline \text{Intercept} \\ \hline Z-1 \\ \hline Z-2 \\ \hline Z-3 \\ \hline Z-4 \\ \hline Z-5 \\ \hline Z-6 \\ \hline Z-7 \\ \hline Z-8 \\ \hline Z-9 \\ \hline X-1 \\ \hline X-2 \\ \hline X-3 \\ \hline X-1 \\ \hline X-2 \\ \hline X-3 \\ \hline X-4 \\ \hline X-5 \\ \hline X-6 \\ \hline X-7 \\ \hline X-8 \\ \hline X-9 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-13 \\ \hline X-14 \\ \hline X-15 \\ u_0 \\ \end{array}$	46.800*** -0.051 0.084 0.001 0.165 0.079^{\dagger} -0.094 0.083^{\dagger} 0.032^{\dagger} -0.006 1.160^{***} -1.007^{*} 0.130^{***} 0.070^{***} 0.030 0.014 0.225 2.226^{***} 2.574^{***} 0.019 -0.028 0.105^{***} 0.133^{***} 0.123^{***} 0.700^{***}
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025 0.055** 0.102*** 0.206*** 0.181*** 0.769***	$\begin{array}{c} Cy\\ Intercept\\ Z-1\\ Z-2\\ Z-3\\ Z-4\\ Z-5\\ Z-6\\ Z-7\\ Z-8\\ Z-9\\ X-1\\ X-2\\ X-3\\ X-4\\ X-5\\ X-6\\ X-7\\ X-8\\ X-9\\ X-10\\ X-11\\ X-12\\ X-13\\ X-14\\ X-15\\ u_0\\ u_1\\ \end{array}$	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.20*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.005 0.106*** 0.130*** 0.202*** 0.094*** 0.296*	$\begin{tabular}{ c c c c } \hline Czech \\ \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & u_1 & u$	Republic 42.225^{***} 0.104^* 0.005 0.113^{\dagger} 1.308^{**} 0.058 -0.096 0.020 0.016 -0.031^{\dagger} -0.960^{***} -2.979^{***} 0.219^{***} 0.061^{***} 0.027 0.015 0.440^{**} 3.003^{***} 5.221^{***} 0.023 -0.074^{***} 0.192^{***} 0.183^{***} 0.106^{***} 0.435^{**}	$\begin{array}{c} \text{Der} \\ \hline \text{Intercept} \\ \hline Z-1 \\ \hline Z-2 \\ \hline Z-3 \\ \hline Z-4 \\ \hline Z-5 \\ \hline Z-6 \\ \hline Z-7 \\ \hline Z-8 \\ \hline Z-9 \\ \hline X-1 \\ \hline X-2 \\ \hline X-3 \\ \hline X-1 \\ \hline X-2 \\ \hline X-3 \\ \hline X-4 \\ \hline X-5 \\ \hline X-6 \\ \hline X-7 \\ \hline X-8 \\ \hline X-9 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-13 \\ \hline X-14 \\ \hline X-15 \\ u_0 \\ u_1 \\ \end{array}$	46.800*** -0.051 0.084 0.001 0.165 0.079^+ -0.094 0.083^+ 0.032^+ -0.006 1.160^{***} -1.007^* 0.130^{***} 0.030 0.014 0.225 2.226^{***} 2.574^{***} 0.019 -0.028 0.105^{***} 0.133^{***} 0.123^{***} 0.700^{***}
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	53.748*** 0.182** 0.042 0.033 -0.059 -0.051 -0.047 0.054 0.017 -0.042* -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761† 0.040† 0.025 0.055** 0.102*** 0.206*** 0.181*** 0.769***	$\begin{array}{c} Cy\\ Intercept\\ Z-1\\ Z-2\\ Z-3\\ Z-4\\ Z-5\\ Z-6\\ Z-7\\ Z-8\\ Z-9\\ X-1\\ X-2\\ X-3\\ X-4\\ X-5\\ X-6\\ X-7\\ X-8\\ X-9\\ X-10\\ X-11\\ X-12\\ X-13\\ X-14\\ X-15\\ u_0\\ u_1\\ u_7\\ \end{array}$	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.20*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.005 0.106*** 0.130*** 0.296*	$\begin{tabular}{ c c c c } \hline Czech \\ \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & u_1 & u_7 & u_1 & u_7 & U_1 & U_2 & U$	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023 -0.074*** 0.192*** 0.183*** 0.106*** 0.435**	$\begin{array}{c} \text{Der} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \end{array}$	46.800*** -0.051 0.084 0.001 0.165 0.079^{\dagger} -0.094 0.083^{\dagger} 0.032^{\dagger} -0.006 1.160^{***} -1.007^{*} 0.130^{***} 0.030 0.014 0.225 2.226^{***} 2.574^{***} 0.019 -0.028 0.105^{***} 0.133^{***} 0.123^{***} 0.700^{***}
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7 r	53.748*** 0.182** 0.042 0.033 -0.059 -0.047 0.054 0.017 -0.044 0.059 -0.047 0.054 0.017 -0.047 0.054 0.017 -0.042* -0.864** -3.079 0.145*** 0.019 -0.006 -0.009 0.218 0.984** 0.761 [†] 0.040 [†] 0.025 0.055** 0.102*** 0.206*** 0.181*** 0.769*** - - - 57.742	$\begin{array}{c} Cy\\ Intercept\\ Z-1\\ Z-2\\ Z-3\\ Z-4\\ Z-5\\ Z-6\\ Z-7\\ Z-8\\ Z-9\\ X-1\\ X-2\\ X-3\\ X-4\\ X-5\\ X-6\\ X-7\\ X-8\\ X-9\\ X-10\\ X-11\\ X-12\\ X-13\\ X-14\\ X-15\\ u_0\\ u_1\\ u_7\\ r\\ \end{array}$	47.549*** -0.028 0.194 -0.020 0.051 -0.184* -0.046 0.220 0.025 0.019 -0.255 -2.163*** 0.200*** 0.079*** -0.005 0.003 0.263 1.751*** 2.395*** 0.024 0.005 0.106*** 0.130*** 0.296* - 84.215	$\begin{tabular}{ c c c c } \hline Czech \\ \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & u_1 & u_7 & r & \\ \hline \end{tabular}$	Republic 42.225*** 0.104* 0.005 0.113† 1.308** 0.058 -0.096 0.020 0.016 -0.960*** -2.979*** 0.219*** 0.061*** 0.027 0.015 0.440** 3.003*** 5.221*** 0.023 -0.074*** 0.192*** 0.183*** 0.106*** 0.435** - 72.328	$\begin{array}{c} \text{Der} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \\ r \end{array}$	46.800*** -0.051 0.084 0.001 0.165 0.079† -0.094 0.083† 0.032† -0.006 1.160*** -1.007* 0.130*** 0.070*** 0.030 0.014 0.225 2.226*** 2.574*** 0.019 -0.028 0.105*** 0.133*** 0.123*** 0.700*** 49.141

Dommin	сап керионс	En	gland	Es	tonia	Fir	lland
Intercent	52 614***	Intercent	45 962***	Intercent	45 646***	Intercept	46 980***
7-1	0.023	7-1	0.059	7-1	0.085	7-1	0.069
72	0.023	7 2	0.140	72	0.005	7 2	0.133+
Z-2 7 2	0.072	Z-2 7 2	0.140	Z-2 7 2	-0.077	Z-2 7 2	0.133
Z-3	-0.082	Z-3	-0.048	Z-3	0.004	Z-3	-0.100
Z-4	-0.318	Z-4	0.027	Z-4	1.003	Z-4	1.514**
Z-5	-0.052	Z-5	0.044	Z-5	-0.065	Z-5	0.060
Z-6	0.124	Z-6	-0.086	Z-6	-0.110	Z-6	0.035
Z-7	-0.014	Z-7	0.173*	Z-7	0.116	Z-7	0.124†
Z-8	0.001	Z-8	0.049	Z-8	0.004	Z-8	-0.023
Z-9	-0.039	Z-9	-0.025	Z-9	0.042	Z-9	-0.006
X-1	-1.249**	X-1	-1.210***	X-1	-0.140	X-1	0.568†
X-2	-0.761	X-2	-0.123	X-2	0.217	X-2	-1.466
X-3	0.093***	X-3	0.195***	X-3	0.151***	X-3	0.105***
X-4	0.046†	X-4	0.073**	X-4	0.038	X-4	0.068*
X-4 X-5	-0.05/*	X-4 X-5	0.075	X-4 X-5	-0.058*	X-4 X-5	0.000
X-5 V 6	-0.034	X-5 V 6	0.007	X-5 V 6	0.092***	N-5 V 6	0.023
A-0 V 7	-0.017	A-0 X 7	0.017	A-0 V 7	0.085	A-0 V 7	-0.025
X-/	-0.469*	Λ-/ Ν.Ο	0.514***	λ-/ Ν.ο	0.087	Λ-/ Ν.ο	0.585****
X-8	1.590†	X-8	2.838***	X-8	0.964**	X-8	2.485***
X-9	1.861***	X-9	3.523***	X-9	3.067***	X-9	3.479***
X-10	0.080 **	X-10	0.052*	X-10	0.051*	X-10	0.025
X-11	-0.039	X-11	-0.020	X-11	-0.039	X-11	0.019
X-12	0.095***	X-12	0.057*	X-12	0.038	X-12	0.044†
X-13	0.195***	X-13	0.186***	X-13	0.189***	X-13	0.190***
X-14	0.161***	X-14	0.136***	X-14	0.188 * * *	X-14	0.090***
X-15	0.157***	X-15	0.101***	X-15	0.089***	X-15	0.131***
110	2 677***	110	1 031***	110	3 268***	110	0 643**
11.	2.077	11.	-	11 -	4 022***	11.	0.045
u _l	2.440	u]	_	u]	4.022 0.811**	u _I	_
<i>u</i> ₇	70 149	<i>u</i> ₇	50 022	<i>u</i> ₇	54 200	<i>u</i> ₇	50 222
/	70.140	1	39.933		J4.299	1	30.223
			_			_	
(Greece	Gua	temala	Inde	onesia	Ire	land
Intercept	Greece 49.445***	Gua Intercept	temala 54.845***	Inde Intercept	onesia 52.740***	Intercept	eland 50.140***
Intercept Z-1	Greece 49.445*** -0.021	Gua Intercept Z-1	temala 54.845*** 0.158†	Inde Intercept Z-1	onesia 52.740*** 0.043	Intercept Z-1	eland 50.140*** -0.069
Intercept Z-1 Z-2	Greece 49.445*** -0.021 -0.198	Gua Intercept Z-1 Z-2	temala 54.845*** 0.158† 0.157†	Inde Intercept Z-1 Z-2	onesia 52.740*** 0.043 0.101†	Intercept Z-1 Z-2	eland 50.140*** -0.069 -0.016
Intercept Z-1 Z-2 Z-3	Greece 49.445*** -0.021 -0.198 0.009	Gua Intercept Z-1 Z-2 Z-3	temala 54.845*** 0.158† 0.157† -0.088	Inder Intercept Z-1 Z-2 Z-3	onesia 52.740*** 0.043 0.101† -0.118*	Intercept Z-1 Z-2 Z-3	eland 50.140*** -0.069 -0.016 -0.007
Intercept Z-1 Z-2 Z-3 Z-4	Greece 49.445*** -0.021 -0.198 0.009 0.688	Gua Intercept Z-1 Z-2 Z-3 Z-4	temala 54.845*** 0.158† 0.157† -0.088 -0.388	Inder Intercept Z-1 Z-2 Z-3 Z-4	onesia 52.740*** 0.043 0.101† -0.118* 0.311	Intercept Z-1 Z-2 Z-3 Z-4	eland 50.140*** -0.069 -0.016 -0.007 0.708
Intercept Z-1 Z-2 Z-3 Z-4 Z-5	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5	eland 50.140**** -0.069 -0.016 -0.007 0.708 0.108
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272**	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	2land 50.140**** -0.069 -0.016 -0.007 0.708 0.108 -0.099
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175‡	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-6 Z-7	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071	Inder Z-1 Z-2 Z-3 Z-4 Z-5 Z-5 Z-6 Z-7	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135‡	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	50.140**** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175† 0.004	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013	Inder Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	Eland 50.140**** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z 0	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175† 0.004 0.030	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-0	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z 0	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-0	Eland 50.140**** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 0.005
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175† 0.004 0.039 0.202	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 0.127	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† 0.617*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	Eland 50.140**** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.472
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175† 0.004 0.039 -0.392 2.523***	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 2.224**	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 Y 2	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.022	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	Stand 50.140**** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 2.222***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 V-2	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175† 0.004 0.039 -0.392 -2.532***	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-2	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234**	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 V-2	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.120***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 V-2	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	Greece 49.445*** -0.021 -0.198 0.009 0.688 0.059 -0.272** 0.175† 0.004 0.039 -0.392 -2.532*** 0.200*** 0.200***	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.67**	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097**	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068*
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025 -0.016	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025 -0.016 -0.274	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342†	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	$\begin{tabular}{ c c c c c } \hline temala \\ \hline 54.845^{***} \\ 0.158^{\dagger} \\ 0.157^{\dagger} \\ -0.088 \\ -0.388 \\ 0.052 \\ -0.063 \\ 0.071 \\ 0.013 \\ 0.006 \\ -0.127 \\ -3.234^{**} \\ 0.161^{***} \\ 0.097^{**} \\ -0.025 \\ -0.016 \\ -0.274 \\ 1.059^{**} \end{tabular}$	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-6 X-7 X-8	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025 -0.016 -0.274 1.059** 1.214***	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	onesia 52.740**** 0.043 0.101† -0.118* 0.311 0.191**** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	temala 54.845^{***} 0.158^{\dagger} 0.157^{\dagger} -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234^{**} 0.161^{***} 0.097^{**} -0.025 -0.016 -0.274 1.059^{**} 1.214^{***} 0.064^{**}	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -0.392 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***} -0.038	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025 -0.016 -0.274 1.059** 1.214*** 0.064** -0.048†	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030 -0.041*
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	temala 54.845^{***} 0.158^{\dagger} 0.157^{\dagger} -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234^{**} 0.161^{***} 0.097^{**} -0.025 -0.016 -0.274 1.059^{**} 1.214^{***} 0.064^{**} -0.048^{\dagger} 0.029	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	onesia 52.740**** 0.043 0.101† -0.118* 0.311 0.191**** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006 0.074***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.055*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030 -0.041† 0.054*
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -0.392 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.038 0.070^{***} 0.158^{****}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025 -0.016 -0.274 1.059** 1.214*** 0.064** -0.048† 0.029 0.132***	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-12 X-13	onesia 52.740**** 0.043 0.101† -0.118* 0.311 0.191**** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.574 0.113*** 0.006 0.074*** 0.058*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030 -0.041† 0.054* 0.212***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -0.392 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***} -0.038 0.070^{***} 0.158^{***} 0.192^{****}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	temala 54.845*** 0.158† 0.157† -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234** 0.161*** 0.097** -0.025 -0.016 -0.274 1.059** 1.214*** 0.064** -0.048† 0.029 0.132*** 0.157***	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	onesia 52.740**** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006 0.074*** 0.058*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030 -0.041† 0.054* 0.212*** 0.142***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -0.392 -2.532^{***} 0.200^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***} -0.038 0.070^{***} 0.183^{****}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	temala 54.845^{***} 0.158^{\dagger} 0.157^{\dagger} -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234^{**} 0.161^{***} 0.097^{**} -0.025 -0.016 -0.274 1.059^{**} 1.214^{***} 0.064^{**} -0.048^{\dagger} 0.132^{***} 0.98^{****}	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	onesia 52.740**** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006 0.074*** 0.136*** 0.136***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030 -0.041† 0.054* 0.142*** 0.142***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***} -0.38 0.070^{***} 0.183^{***} 0.183^{***} 0.16^{**}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	temala 54.845^{***} 0.158^{\dagger} 0.157^{\dagger} -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234^{**} 0.161^{***} 0.097^{**} -0.025 -0.016 -0.274 1.059^{**} 1.214^{***} 0.064^{**} -0.048^{\dagger} 0.029 0.132^{***} 0.77^{***}	Inder Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006 0.074*** 0.136*** 0.136*** 0.136*** 0.136***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	50.140*** -0.069 -0.016 -0.007 0.708 0.108 -0.099 0.065 0.005 -0.008 0.473 -2.322*** 0.155*** 0.068* -0.011 -0.001 0.200 2.621*** 3.013*** 0.030 -0.041† 0.054* 0.212*** 0.142*** 0.142*** 0.109***
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u ₀	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -0.392 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***} -0.038 0.070^{***} 0.183^{***} 0.183^{***}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	temala 54.845^{***} 0.158^{\dagger} 0.157^{\dagger} -0.088 -0.388 0.052 -0.063 0.071 0.013 0.006 -0.127 -3.234^{**} 0.161^{***} 0.097^{**} -0.025 -0.016 -0.274 1.059^{**} 1.214^{***} 0.064^{**} -0.048^{\dagger} 0.029 0.132^{***} 0.088^{***} 0.031^{\dagger}	Index Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 Z-8 Z-9 X-1 X-2 X-3 X-1 X-2 X-3 X-4 X-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-10 X-11 X-12 X-13 X-10 X-11 X-12 X-13 X-14 X-15 X-10 X-11 X-12 X-13 X-14 X-15 X-10 X-11 X-12 X-13 X-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-14 X-15 N-10	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006 0.074*** 0.136*** 0.136*** 0.135*	$\begin{tabular}{ c c c c c } \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & \\ \hline \end{tabular}$	$\begin{array}{r} -1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.$
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u ₀ u ₁	Greece 49.445^{***} -0.021 -0.198 0.009 0.688 0.059 -0.272^{**} 0.175^{\dagger} 0.004 0.039 -2.532^{***} 0.200^{***} 0.044^{\dagger} 0.029 0.002 -0.115 1.632^{**} 1.470^{\dagger} 0.104^{***} -0.38 0.070^{***} 0.183^{***} 0.183^{***}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	$\begin{tabular}{ c c c c c } \hline $54.845^{***} \\ 0.158^{\dagger} \\ 0.157^{\dagger} \\ -0.088 \\ -0.388 \\ 0.052 \\ -0.063 \\ 0.071 \\ 0.013 \\ 0.006 \\ -0.127 \\ -3.234^{**} \\ 0.161^{***} \\ 0.097^{**} \\ -0.025 \\ -0.016 \\ -0.274 \\ 1.059^{**} \\ 1.214^{***} \\ 0.064^{**} \\ -0.048^{\dagger} \\ 0.029 \\ 0.132^{***} \\ 0.031^{\dagger} \\ -\end{tabular}$	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	onesia 52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.113*** 0.006 0.074*** 0.136*** 0.135*	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	$\begin{array}{r} -1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.$
Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	$\begin{tabular}{ c c c c c } \hline $54.845^{***} \\ 0.158^{\dagger} \\ 0.157^{\dagger} \\ -0.088 \\ -0.388 \\ 0.052 \\ -0.063 \\ 0.071 \\ 0.013 \\ 0.006 \\ -0.127 \\ -3.234^{**} \\ 0.161^{***} \\ 0.097^{**} \\ -0.025 \\ -0.016 \\ -0.274 \\ 1.059^{**} \\ 1.214^{***} \\ 0.064^{**} \\ -0.048^{\dagger} \\ 0.029 \\ 0.132^{***} \\ 0.031^{\dagger} \\ - \\ 0.749^{***} \end{tabular}$	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	52.740*** 0.043 0.101† -0.118* 0.311 0.191*** -0.059 0.135† -0.031 0.031† -0.617* 0.023 0.130*** 0.025 -0.016 0.019 0.342† 0.591 0.574 0.138*** 0.006 0.074*** 0.136*** 0.135* - 0.130*	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	$\begin{array}{r} \textbf{-1.1}\\ & 50.140^{\texttt{***}}\\ & -0.069\\ & -0.016\\ & -0.007\\ & 0.708\\ & 0.108\\ & -0.099\\ & 0.065\\ & 0.005\\ & -0.008\\ & 0.473\\ & -2.322^{\texttt{***}}\\ & 0.155^{\texttt{***}}\\ & 0.068^{\texttt{*}}\\ & -0.011\\ & -0.001\\ & 0.200\\ & 2.621^{\texttt{***}}\\ & 3.013^{\texttt{***}}\\ & 0.030\\ & -0.041^{\texttt{*}}\\ & 0.0212^{\texttt{***}}\\ & 0.142^{\texttt{***}}\\ & 0.109^{\texttt{***}}\\ & 0.939^{\texttt{*}}\\ & 6.444^{\texttt{***}}\\ & 1.162^{\texttt{*}}\\ \end{array}$

	Italy	Korea, F	Republic of	La	atvia	Lith	uania
Intercept	52.394***	Intercept	47.173***	Intercept	49.648***	Intercept	49.592***
Z-1	0.002	Z-1	0.009	Z-1	0.027	Z-1	0.028
Z-2	-0.085†	Z-2	0.116	Z-2	0.095	Z-2	0.000
Z-3	0.059	Z-3	-0.067	Z-3	0.107	Z-3	-0.033
Z-4	0.450	Z-4	-0.760*	Z-4	-1.055*	Z-4	0.800†
Z-5	0.133*	Z-5	0.143**	Z-5	0.137†	Z-5	0.238**
Z-6	-0.068	Z-6	-0.157*	Z-6	-0.356***	Z-6	0.012
Z-7	0.150**	Z-7	0.082	Z-7	-0.072	Z-7	-0.036
Z-8	0.008	Z-8	0.010	Z-8	-0.033	Z-8	0.005
Z-9	0.017	Z-9	-0.006	Z-9	0.064†	Z-9	0.019
X-1	0.066	X-1	0.261	X-1	0.498	X-1	0.486
X-2	-3.680***	X-2	1.071	X-2	-3.002**	X-2	-1.301
X-3	0.226***	X-3	0.158***	X-3	0.106***	X-3	0.155***
X-4	0.059*	X-4	0.025†	X-4	0.011	X-4	0.033
X-5	-0.006	X-5	-0.019	X-5	0.034	X-5	0.038
X-6	-0.024	X-6	0.015	X-6	-0.050†	X-6	-0.036
X-7	0.311	X-7	0.323*	X-7	0.419	X-7	0.288
X-8	2.209***	X-8	1.142*	X-8	0.574	X-8	2.291**
X-9	2.787***	X-9	2.224**	X-9	1.319	X-9	2.750**
X-10	0.044†	X-10	0.004	X-10	0.033	X-10	0.026
X-11	-0.058*	X-11	-0.028*	X-11	-0.082**	X-11	0.004
X-12	0.110***	X-12	0.102***	X-12	0.085*	X-12	0.138***
X-13	0.074*	X-13	0.195***	X-13	0.217***	X-13	0.171***
X-14	0.158***	X-14	0.148^{***}	X-14	0.176***	X-14	0.162***
X-15	0.101***	X-15	0.117***	X-15	0.188***	X-15	0.076**
u_0	0.075	u_0	0.470***	u_0	2.299***	u_0	2.250***
u_1	—	u_1	—	u_1	—	u_1	2.249***
u_7	_	u_7	_	u_7	1.198**	u_7	_
r	57.485	r	53.852	r	65.124	r	62.724
]	Malta	M	exico	New	Zealand	No	rway
Intercept	48.088***	Intercept	52.746***	Intercept	47.180***	Intercept	49.696***
Z-1	-0.059	Z-1	0.001	Z-1	0.083	Z-1	-0.070
Z-2	0.184	Z-2	0.119	Z-2	0.046	Z-2	0.218*
Z-3	0.204*	Z-3	-0.020	Z-3	-0.042	Z-3	0.044

mercept	48.088	mercept	32.740	intercept	47.180	intercept	49.090
Z-1	-0.059	Z-1	0.001	Z-1	0.083	Z-1	-0.070
Z-2	0.184	Z-2	0.119	Z-2	0.046	Z-2	0.218*
Z-3	0.204*	Z-3	-0.020	Z-3	-0.042	Z-3	0.044
Z-4	-0.675	Z-4	0.161	Z-4	0.178	Z-4	0.916
Z-5	0.044	Z-5	0.037	Z-5	0.017	Z-5	0.106
Z-6	-0.115	Z-6	0.071	Z-6	-0.153*	Z-6	-0.006
Z-7	0.179†	Z-7	0.132†	Z-7	0.159*	Z-7	0.040
Z-8	-0.068*	Z-8	0.025	Z-8	0.020	Z-8	-0.016
Z-9	0.016	Z-9	-0.043*	Z-9	-0.037	Z-9	-0.019
X-1	-0.748	X-1	-0.308	X-1	0.604*	X-1	0.704
X-2	-2.457†	X-2	-1.611	X-2	-0.149	X-2	-3.119***
X-3	0.152***	X-3	0.218***	X-3	0.187***	X-3	0.221***
X-4	0.066**	X-4	0.056*	X-4	0.069***	X-4	0.146***
X-5	-0.008	X-5	-0.006	X-5	0.016	X-5	0.037
X-6	0.020	X-6	0.002	X-6	-0.005	X-6	-0.005
X-7	0.079	X-7	-0.084	X-7	0.354*	X-7	0.365
X-8	2.236***	X-8	1.123**	X-8	1.665***	X-8	3.121***
X-9	3.473***	X-9	1.022*	X-9	2.779***	X-9	3.949***
X-10	0.023	X-10	0.064**	X-10	0.034*	X-10	0.053†
X-11	-0.044*	X-11	0.002	X-11	-0.037*	X-11	-0.080*
X-12	0.051**	X-12	0.071***	X-12	0.074***	X-12	0.062*
X-13	0.138***	X-13	0.119***	X-13	0.108***	X-13	0.069**
X-14	0.171***	X-14	0.168***	X-14	0.211***	X-14	0.111***
X-15	0.141***	X-15	0.125***	X-15	0.124***	X-15	0.105***
u_0	0.806***	u_0	0.543***	u_0	0.964***	u_0	2.964***
u_1	_	u_1	_	u_1	_	u_1	1.742*
u_7	_	u_7	-	u_7	0.191*	u_7	1.362**
r	56.975	r	64.031	r	55.125	r	67.890

Para	aguay	Po	oland	Russian	Federation	Slovak	Republic
Intercept	52.200***	Intercept	46.341***	Intercept	50.455***	Intercept	46.834***
Z-1	0.088	Z-1	0.266**	Z-1	0.107†	Z-1	0.070
Z -2	0.042	7-2	0.010	7-2	0.100	Z -2	0.008
Z-3	-0.005	Z-3	0.019	Z-3	-0.134*	Z-3	0.024
Z 3 7-4	0.153	Z 3 7-4	-0.701	Z 3 7 -4	0.827+	Z 3 7 -4	-0.295
Z-4 75	0.135	Z-4 75	-0.701	Z-4 75	0.027	Z- 4 75	0.053
Z-3	0.140	L-J 7.6	0.040	L-3 7.6	-0.030	L-J 7 6	-0.033
Z-0	0.017	Z-0	-0.082	Z-0	0.080	Z-0	-0.151
Z-/	0.047	Z-/	0.102	Z-/	0.055	Z-/	0.096
Z-8	0.034	Z-8	0.023	Z-8	-0.05/*	Z-8	0.018
Z-9	0.057	Z-9	-0.021	Z-9	0.039	Z-9	-0.021
X-1	-0.681	X-1	0.444	X-1	0.329	X-1	-0.482
X-2	-0.964	X-2	-2.966†	X-2	0.321	X-2	0.517
X-3	0.191***	X-3	0.136***	X-3	0.111***	X-3	0.176***
X-4	0.080**	X-4	0.165***	X-4	0.085**	X-4	0.093***
X-5	0.023	X-5	0.051†	X-5	-0.003	X-5	-0.017
X-6	-0.004	X-6	-0.009	X-6	-0.013	X-6	0.020
X-7	0.161	X-7	0.130	X-7	-0.076	X-7	0.523*
X-8	1.386**	X-8	1.626**	X-8	0.638	X-8	2.208***
X-9	1 728***	X-9	2 990***	X-9	1 078†	X-9	3 060***
X-10	-0.023	X-10	0.060**	X-10	0.025	X-10	0.055*
X-10 X 11	-0.025	X-10 X 11	0.000	X-10 X 11	0.025	X-10 X 11	0.031
X-11 X 12	0.010	X-11 X 12	0.011	X-11 X 12	-0.070	X-11 X 12	-0.031
A-12 X 12	0.007	A-12 X 12	-0.014	A-12 V 12	0.035	A-12 X 12	0.070***
X-15	0.149***	X-15	0.119***	X-13	0.203***	X-15	0.188****
X-14	0.129***	X-14	0.139***	X-14	0.094**	X-14	0.179***
X-15	0.133***	X-15	0.089***	X-15	0.117***	X-15	0.153***
u_0	3.821***	u_0	2.064***	u_0	4.018***	u_0	1.782***
u_1	5.284***	u_1	_	u_1	3.772***	u_1	_
u_7	0.847***	u_7	_	u_7	0.179**	u_7	—
r	61.659	r	70.710	r	66.451	r	67.128
Slo	venia	S	pain	Sw	veden	Switz	erland
Slov Intercept	venia 47.425***	S Intercept	pain 50.580***	Sw Intercept	v eden 47.839***	Switz Intercept	erland 46.379***
Slor Intercept Z-1	venia 47.425*** 0.017	S Intercept Z-1	pain 50.580*** 0.223**	Sw Intercept Z-1	7 eden 47.839*** -0.111	Switz Intercept Z-1	verland 46.379*** 0.118*
Slor Intercept Z-1 Z-2	venia 47.425*** 0.017 0.065	Intercept Z-1 Z-2	pain 50.580*** 0.223** 0.055	Sw Intercept Z-1 Z-2	veden 47.839*** -0.111 0.102	Switz Intercept Z-1 Z-2	terland 46.379*** 0.118* 0.032
Slor Intercept Z-1 Z-2 Z-3	venia 47.425*** 0.017 0.065 0.045	S Intercept Z-1 Z-2 Z-3	pain 50.580*** 0.223** 0.055 0.072	Sw Intercept Z-1 Z-2 Z-3	47.839*** -0.111 0.102 -0.170	Switz Intercept Z-1 Z-2 Z-3	eerland 46.379*** 0.118* 0.032 -0.107
Slo Intercept Z-1 Z-2 Z-3 Z-4	venia 47.425*** 0.017 0.065 0.045 0.647	S Intercept Z-1 Z-2 Z-3 Z-4	pain 50.580*** 0.223** 0.055 0.072 0.072	Sw Intercept Z-1 Z-2 Z-3 Z-4	reden 47.839*** -0.111 0.102 -0.170 0.688	Switz Intercept Z-1 Z-2 Z-3 Z-4	eerland 46.379*** 0.118* 0.032 -0.107 2.012***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-4 Z 5	venia 47.425*** 0.017 0.065 0.045 0.647 0.014	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5	50.580*** 0.223** 0.055 0.072 -0.217 0.053	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-4 Z-5	reden 47.839*** -0.111 0.102 -0.170 0.688 0.044	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5	zerland 46.379*** 0.118* 0.032 -0.107 2.012*** 0.284***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 0.002	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 0.082	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	reden 47.839*** -0.111 0.102 -0.170 0.688 0.044 0.112	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	zerland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** 0.160*
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-6 Z-7	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.002	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.002	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-6	reden 47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	zerland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.200***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 0.008	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 0.028	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	zerland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** 0.020
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-0	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z 0	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.217*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-0	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 -0.25
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 Z-9	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.621	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.028 -0.047*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 V.1	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 0.202	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175**	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314 -1.347†	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175*** -1.481**	Switz Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166***	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314 -1.347† 0.143***	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046†	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314 -1.347† 0.143*** 0.057*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037†	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065**	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043†	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.092 -0.028 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637*	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381†	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-4 X-5 X-6 X-7	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772***	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.214 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311**	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278 1.865***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392***
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	venia 47.425*** 0.017 0.065 0.045 0.047 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125***	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.218 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696**	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278 1.865*** 2.522***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-10	venia 47.425*** 0.017 0.065 0.045 0.047 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696** -0.013	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278 1.865*** 2.522*** 0.035	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11	venia 47.425*** 0.017 0.065 0.045 0.047 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063**	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	50.580*** 0.223** 0.072 -0.217 -0.053 -0.082 0.092 -0.217 0.053 0.057 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696** -0.013 -0.059**	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278 1.865*** 2.522*** 0.035 -0.024	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-1 X-2 X-3 X-1 X-2 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-10 X-7 X-8 X-9 X-10 X-11	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043*
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.060**	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	pain 50.580^{***} 0.223^{**} 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047^* -0.314 -1.347^{\dagger} 0.143^{***} 0.057^* -0.014 0.046 0.381^{\dagger} 1.311^{**} 1.696^{**} -0.013 -0.059^{**} 0.080^{***}	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278 1.865*** 2.522*** 0.035 -0.024 0.041†	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-10	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.060** 0.060** 0.060** 0.045†	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	pain 50.580^{***} 0.223^{**} 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047^* -0.314 -1.347^{\dagger} 0.143^{***} 0.057^* -0.014 0.046 0.381^{\dagger} 1.311^{**} 1.696^{**} -0.013 -0.059^{**} 0.080^{***} 0.122^{***}	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.36*** 0.037† 0.043† -0.029 0.278 1.865*** 2.522*** 0.035 -0.024 0.041† 0.112***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.146***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.060** 0.065* 0.178***	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	pain 50.580^{***} 0.223^{**} 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047^* -0.314 -1.347^{\dagger} 0.143^{***} 0.057^* -0.014 0.046 0.381^{\dagger} 1.311^{**} 1.696^{**} -0.013 -0.059^{**} 0.080^{***} 0.122^{***} 0.202^{***}	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.029 0.278 1.865*** 2.522*** 0.035 -0.024 0.041† 0.112*** 0.168***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.146*** 0.199***
Slor Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.063** 0.063** 0.060** 0.045† 0.178*** 0.141***	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	pain 50.580^{***} 0.223^{**} 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047^* -0.314 -1.347^{\dagger} 0.143^{***} 0.057^* -0.014 0.046 0.381^{\dagger} 1.311^{**} 1.696^{**} -0.013 -0.059^{**} 0.22^{***} 0.106^{***}	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 $1.175**$ $-1.481**$ $0.136***$ 0.037^{\dagger} 0.043^{\dagger} -0.029 0.278 $1.865***$ $2.522***$ 0.035 -0.024 0.041^{\dagger} $0.112***$ $0.168***$ $0.114***$	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.199*** 0.105***
Slot Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.063** 0.060** 0.063** 0.063** 0.063** 0.063** 0.045† 0.178*** 0.141*** 2.625***	S Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 ''	50.580*** 0.223** 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696** -0.013 -0.059** 0.80*** 0.122*** 0.106*** 1.023**	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 U	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037† 0.043† -0.278 1.865*** 2.522*** 0.035 -0.024 0.041† 0.112*** 0.168*** 0.114*** 2.721***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 V.	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.105*** 4.386***
Slot Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.045† 0.178*** 0.141*** 2.625***	$\begin{array}{c} \textbf{S} \\ \hline \textbf{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_{\text{I}} \end{array}$	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696** -0.013 -0.059** 0.80*** 0.122*** 0.106*** 1.023**	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 $1.175**$ $-1.481**$ $0.136***$ 0.037^{\dagger} 0.043^{\dagger} -0.029 0.278 $1.865****$ $2.522***$ 0.035 -0.024 0.041^{\dagger} $0.112****$ $0.168***$ $0.114****$ $2.721***$	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.105*** 4.386*** 1.485*
$\begin{tabular}{ c c c c c } \hline Slow \\ \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & u_1 & $	venia 47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.008 0.024 0.263 -0.280 0.166*** 0.046† 0.065** -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.063** 0.065** 0.034 -0.034 -0.034 -0.063** 0.065** 0.045† 0.178*** 0.141*** 2.625***	$\begin{array}{c} \textbf{S} \\ \hline \textbf{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ \vdots \end{array}$	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696** -0.013 -0.059** 0.202*** 0.106*** 1.023**	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.047 -0.003 1.175** -1.481** 0.136*** 0.037 [†] 0.043 [†] -0.029 0.278 1.865*** 2.522*** 0.035 -0.024 0.041 [†] 0.112*** 0.168*** 0.114*** 2.721*** - 0.706*	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.195*** 4.386*** 1.485* 0.922**
Slot Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	47.425*** 0.017 0.065 0.045 0.647 -0.014 -0.002 0.006 -0.003 0.024 0.263 -0.280 0.166*** 0.045* -0.036 0.637* 2.772*** 4.125*** 0.034 -0.063** 0.060** 0.045† 0.178*** 0.141*** 2.625*** - 0.880* 77.270	$\begin{array}{c} \textbf{S} \\ \hline \textbf{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \\ \textbf{r} \end{array}$	50.580*** 0.223** 0.055 0.072 -0.217 -0.053 -0.082 0.092 -0.028 -0.047* -0.314 -1.347† 0.143*** 0.057* -0.014 0.046 0.381† 1.311** 1.696** -0.013 -0.059** 0.106*** 1.023** - 71.608	$\begin{tabular}{ c c c c c } \hline Sw \\ \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & u_1 & u_7 & u_7 & x_1 & X-15 & U_0 & U_1 & U_7 & x_1 & X-15 & U_0 & U_1 & U_7 & X-12 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-12 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U_7 & X-13 & X-14 & X-15 & U_0 & U_1 & U$	47.839*** -0.111 0.102 -0.170 0.688 0.044 -0.112 0.066 0.044 -0.112 0.066 0.047 -0.003 $1.175**$ $-1.481**$ $0.136***$ 0.037^{\dagger} 0.043^{\dagger} -0.029 0.278 $1.865****$ $2.522***$ 0.035 -0.024 0.041^{\dagger} $0.112****$ $0.114****$ $2.721***$ $-0.706*$	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7 r	terland 46.379*** 0.118* 0.032 -0.107 2.012*** -0.284*** -0.169* 0.290*** -0.026 0.025 -0.588 -2.282*** 0.143*** 0.018 -0.002 0.050* 0.639* 2.392*** 3.909*** 0.009 -0.043* 0.117*** 0.165*** 4.386*** 1.485* 0.923**

Thailand

FIXED EFFECTS	
Intercept	53.810***
Z-1. School mean of civic participation at school	-0.049
Z-2. School mean of discussion of political and social issues outside of school	-0.063
Z-3. School mean of civic participation outside of school	-0.011
Z-4. Average school SES	0.078
Z-5. Collective perceptions of openness in classroom discussions	0.407***
Z-6. Collective perceptions of students' influence on decisions about school	-0.118
Z-7. Collective perceptions of student-teacher relationships	0.034
Z-8. Availability of resources in the local community	0.021
Z-9. Social tension in the community	0.077†
X-1. Gender (Female)	-1.711**
X-2. Immigrant background	-3.709***
X-3. Civic knowledge	0.230***
X-4. Civic participation at school	0.054*
X-5. Discussion of political and social issues outside of school	-0.013
X-6. Participation in organized activities outside of school	0.011
X-7. Family SES	0.180
X-8. Parents: Quite interested in social and political issues	1.505*
X-9. Parents: Very interested in social and political issues	1.791*
X-10. Openness in classroom discussions	0.109***
X-11. Students' influence on decisions about school	-0.019
X-12. Student-teacher relationships	0.049
X-13. Political interest	0.160***
X-14. Internal political efficacy	0.004
X-15. Collective school efficacy	0.135***
RANDOM EFFECTS	
u_0 . Between-school (Intercept)	0.315*
u_1 . Gender (Female) slope	—
u_7 . Family SES slope	—
r. Within-school variance component	59.225

p < .1, *p < .05, **p < .01, ***p < .001

Between-school	Within-school variance	Intraclass correlation
variance	component (σ 2)	coefficient (ICC) $\times 100^{a}$
component (τ)		
2.07***	102.65	1.98
3.01***	78.99	3.67
2.05^{***}	88.34	2.27
3.19***	127.53	2.44
3.21***	92.60	3.35
4.96^{***}	92.57	5.09
1.92^{**}	132.20	1.43
2.51^{***}	88.28	2.77
2.53^{***}	76.50	3.20
0 0 ***	114.01	2.25

Appendix G: Intraclass Correlation for Adolescents' Expected Informal Participation

	variance	component (σ 2)	coefficient (ICC) $\times 100^{a}$
	component (τ)		
Austria	2.07***	102.65	1.98
Belgium (Flemish)	3.01***	78.99	3.67
Bulgaria	2.05^{***}	88.34	2.27
Chile	3.19***	127.53	2.44
Chinese Taipei	3.21***	92.60	3.35
Colombia	4.96^{***}	92.57	5.09
Cyprus	1.92^{**}	132.20	1.43
Czech Republic	2.51^{***}	88.28	2.77
Denmark	2.53^{***}	76.50	3.20
Dominican Republic	2.63***	114.01	2.25
England	3.40***	84.71	3.86
Estonia	4.63***	62.10	6.94
Finland	2.32***	69.00	3.25
Greece	2.27^{***}	91.11	2.43
Guatemala	5.25***	89.91	5.51
Indonesia	2.82^{***}	63.68	4.23
Ireland	3.53***	92.22	3.69
Italy	6.63***	81.29	7.54
Korea, Republic of	1.16^{***}	80.98	1.41
Latvia	2.26^{***}	76.06	2.88
Lithuania	3.29***	69.83	4.50
Malta	6.32***	100.78	5.90
Mexico	2.88^{***}	105.02	2.67
New Zealand	1.95^{***}	86.15	2.21
Norway	2.40^{***}	88.70	2.63
Paraguay	2.95^{***}	97.20	2.94
Poland	1.64***	79.99	2.01
Russian Federation	3.21***	86.06	3.60
Slovak Republic	1.63***	77.91	2.04
Slovenia	2.35^{***}	81.70	2.79
Spain	1.79^{**}	98.53	1.79
Sweden	2.85^{***}	72.82	3.77
Switzerland	1.07^{**}	79.84	1.32
Thailand	1.24***	61.12	1.98

Note. All values were rounded off to the second decimal point.

^a The proportion (%) of the difference in expected informal participation among adolescents that can be explained by school differences. ** p < .01, *** p < .001

Country

Appendix H: HLM Results - Expected Informal Participation

Austria

FIXED EFFECTS	
Intercept	47.350***
Z-1. School mean of civic participation at school	-0.125
Z-2. School mean of discussion of political and social issues outside of school	-0.055
Z-3. School mean of civic participation outside of school	0.033
Z-4. Average school SES	0.517
Z-5. Collective perceptions of openness in classroom discussions	0.114†
Z-6. Collective perceptions of students' influence on decisions about school	0.218*
Z-7. Collective perceptions of student-teacher relationships	-0.047
Z-8. Availability of resources in the local community	0.028
Z-9. Social tension in the community	-0.017
X-1. Gender (Female)	0.267
X-2. Immigrant background	0.279
X-3. Civic knowledge	-0.091***
X-4. Civic participation at school	0.016
X-5. Discussion of political and social issues outside of school	0.079**
X-6. Participation in organized activities outside of school	0.103***
X-7. Family SES	0.340
X-8. Parents: Quite interested in social and political issues	0.855
X-9. Parents: Very interested in social and political issues	0.363
X-10. Openness in classroom discussions	0.045†
X-11. Students' influence on decisions about school	0.079*
X-12. Student-teacher relationships	-0.004
X-13. Political interest	0.202***
X-14. Internal political efficacy	0.243***
X-15. Collective school efficacy	0.049*
RANDOM EFFECTS	
u_0 . Between-school (Intercept)	1.374**
u_I . Gender (Female) slope	3.412**
u_7 . Family SES slope	_
r. Within-school variance component	75.630

p < .1, *p < .05, **p < .01, ***p < .001

вегдиш	(Flemish)	Bu	lgaria	C	hile	Chines	se Taipei
Intercept	45.564***	Intercept	50.865***	Intercept	49.749***	Intercept	49.512***
Z-1	-0.026	Z-1	-0.045	Z-1	0.044	Z-1	-0.020
7-2	0.145*	7-2	-0.044	7-2	0.037	7-2	0.103
7-3	0.145*	7-3	0.044	7-3	0.123+	7-3	0.105
Z-J 7 4	0.175	Z-3 7 4	0.000	Z-3 7 4	0.125	Z-3 7 4	0.234
Z-4	0.851*	Z-4	-0.233	Z-4	0.020	Z-4	-0.331
Z-5	0.057	Z-5	0.069	Z-5	-0.031	Z-5	0.091
Z-6	0.056	Z-6	0.071	Z-6	-0.060	Z-6	-0.065
Z-7	-0.047	Z-7	0.078	Z-7	0.087	Z-7	0.063
Z-8	-0.054**	Z-8	0.068*	Z-8	-0.018	Z-8	0.008
Z-9	0.035†	Z-9	-0.007	Z-9	-0.020	Z-9	0.018
X-1	0 446	X-1	0.238	X-1	-0.293	X-1	-1 950***
x_2	-0.673	X-2	0.205	X_2	-0.523	X_2	0.470
X 2	0.075*	X 2	0.1205	X 2 X 3	0.023	X 2 X 3	0.470
X-3 V 4	-0.035	X-3 V 4	-0.120	X-3 X 4	-0.058	X-3 X 4	-0.033
Λ-4 V 5	0.041	Λ-4 V 5	0.009	Λ-4 V 5	0.0321	Λ-4 V 5	0.008
A-3	0.058*	A-3	0.014	A-5	0.082****	A-3	0.049*
X-6	0.099***	X-6	0.044	X-6	0.057*	X-6	0.060**
X-7	0.050	X-7	0.460	X-7	-0.187	X-7	0.324*
X-8	0.526	X-8	0.426	X-8	0.717†	X-8	0.755*
X-9	0.256	X-9	1.634*	X-9	0.219	X-9	0.479
X-10	0.025	X-10	0.023	X-10	0.029	X-10	0.054**
X-11	0.068**	X-11	0.031	X-11	0.028	X-11	0.019
X-12	0.027	X-12	0.025	X-12	0.040†	X-12	0.012
X-13	0.172***	X-13	0 143**	X-13	0 234***	X-13	0 278***
X 14	0.253***	X 14	0.237***	X 14	0.291	X 14	0.278***
X-14 V 15	0.255	A-14 V 15	0.237***	X-14 X 15	0.071***	A-14 V 15	0.278***
A-13	0.013	A-13	0.075***	A-13	0.071***	A-15	0.055
u_0	0.104	u_0	2.190***	u_0	0.140*	u_0	0.755****
u_1	1./66*	u_1	1.068**	u_1	-	u_1	—
u_7	_	u_7	0.080**	u_7	2.209***	u_7	_
r	56.820	r	69.340	r	82.518	r	61.427
Colo	ombia	Су	prus	Czech	Republic	Den	mark
Colo Intercept	ombia 54.547***	Cy Intercept	prus 49.800***	Czech Intercept	Republic 45.597***	Der Intercept	mark 46.246***
Cold Intercept Z-1	ombia 54.547*** 0.132*	Cy Intercept Z-1	prus 49.800*** 0.248**	Czech Intercept Z-1	Republic 45.597*** 0.009	Den Intercept Z-1	mark 46.246*** 0.005
Cold Intercept Z-1 Z-2	54.547*** 0.132* 0.138*	Cy Intercept Z-1 Z-2	prus 49.800*** 0.248** 0.245*	Czech Intercept Z-1 Z-2	Republic 45.597*** 0.009 0 174*	Den Intercept Z-1 Z-2	mark 46.246*** 0.005 0.158*
Cold Intercept Z-1 Z-2 Z-3	ombia 54.547*** 0.132* 0.138* 0.159**	Cy Intercept Z-1 Z-2 Z-3	prus 49.800*** 0.248** 0.245* 0.091	Czech Intercept Z-1 Z-2 7-3	Republic 45.597*** 0.009 0.174* 0.019	Den Intercept Z-1 Z-2 Z-3	46.246*** 0.005 0.158*
Cold Intercept Z-1 Z-2 Z-3 Z-3	54.547*** 0.132* 0.138* 0.159** 0.526	Cy Intercept Z-1 Z-2 Z-3 Z-4	9.800*** 0.248** 0.245* -0.091 0.606	Czech Intercept Z-1 Z-2 Z-3 Z-4	Republic 45.597*** 0.009 0.174* 0.019 0.762*	Den Intercept Z-1 Z-2 Z-3 Z-4	46.246*** 0.005 0.158* -0.014 0.512
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-4	54.547*** 0.132* 0.138* 0.159** -0.526 0.002	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-4	9.800*** 0.248** 0.245* -0.091 0.606 0.179+	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-4	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-4	46.246*** 0.005 0.158* -0.014 -0.513 0.228
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-5	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5	9.800*** 0.248** 0.245* -0.091 0.606 -0.178†	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-5	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.122	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5	46.246*** 0.005 0.158* -0.014 -0.513 0.028
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-6	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287*	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123†	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225*
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164*
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097***	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026 -0.045†	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.005	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097*** 0.033†	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026 -0.045† 0.088***	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.005 0.005	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060**	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	$\begin{array}{c} 49.800^{***} \\ 0.248^{**} \\ 0.245^{*} \\ 0.091 \\ 0.606 \\ -0.178^{\dagger} \\ 0.287^{*} \\ -0.127 \\ 0.041 \\ 0.014 \\ 0.315 \\ -0.026 \\ -0.045^{\dagger} \\ 0.088^{***} \\ 0.058^{**} \end{array}$	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.005 0.005 0.005	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057**	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026 -0.045† 0.058** 0.077**	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.090*** 0.062*** 0.10***	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** 0.132	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.315 -0.026 -0.045† 0.088*** 0.058** 0.077** 0.374	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.090*** 0.062*** 0.109*** 0.23*	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** 0.126
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** 0.132	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.315 -0.026 -0.045† 0.088*** 0.058** 0.077** 0.374 1.261*	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-5 X-6 X-7 X-8	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.062*** 0.109*** -0.228† 0.75***	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-9 X-9 X-1 X-9 X-9 X-1 X-9 X-9 X-9 X-1 X-9 X-9 X-9 X-9 X-1 X-9 X-9 X-9 X-9 X-9 X-9 X-9 X-9	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-0	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026 -0.045† 0.088*** 0.058** 0.077** 0.374 1.261*	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-6 X-7 X-8 X-0 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-9 X-1 X-2 X-9 X-1 X-2 X-9 X-1 X-2 X-9 X-1 X-2 X-9 X-1 X-2 X-9 X-1 X-2 X-9 X-1 X-2 X-3 X-4 X-2 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-6 X-7 X-7 X-7 X-7 X-6 X-7 X-7 X-7 X-6 X-7 X-7 X-7 X-6 X-7 X-6 X-7 X-7 X-6 X-7 X-6 X-7 X-6 X-7 X-6 X-7 X-8 X-6 X-7 X-8 X-6 X-7 X-8 X-6 X-7 X-8 X-8 X-8 X-8 X-8 X-8 X-8 X-8	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.062*** 0.109*** -0.228† 0.975*** 1.446***	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-6 X-7 X-8 X-0 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-9 X-1 X-2 X-3 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-8 X-8 X-8 X-8 X-8 X-8 X-8	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.224**
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-1	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-10 X-10 X-10 X-10 X-10 X-10 X-10 X-10	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026 -0.045† 0.088*** 0.058** 0.077** 0.374 1.261* 0.421	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-1	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.062*** 0.109*** -0.228† 0.975*** 1.446*** 0.104	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10 X-1 X-8 X-9 X-10	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.018	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-10 X-11	49.800*** $0.248**$ $0.245*$ -0.091 0.606 -0.178^{\dagger} $0.287*$ -0.127 0.041 0.014 0.315 -0.026 -0.045^{\dagger} $0.058**$ $0.077**$ 0.374 $1.261*$ $1.421*$ 0.033	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-9 X-7 X-8 X-7 X-8 X-9 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10 X-9 X-10 X-9 X-10 X-9 X-10 X-9 X-10 X-9 X-10 X-9 X-10	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.062*** 0.109*** -0.228† 0.975*** 1.446*** 0.014	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-7 X-7 X-8 X-9 X-1 X-7 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10 X-9 X-10 X-9 X-10 X-9 X-10 X-9 X-10	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.504
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-1 X-2 X-7 X-8 X-1 X-2 X-7 X-6 X-7 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.018 0.025	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11	49.800*** $0.248**$ $0.245*$ -0.091 0.606 -0.178 † $0.287*$ -0.127 0.041 0.014 0.315 -0.026 -0.045 † $0.088***$ $0.058**$ $0.077**$ 0.374 $1.261*$ $1.421*$ 0.033 $0.076***$	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-1 X-2 X-3 X-1 X-2 X-1 X-2 X-3 X-1 X-2 X-3 X-1 X-2 X-3 X-1 X-2 X-3 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-7 X-8 X-9 X-1 X-1 X-2 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-10 X-1 X-8 X-9 X-10 X-1 X-8 X-9 X-10	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.090*** 0.62*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021	Der Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10 XX-10 XX	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-1 X-2 X-7 X-8 X-1 X-2 X-3 X-4 X-7 X-8 X-7 X-7 X-8 X-1 X-2 X-7 X-8 X-1 X-2 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-10 X-10 X-11 X-12 X-10 X-11 X-12 X-10 X-11 X-12 X-11 X-12 X-11 X-12	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.012	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	49.800*** $0.248**$ $0.245*$ -0.091 0.606 -0.178 † $0.287*$ -0.127 0.041 0.014 0.315 -0.026 -0.045 † $0.088***$ $0.058**$ $0.077**$ 0.374 $1.261*$ $1.421*$ 0.033 $0.076****$ -0.001	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.090*** 0.062*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** -0.003
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-1 X-1 X-2 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.018 0.025 0.012	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13	49.800^{***} 0.248^{**} 0.245^{*} -0.091 0.606 -0.178^{\dagger} 0.287^{*} -0.127 0.041 0.014 0.315 -0.026 -0.045^{\dagger} 0.058^{**} 0.077^{**} 0.374 1.261^{*} 1.421^{*} 0.033 0.076^{***} -0.001 0.146^{***}	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.090*** 0.62*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021 0.002 0.172***	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** -0.003 0.252***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.018 0.025 0.012 0.202*** 0.335***	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	49.800^{***} 0.248^{**} 0.245^{*} 0.091 0.606 -0.178^{\dagger} 0.287^{*} -0.127 0.041 0.014 0.315 -0.026 -0.045^{\dagger} 0.058^{**} 0.077^{**} 0.374 1.261^{*} 1.421^{*} 0.033 0.076^{***} -0.001 0.146^{***} 0.302^{***}	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.090*** 0.62*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021 0.002 0.172*** 0.262***	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** -0.003 0.252*** 0.172***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	54.547*** $0.132*$ $0.138*$ $0.159**$ -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097^{***} 0.033^{\dagger} 0.057^{**} -0.132 0.158 0.125 0.018 0.025 0.012 0.202^{***} 0.335^{***} 0.115^{***}	Cy Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	49.800^{***} 0.248^{**} 0.245^{*} 0.091 0.606 -0.178^{\dagger} 0.287^{*} -0.127 0.041 0.315 -0.026 -0.045^{\dagger} 0.058^{**} 0.077^{**} 0.374 1.261^{*} 1.421^{*} 0.033 0.076^{***} -0.001 0.146^{***} 0.302^{***}	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.62*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021 0.002 0.172*** 0.262*** 0.051**	Den Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** -0.003 0.252*** 0.172*** -0.014
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	54.547*** 0.132^* 0.138^* 0.159^{**} -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097^{***} 0.033^{\dagger} 0.060^{**} 0.057^{**} 0.132 0.158 0.125 0.012 0.202^{***} 0.335^{***} 0.115^{***} 0.275^{*}	CyInterceptZ-1Z-2Z-3Z-4Z-5Z-6Z-7Z-8Z-9X-1X-2X-3X-4X-5X-6X-7X-8X-9X-10X-11X-12X-13X-14X-15 u_0	49.800^{***} 0.248^{**} 0.245^{*} -0.091 0.606 -0.178^{\dagger} 0.287^{*} -0.127 0.041 0.014 0.315 -0.026 -0.045^{\dagger} 0.058^{**} 0.077^{**} 0.374 1.261^{*} 1.421^{*} 0.033 0.076^{***} -0.001 0.146^{***} 0.302^{***} 0.029 1.559^{**}	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.62*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021 0.002 0.172*** 0.262*** 0.051** 0.189†	$\begin{array}{c} \text{Den} \\ \hline \text{Intercept} \\ \hline Z-1 \\ \hline Z-2 \\ \hline Z-3 \\ \hline Z-4 \\ \hline Z-5 \\ \hline Z-6 \\ \hline Z-7 \\ \hline Z-8 \\ \hline Z-9 \\ \hline X-1 \\ \hline X-2 \\ \hline X-3 \\ \hline X-2 \\ \hline X-3 \\ \hline X-4 \\ \hline X-5 \\ \hline X-6 \\ \hline X-7 \\ \hline X-8 \\ \hline X-9 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-13 \\ \hline X-14 \\ \hline X-15 \\ u_0 \end{array}$	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** -0.003 0.252*** 0.172*** -0.014 3.174***
Cold Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.09 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.012 0.202*** 0.335*** 0.115*** 0.275*	$\begin{array}{c} Cy\\ Intercept\\ Z-1\\ Z-2\\ Z-3\\ Z-4\\ Z-5\\ Z-6\\ Z-7\\ Z-8\\ Z-9\\ X-1\\ X-2\\ X-3\\ X-4\\ X-5\\ X-6\\ X-7\\ X-8\\ X-9\\ X-10\\ X-11\\ X-12\\ X-13\\ X-14\\ X-15\\ u_0\\ u_1 \end{array}$	49.800^{***} 0.248^{**} 0.245^{*} -0.091 0.606 -0.178^{\dagger} 0.287^{*} -0.127 0.041 0.014 0.315 -0.026 -0.045^{\dagger} 0.088^{***} 0.058^{**} 0.077^{**} 0.374 1.261^{*} 1.421^{*} 0.033 0.076^{***} -0.001 0.146^{***} 0.302^{***} 0.029 1.559^{**} 5.747^{**}	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.0090*** 0.62*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021 0.002 0.172*** 0.262*** 0.051** 0.189†	$\begin{array}{c} \text{Den} \\ \hline \text{Intercept} \\ \hline Z-1 \\ \hline Z-2 \\ \hline Z-3 \\ \hline Z-4 \\ \hline Z-5 \\ \hline Z-6 \\ \hline Z-7 \\ \hline Z-8 \\ \hline Z-9 \\ \hline X-1 \\ \hline X-2 \\ \hline X-3 \\ \hline X-2 \\ \hline X-3 \\ \hline X-4 \\ \hline X-5 \\ \hline X-6 \\ \hline X-7 \\ \hline X-8 \\ \hline X-9 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-10 \\ \hline X-11 \\ \hline X-12 \\ \hline X-13 \\ \hline X-14 \\ \hline X-15 \\ \hline u_0 \\ \hline u_1 \\ \end{array}$	amark 46.246^{***} 0.005 0.158^* -0.014 -0.513 0.028 0.225^* -0.043 0.020 -0.016 1.055^{***} -1.164^* 0.007 0.065^{***} 0.084^{***} 0.092^{***} -0.126 0.576 1.334^{**} 0.016 0.084^{***} -0.003 0.252^{***} 0.172^{***} -0.014 3.174^{***} 1.179^*
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.09 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.012 0.202*** 0.335*** 0.115*** 0.275*	$\begin{array}{c} Cy \\ \hline Intercept \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \end{array}$	49.800*** $0.248**$ $0.245*$ -0.091 0.606 -0.178^{\dagger} $0.287*$ -0.127 0.041 0.014 0.315 -0.026 -0.045^{\dagger} $0.077*$ 0.374 $1.261*$ $1.421*$ 0.033 $0.076***$ 0.001 $0.146***$ $0.302***$ 0.029 $1.559**$ $5.747**$	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.005 0.090*** 0.062*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.002 0.172*** 0.262*** 0.051** 0.189†	$\begin{array}{c} \text{Der} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \end{array}$	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** 0.016 0.084*** -0.003 0.252*** 0.172*** -0.014 3.174*** 1.179*
$\begin{array}{c} \text{Cold} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \\ r \end{array}$	54.547*** 0.132* 0.138* 0.159** -0.526 -0.003 0.053 -0.042 0.024 0.009 -0.308 -1.091 -0.097*** 0.033† 0.060** 0.057** -0.132 0.158 0.125 0.018 0.025 0.012 0.202*** 0.355*** 0.115*** 0.275* - 66.069	$\begin{array}{c} Cy \\ \hline Intercept \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \\ r \end{array}$	49.800*** 0.248** 0.245* -0.091 0.606 -0.178† 0.287* -0.127 0.041 0.014 0.315 -0.026 -0.045† 0.088*** 0.077** 0.374 1.261* 1.421* 0.033 0.076*** -0.001 0.146*** 0.029 1.559** 5.747** - 94.274	Czech Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	Republic 45.597*** 0.009 0.174* 0.019 0.763* 0.000 0.123† 0.048 0.005 -0.016 0.106 -1.065 0.005 0.090*** 0.062*** 0.109*** -0.228† 0.975*** 1.446*** 0.014 0.021 0.002 0.172*** 0.262*** 0.051** 0.189† 65 218	$\begin{array}{c} \text{Der} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \\ r \end{array}$	46.246*** 0.005 0.158* -0.014 -0.513 0.028 0.225* -0.043 0.020 -0.016 1.055*** -1.164* 0.007 0.065*** 0.084*** 0.092*** -0.126 0.576 1.334** 0.016 0.084*** 0.003 0.252*** 0.172*** 0.172*** -0.014 3.174*** 1.179* - 49.855

Dominica	n Republic	En	gland	Est	tonia	Fir	land
Intercent	58 192***	Intercent	48 207***	Intercept	47 685***	Intercept	44 859***
7-1	0.211*	7-1	-0.047	7-1	0.111*	7-1	-0.022
7-2	0.014	Z-?	0.076	7-2	0.086	7-2	0.153*
7-3	-0.052	Z-3	0.076	7-3	0.000	7-3	-0.072
Z 3 7 -4	-1 225+	Z 3 7-4	-0.558	Z 3 7 -4	0.830+	Z 3 7 -4	1 292**
Z-4 7 5	0.008	Z-4 7.5	0.000	Z-4 7 5	0.044	Z-4 7 5	0.058
Z-5 7.6	-0.098	Z-5 7.6	-0.009	Z-5 7.6	0.044	Z-5 7.6	-0.038
Z-0	0.020	Z-0 77	0.052	Z-0 7 7	0.192	Z-0 77	0.120
Z-/	0.082	Z-/	0.109	Z-/	0.075	Z-/	0.075
Z-0	0.032	Z-0	0.083	Z-0	-0.018	Z-0	-0.001
Z-9	-0.004	Z-9	-0.025	Z-9	0.029	Z-9	0.014
X-1 X-2	-2.000****	A-1 X-2	0.915***	X-1 X-2	0.384	A-1 X-2	1.725****
X-2	1.461	X-2	-0.221	X-2	0.990	X-2	-0.538
X-3	-0.034	X-3	-0.01/	X-3	-0.038*	X-3	-0.021
X-4	0.062*	X-4	0.053**	X-4	0.077***	X-4	0.039*
X-5	0.007	X-5	0.0/1*	X-5	0.027	X-5	0.058**
X-6	0.059†	X-6	0.076***	X-6	0.088***	X-6	0.067**
X-7	-0.572†	X-7	0.528*	X-7	0.356	X-7	-0.073
X-8	1.150†	X-8	0.775	X-8	0.709†	X-8	-0.807*
X-9	0.737	X-9	0.462	X-9	0.274	X-9	-0.320
X-10	0.027	X-10	0.026	X-10	0.011	X-10	0.050*
X-11	-0.036	X-11	0.063**	X-11	0.047*	X-11	0.033
X-12	0.063*	X-12	-0.009	X-12	0.002	X-12	-0.009
X-13	0.304***	X-13	0.221***	X-13	0.244***	X-13	0.227***
X-14	0.251***	X-14	0.219***	X-14	0.249***	X-14	0.277***
X-15	0.127***	X-15	0.043†	X-15	-0.002	X-15	-0.002
u_0	0.026**	u_0	0.423*	u_0	2.776***	u_0	0.261*
u_1	_	u_1	_	u_1	2.413***	u_1	_
u_7	0.773***	u_7	0.467*	u_7	0.667***	u_7	0.681*
r	80.355	r	56.658	r	44.477	r	43.155
Gi	eece	Gua	temala	Inde	onesia	Ire	land
GI	:eece 52.542***	Gua Intercept	temala 55.148***	Inde Intercept	onesia 55.835***	Intercept	eland 48.052***
Gr Intercept Z-1	Seece 52.542*** 0.036	Gua Intercept Z-1	temala 55.148*** 0.051	Inde Intercept Z-1	onesia 55.835*** 0.000	Intercept Z-1	eland 48.052*** 0.000
Gr Intercept Z-1 Z-2	52.542*** 0.036 -0.091	Gua Intercept Z-1 Z-2	temala 55.148*** 0.051 0.140	Inder Intercept Z-1 Z-2	onesia 55.835*** 0.000 0.311***	Intercept Z-1 Z-2	eland 48.052*** 0.000 -0.040
Gr Intercept Z-1 Z-2 Z-3	reece 52.542*** 0.036 -0.091 0.201**	Gua Intercept Z-1 Z-2 Z-3	temala 55.148*** 0.051 0.140 0.113	Inde Intercept Z-1 Z-2 Z-3	onesia 55.835*** 0.000 0.311*** 0.069	Intercept Z-1 Z-2 Z-3	eland 48.052*** 0.000 -0.040 0.086
Gr Intercept Z-1 Z-2 Z-3 Z-3 7-4	Seece 52.542*** 0.036 -0.091 0.201** 0.739	Gua Intercept Z-1 Z-2 Z-3 Z-3 Z-4	temala 55.148*** 0.051 0.140 0.113 -0.850	Inder Intercept Z-1 Z-2 Z-3 Z-3 Z-4	onesia 55.835*** 0.000 0.311*** 0.069 -0 398	Intercept Z-1 Z-2 Z-3 Z-4	48.052*** 0.000 -0.040 0.086 1.337**
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-4 Z-5	reece 52.542*** 0.036 -0.091 0.201** 0.739 0.094	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100†	Intercept Z-1 Z-2 Z-3 Z-4 Z-5	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	reece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012	Inde Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0 122	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201***
Gr Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-6 Z-7	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035
Gr Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	Aland 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064**	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	And 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158	Inder Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1120**	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	And 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.122 0.95 0.000 -0.122 0.095 0.000 -0.124	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	And 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123*
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 0.065**	Inde Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.95 0.000 -1.170** 1.619* 0.001	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-2 X-3	eland 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* 0.025
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** 0.537 0.020 0.023	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X 4	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	Seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** 0.537 0.020 0.052* 0.025	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.042*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.001 0.379 1.123* -0.025 0.043 0.050*
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 Z-8 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-9 X-1 X-2 Z-7 Z-8 Z-9 X-1 X-2 Z-7 Z-8 Z-9 X-1 X-2 X-3 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-9 X-1 X-5 X-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101***	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.006***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.005*
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.202	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Y 7	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† 0.260	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.96*** 0.497**	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Y 7	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.099*** 0.078
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.298	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.096*** 0.487**	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.099*** 0.078 0.542
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-0	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.298 0.017	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-0	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116*	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-6 X-7 X-8 X-0	binesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.096*** 0.487** 0.587	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-0	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.025 0.101*** 0.298 0.017 1.291† 0.46*	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	binesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.966*** 0.487** 0.587 1.146* 0.59**	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.099*** 0.78 0.542 0.521 0.065**
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-1 X-2 X-3 X-4 X-1 X-5 X-6 X-7 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-9 X-1 X-1 X-1 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.298 0.017 1.291† 0.046† 0.027	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-10 X-11	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 0.022	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-5 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-1 X-2 X-1 X-2 X-3 X-4 X-9 X-1 X-8 X-9 X-1 X-1 X-1 X-2 X-1 X-1 X-2 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.966*** 0.487** 0.587 1.146* 0.059**	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-9 X-1 X-2 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-8 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10 X-1 X-8 X-9 X-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX-10 XX	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.234
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.298 0.017 1.291† 0.046† 0.007	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-9 X-1 X-7 X-8 X-9 X-1 X-8 X-9 X-10 X-10 X-11 X-11 X-11 X-11 X-11 X-11 X-11 X-11 X-11 X-11 X-11 X-11	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 -0.008	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.966*** 0.487** 0.587 1.146* 0.059** 0.005	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-2 X-3 X-4 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-9 X-1 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.099*** 0.78 0.521 0.066** 0.034 0.12
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-12	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.298 0.017 1.291† 0.046† 0.007 -0.400† 0.162****	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-12	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 -0.008 -0.012 0.216***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.966*** 0.487** 0.587 1.146* 0.059** 0.005 -0.020	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-12 X-12 X-1 X-12 X-12 X-1 X-12 XX-12 XX-12 XX-12 XX-12 XX-12 XX-12 XX	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.101*** 0.298 0.017 1.291† 0.046† 0.007 -0.400*	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 -0.008 -0.012 0.216*** 0.225***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	binesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.966*** 0.487** 0.587 1.146* 0.059** 0.005 -0.020 0.139***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-5 X-6 X-7 X-8 X-9 X-1 X-1 X-1 X-1 X-1 X-1 X-1 X-1	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019 0.222***
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 Y-15 Y-16 Y-17 Y-16 Y-16 Y-17 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-16 Y-17 Y-17 Y-16 Y-17 Y-17 Y-16 Y-17 Y-16 Y-17 Y-1	seece 52.542^{***} 0.036 -0.091 0.201^{**} 0.739 0.094 0.024 -0.021 0.023 0.064^{**} -0.478 0.537 0.020 0.052^{*} 0.025 0.101^{***} 0.298 0.017 1.291^{\dagger} 0.046^{\dagger} 0.007 -0.040^{\dagger} 0.248^{***} 0.27^{***}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 X-16 X-11 X-12 X-13 X-14 X-15 X-16 X-17 X-16 X-17 X-18 X-19 X-10 X-11 X-19 X-10 X-11 X-19 X-10 X-10 X-11 X-12 X-13 X-14 X-15 X-16 X-17 X-18 X-9 X-10 X-19 X-10 X-11 X-12 X-13 X-14 X-12 X-13 X-14 X-12 X-13 X-14 X-12 X-13 X-14 X-15 X-16 X-11 X-12 X-13 X-14 X-15 X-15 X-16 X-11 X-12 X-13 X-14 X-15 X-15 X-16 X-11 X-12 X-13 X-14 X-15 X-15 X-16 X-17 X-16 X-11 X-12 X-13 X-14 X-15 X-15 X-16 X-17 X-17 X-16 X-17 X-17 X-16 X-17 X-1	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 -0.008 -0.012 0.216*** 0.393***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.096*** 0.487** 0.587 1.146* 0.059** 0.005 -0.020 0.139*** 0.238***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 X-14 X-12 X-13 X-14	Hand 48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019 0.222*** 0.289*** 0.412*
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	seece 52.542^{***} 0.036 -0.091 0.201^{**} 0.739 0.094 0.024 -0.021 0.023 0.064^{**} -0.478 0.537 0.020 0.052^{*} 0.025 0.101^{***} 0.298 0.017 1.291^{\dagger} 0.046^{\dagger} 0.007 -0.040^{\dagger} 0.160^{***} 0.248^{***} 0.272^{**}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	temala 55.148^{***} 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065^{**} 0.112^{***} 0.067^{***} 0.054^{\dagger} -0.269 0.558 1.116^{*} 0.041 -0.008 -0.012 0.216^{***} 0.93^{***} 0.93^{***}	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.22 -1.170** 1.619* 0.001 0.020 0.043* 0.096*** 0.487** 0.587 1.146* 0.059** 0.005 -0.020 0.139*** 0.238*** 0.044†	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019 0.222*** 0.289*** 0.040*
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	reece 52.542^{***} 0.036 -0.091 0.201^{**} 0.739 0.094 0.024 -0.021 0.023 0.064^{**} -0.478 0.537 0.020 0.052^* 0.025 0.101^{***} 0.298 0.017 1.291^{\dagger} 0.046^{\dagger} 0.007 -0.040^{\dagger} 0.160^{***} 0.248^{***} 0.300^{*}	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	temala 55.148^{***} 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065^{**} 0.112^{***} 0.067^{***} 0.054^{+} -0.269 0.558 1.116^{*} 0.041 -0.008 -0.012 0.216^{***} 0.93^{***} 0.046^{*}	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	onesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.096*** 0.487** 0.587 1.146* 0.059** 0.005 -0.020 0.139*** 0.238*** 0.044† 1.705**** 2.211***	$\begin{tabular}{ c c c c c } \hline Intercept & Z-1 & Z-2 & Z-3 & Z-4 & Z-5 & Z-6 & Z-7 & Z-8 & Z-9 & X-1 & X-2 & X-3 & X-4 & X-5 & X-6 & X-7 & X-8 & X-9 & X-10 & X-11 & X-12 & X-13 & X-14 & X-15 & u_0 & \\ \hline \end{tabular}$	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019 0.222*** 0.289*** 0.040* 0.975***
Gr Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.025 0.101*** 0.298 0.017 1.291† 0.046† 0.007 -0.400* 0.160*** 0.300*	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 -0.008 -0.012 0.216*** 0.393*** 0.093***	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	$\begin{array}{l} \hline \textbf{onesia} \\ \hline 55.835^{***} \\ 0.000 \\ 0.311^{***} \\ 0.069 \\ -0.398 \\ -0.100^{\dagger} \\ -0.122 \\ 0.095 \\ 0.000 \\ -0.022 \\ -1.170^{**} \\ 1.619^{*} \\ 0.001 \\ 0.020 \\ 0.043^{*} \\ 0.096^{***} \\ 0.487^{**} \\ 0.587 \\ 1.146^{*} \\ 0.059^{**} \\ 0.005 \\ -0.020 \\ 0.139^{***} \\ 0.238^{***} \\ 0.044^{\dagger} \\ 1.705^{***} \\ 3.311^{**} \end{array}$	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019 0.222*** 0.289*** 0.040* 0.975***
$\begin{array}{c} \text{Gr} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \\ u_7 \\ \hline \end{array}$	seece 52.542*** 0.036 -0.091 0.201** 0.739 0.094 0.024 -0.021 0.023 0.064** -0.478 0.537 0.020 0.052* 0.025 0.101*** 0.298 0.017 1.291† 0.046† 0.007 -0.400* 0.160*** 0.300* - 0.699*** 60.518	Gua Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	temala 55.148*** 0.051 0.140 0.113 -0.850 0.090 0.012 0.032 0.004 -0.022 0.158 -1.776 -0.065** 0.112*** 0.067*** 0.054† -0.269 0.558 1.116* 0.041 -0.008 -0.012 0.216*** 0.393*** 0.093*** 0.046* -0.041* 60.068	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7 T	binesia 55.835*** 0.000 0.311*** 0.069 -0.398 -0.100† -0.122 0.095 0.000 -0.122 0.095 0.000 -0.022 -1.170** 1.619* 0.001 0.020 0.043* 0.096*** 0.487** 0.587 1.146* 0.059** 0.005 -0.020 0.139*** 0.238*** 0.044† 1.705*** 3.311**	Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	48.052*** 0.000 -0.040 0.086 1.337** 0.045 0.201*** -0.035 0.005 0.011 0.379 1.123* -0.025 0.043 0.050* 0.078 0.542 0.521 0.066** 0.034 -0.019 0.222*** 0.289*** 0.040* 0.975*** - 0.222*

Italy		Korea, Republic of		Latvia		Lithuania	
Intercept	49.037***	Intercept	47.298***	Intercept	51.835***	Intercept	51.087***
Z-1	-0.038	Z-1	0.070	Z-1	-0.123†	Z-1	-0.019
Z-2	0.316***	Z-2	0.148*	Z-2	0.132	Z-2	-0.098
Z-3	0.100	Z-3	-0.001	Z-3	0.037	Z-3	0.137†
Z-4	0.533	Z-4	-1.201**	Z-4	0.013	Z-4	0.614
Z-5	0.110	Z-5	0.064	Z-5	-0.001	Z-5	0.107
Z-6	0 146†	Z-6	0.035	Z-6	0.091	Z-6	0.073
Z-7	-0.168**	Z-7	0.085†	Z-7	-0.061	Z-7	0.090
7-8	0.028	Z-8	-0.001	Z-8	-0.025	7-8	-0.031
Z-0	0.020	Z-0 7-9	-0.035*	Z-0	-0.023	Z-0 7_0	0.003
V 1	0.035	V 1	-0.035	V 1	-0.033	Z-) V 1	0.005
A-1 V 2	0.419	Λ-1 V 2	-0.140	Λ^{-1}	-0.809	Λ-1 V 2	0.201
X-2 X 2	-0.430	X-2 X 2	0.050***	Λ-2 V 2	-1.098	Λ-2 V 2	0.205
A-3 X 4	0.024	A-3 V 4	-0.039	A-3 V 4	-0.045	Λ-3 V 4	-0.110***
Λ-4 Χ-5	0.098***	Λ-4 Χ-5	0.018	Λ-4 Χ-5	0.080****	X-4 X-5	-0.007
X-5	0.084***	X-5	0.012	X-5	0.095***	X-5	0.057*
X-6	0.047	X-6	0.063*	X-6	0.041	X-6	0.051*
X-7	0.506*	X-/	0.122	X-7/	-0.177	X-7	0.352†
X-8	1.176*	X-8	0.389	X-8	0.418	X-8	0.140
X-9	0.736	X-9	0.376	X-9	0.878	X-9	0.718
X-10	0.056*	X-10	0.073***	X-10	0.012	X-10	0.037
X-11	0.022	X-11	0.055***	X-11	0.064*	X-11	0.068**
X-12	-0.016	X-12	0.002	X-12	0.029	X-12	-0.023
X-13	0.205***	X-13	0.202***	X-13	0.193***	X-13	0.203***
X-14	0.279***	X-14	0.321***	X-14	0.272***	X-14	0.302***
X-15	0.065**	X-15	0.037**	X-15	0.065*	X-15	0.062*
u_0	1.679***	u_0	0.773***	u_0	3.557***	u_0	0.911***
u_1	_	u_1	2.581**	u_1	3.553***	<i>u</i> ₁	_
<i>u</i> ₇	_	<i>u</i> ₇	1.308***	<i>u</i> ₇	1.134***	<i>u</i> ₇	_
r	54.763	r	54.202	r	55.135	r	51.637
	· · · ·						
N	Malta	Mexico		New Zealand		Norway	
Intercept	/8 887***	Intercent	53 415***	Intercept	48 025***	Intercent	47.564***
	40.007	ппспсп	///				
Z-1	0 160*	Z-1	-0.137*	Z-1	0.100*	Z-1	-0.088
Z-1 7-2	0.160† 0.275†	Z-1 Z-2	-0.137*	Z-1 7-2	0.100† 0.073	Z-1 7-2	-0.088
Z-1 Z-2 Z-3	0.160† 0.275†	Z-1 Z-2 Z-3	-0.137* -0.038 0.300***	Z-1 Z-2 Z-3	0.100† 0.073	Z-1 Z-2 Z-3	-0.088 0.210** 0.187*
Z-1 Z-2 Z-3 Z-4	0.160† 0.275† -0.008	Z-1 Z-2 Z-3 Z-4	-0.137* -0.038 0.300***	Z-1 Z-2 Z-3 Z-4	0.100† 0.073 -0.014	Z-1 Z-2 Z-3 Z-4	-0.088 0.210** 0.187*
Z-1 Z-2 Z-3 Z-4 Z-5	0.160† 0.275† -0.008 -1.376	Z-1 Z-2 Z-3 Z-4 Z-5	-0.137* -0.038 0.300*** 0.486 0.054	Z-1 Z-2 Z-3 Z-4 Z-5	0.100† 0.073 -0.014 -0.926* 0.007	Z-1 Z-2 Z-3 Z-4 Z-5	-0.088 0.210** 0.187* -0.317 0.075
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	0.160† 0.275† -0.008 -1.376 -0.062 0.056	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	-0.137* -0.038 0.300*** 0.486 0.054	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	0.100† 0.073 -0.014 -0.926* 0.007 0.002	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	-0.088 0.210** 0.187* -0.317 0.075 0.103
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	0.160† 0.275† -0.008 -1.376 -0.062 0.056	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	-0.137* -0.038 0.300*** 0.486 0.054 0.142	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	0.100† 0.073 -0.014 -0.926* 0.007 0.002	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	-0.088 0.210** 0.187* -0.317 0.075 0.103 0.103
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001 -0.010	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001 -0.010 -0.004	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.727*	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209***	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001 -0.010 -0.004 -0.291	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787*	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001 -0.010 -0.004 -0.291 -0.249	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001 -0.010 -0.004 -0.291 -0.249 -0.095***	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051*	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	-0.137* -0.038 0.300*** 0.486 0.054 0.142 -0.001 -0.010 -0.004 -0.291 -0.249 -0.095*** 0.043*	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080***	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102***
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.081***	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 * * * \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 * * * \\ 0.043 * \\ 0.075 * * * \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045**	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061**
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.081*** 0.068***	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 * * * \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 * * * \\ 0.043 * \\ 0.075 * * * \\ 0.074 * * \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045** 0.083***	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061** 0.087***
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.081*** 0.068*** 0.548*	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 * * * \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 * * * \\ 0.043 * \\ 0.075 * * * \\ 0.074 * * * \\ -0.062 \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045** 0.083*** 0.221	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.081*** 0.068*** 0.548* 1.183**	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 *** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 *** \\ 0.043 * \\ 0.075 *** \\ 0.074 *** \\ -0.062 \\ 0.035 \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045** 0.083*** 0.221 0.107	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*} \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	$\begin{array}{c} -0.137 \\ -0.038 \\ 0.300 \\ ** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 \\ ** \\ 0.043 \\ 0.075 \\ ** \\ 0.075 \\ ** \\ 0.074 \\ ** \\ -0.062 \\ 0.035 \\ 0.046 \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045** 0.083*** 0.221 0.107 0.715	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*}\\ 1.488^{*} \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.081*** 0.068*** 0.548* 1.183** 1.954** -0.013	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10	$\begin{array}{c} -0.137 \\ -0.038 \\ 0.300 \\ ** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 \\ ** \\ 0.043 \\ 0.075 \\ ** \\ 0.075 \\ ** \\ 0.074 \\ ** \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045** 0.083*** 0.221 0.107 0.715 0.005	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*}\\ 1.488^{*}\\ 0.071^{**}\\ \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11	$\begin{array}{c} -0.137 \\ -0.038 \\ 0.300 \\ ** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.010 \\ -0.291 \\ -0.249 \\ -0.095 \\ ** \\ 0.043 \\ 0.075 \\ ** \\ 0.075 \\ ** \\ 0.074 \\ ** \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11	0.100^{\dagger} 0.073 -0.014 -0.926^{*} 0.007 0.002 0.011 -0.031 -0.013 0.787^{*} 0.374 -0.023 0.080^{***} 0.045^{**} 0.045^{**} 0.221 0.107 0.715 0.005 0.057^{*}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*}\\ 1.488^{*}\\ 0.071^{**}\\ 0.040\\ \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12	0.160† 0.275† -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.081*** 0.068*** 0.548* 1.183** 1.954** -0.013 0.028 0.012	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12	$\begin{array}{c} -0.137 \\ -0.038 \\ 0.300 \\ ** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 \\ ** \\ 0.043 \\ 0.075 \\ ** \\ 0.043 \\ 0.075 \\ ** \\ 0.074 \\ ** \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	0.100^+ 0.073^- -0.014^- -0.926^* 0.007^- 0.002^- 0.011^- -0.031^- -0.013^- 0.787^* 0.374^- -0.023^- 0.080^{***} 0.045^{**} 0.045^{**} 0.221^- 0.107^- 0.715^- 0.005^- 0.056^{**}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*}\\ 1.488^{*}\\ 0.071^{**}\\ 0.040\\ -0.047^{+}\\ \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.081^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028 0.012 0.275^{*}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13	$\begin{array}{c} -0.137 \\ -0.038 \\ 0.300 \\ ** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 \\ ** \\ 0.043 \\ 0.075 \\ ** \\ 0.075 \\ ** \\ 0.075 \\ ** \\ 0.074 \\ ** \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \\ 0.281 \\ ** \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	0.100^{\dagger} 0.73 -0.014 -0.926^{*} 0.007 0.002 0.011 -0.031 -0.013 0.787^{*} 0.374 -0.023 0.080^{***} 0.045^{**} 0.045^{**} 0.045^{**} 0.221 0.107 0.715 0.005 0.057^{*} 0.056^{**} 0.194^{***}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*}\\ 1.488^{*}\\ 0.071^{**}\\ 0.040\\ -0.047^{\dagger}\\ 0.187^{***}\\ \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028 0.012 0.267^{***} 0.273^{***}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	$\begin{array}{c} -0.137^{*} \\ -0.038 \\ 0.300^{***} \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095^{***} \\ 0.043^{*} \\ 0.075^{***} \\ 0.075^{***} \\ 0.075^{***} \\ 0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \\ 0.281^{***} \\ 0.259^{***} \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	0.100^+ 0.073^- -0.014^- -0.926^* 0.007^- 0.002^- 0.011^- -0.031^- -0.013^- 0.787^* 0.374^- -0.023^- 0.080^{***} 0.045^{**} 0.045^{**} 0.045^{**} 0.045^{**} 0.021^- 0.005^- 0.056^{**} 0.194^{***} 0.247^{***}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061** 0.087*** 0.160 1.276* 1.488* 0.071** 0.040 -0.047† 0.187*** 0.221***
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028 0.012 0.267^{***} 0.273^{***} 0.034^{+}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 *** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 *** \\ 0.043 * \\ 0.075 *** \\ 0.075 *** \\ 0.075 *** \\ 0.075 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \\ 0.281 *** \\ 0.259 *** \\ 0.076 ** \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	0.100^+ 0.073^- -0.014^- -0.926^* 0.007^- 0.002^- 0.011^- -0.031^- -0.013^- 0.787^* 0.374^- -0.023^- 0.080^{***} 0.045^{**} 0.045^{**} 0.045^{**} 0.045^{**} 0.045^{**} 0.021^- 0.056^{**} 0.194^{***} 0.247^{***} 0.022^-	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	$\begin{array}{c} -0.088\\ 0.210^{**}\\ 0.187^{*}\\ -0.317\\ 0.075\\ 0.103\\ -0.126\\ 0.012\\ -0.006\\ -0.018\\ -1.260\\ -0.043\\ 0.102^{***}\\ 0.061^{**}\\ 0.061^{**}\\ 0.087^{***}\\ 0.160\\ 1.276^{*}\\ 1.488^{*}\\ 0.071^{**}\\ 0.040\\ -0.047^{\dagger}\\ 0.187^{***}\\ 0.221^{***}\\ 0.051^{**}\\ \end{array}$
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028 0.012 0.267^{***} 0.034^{\dagger} 1.049^{\dagger}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 *** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 *** \\ 0.043 * \\ 0.075 *** \\ 0.075 *** \\ 0.075 *** \\ 0.074 *** \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \\ 0.281 *** \\ 0.259 *** \\ 0.076 ** \\ 0.260 *** \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	0.100^{\dagger} 0.100^{\dagger} 0.073 -0.014 -0.926^{*} 0.007 0.002 0.011 -0.031 -0.031 -0.013 0.787^{*} 0.374 -0.023 0.080^{***} 0.045^{**} 0.045^{**} 0.045^{**} 0.005 0.057^{*} 0.056^{**} 0.194^{***} 0.022 1.012^{**}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061** 0.061** 0.087*** 0.160 1.276* 1.488* 0.071** 0.040 -0.047† 0.187*** 0.221*** 0.051* 1.258**
Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u ₀	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028 0.012 0.267^{***} 0.034^{\dagger} 1.049^{\dagger} 0.817^{***}	$ \begin{array}{c} \text{Intercept} \\ \text{Z-1} \\ \text{Z-2} \\ \text{Z-3} \\ \text{Z-4} \\ \text{Z-5} \\ \text{Z-6} \\ \text{Z-7} \\ \text{Z-8} \\ \text{Z-9} \\ \text{X-1} \\ \text{X-2} \\ \text{X-3} \\ \text{X-4} \\ \text{X-5} \\ \text{X-6} \\ \text{X-7} \\ \text{X-8} \\ \text{X-9} \\ \text{X-10} \\ \text{X-11} \\ \text{X-12} \\ \text{X-11} \\ \text{X-12} \\ \text{X-13} \\ \text{X-14} \\ \text{X-15} \\ u_0 \\ u_i \end{array} $	$\begin{array}{c} -0.137 * \\ -0.038 \\ 0.300 *** \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095 *** \\ 0.043 * \\ 0.075 *** \\ 0.075 *** \\ 0.075 *** \\ 0.074 *** \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \\ 0.281 *** \\ 0.259 *** \\ 0.076 ** \\ 0.260 *** \\ 0.260 *** \\ 0.070 ** \end{array}$	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	0.100^{\dagger} 0.073 -0.014 -0.926^{*} 0.007 0.002 0.011 -0.031 -0.013 0.787^{*} 0.374 -0.023 0.080^{***} 0.045^{**} 0.045^{**} 0.033^{***} 0.221 0.107 0.715 0.005 0.057^{*} 0.056^{**} 0.194^{***} 0.247^{***} 0.022 1.012^{**} 1.285^{*}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061** 0.061** 0.087*** 0.160 1.276* 1.488* 0.071** 0.040 -0.047† 0.187*** 0.221*** 0.051* 1.258** 5 813***
$\begin{array}{c} Z-1\\ Z-2\\ Z-3\\ Z-4\\ Z-5\\ Z-6\\ Z-7\\ Z-8\\ Z-9\\ X-1\\ X-2\\ X-3\\ X-4\\ X-5\\ X-6\\ X-7\\ X-8\\ X-9\\ X-10\\ X-11\\ X-12\\ X-13\\ X-14\\ X-15\\ u_0\\ u_1\\ u_1\\ u_1\\ u_1\\ u_1\\ u_1\\ u_2\\ u_2\\ u_3\\ u_1\\ u_3\\ u_3\\ u_1\\ u_3\\ u_3\\ u_3\\ u_3\\ u_3\\ u_3\\ u_3\\ u_3$	0.160^{\dagger} 0.275^{\dagger} -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209^{***} -0.405 0.015 0.051^{*} 0.081^{***} 0.068^{***} 0.548^{*} 1.183^{**} 1.954^{**} -0.013 0.028 0.012 0.267^{***} 0.034^{\dagger} 1.049^{\dagger} 0.817^{***}	$ \begin{array}{c} \text{Intercept} \\ \text{Z-1} \\ \text{Z-2} \\ \text{Z-3} \\ \text{Z-4} \\ \text{Z-5} \\ \text{Z-6} \\ \text{Z-7} \\ \text{Z-8} \\ \text{Z-9} \\ \text{X-1} \\ \text{X-2} \\ \text{X-3} \\ \text{X-4} \\ \text{X-5} \\ \text{X-6} \\ \text{X-7} \\ \text{X-8} \\ \text{X-9} \\ \text{X-10} \\ \text{X-11} \\ \text{X-12} \\ \text{X-11} \\ \text{X-12} \\ \text{X-13} \\ \text{X-14} \\ \text{X-15} \\ u_0 \\ u_1 \\ u_1 \end{array} \right. $	$\begin{array}{c} -0.137^{*} \\ -0.038 \\ 0.300^{***} \\ 0.486 \\ 0.054 \\ 0.142 \\ -0.001 \\ -0.010 \\ -0.004 \\ -0.291 \\ -0.249 \\ -0.095^{***} \\ 0.043^{*} \\ 0.075^{***} \\ 0.075^{***} \\ 0.075^{***} \\ 0.074^{***} \\ -0.062 \\ 0.035 \\ 0.046 \\ -0.006 \\ 0.020 \\ 0.014 \\ 0.281^{***} \\ 0.259^{***} \\ 0.076^{**} \\ 0.260^{***} \\ 0.070^{**} \\ 0.056^{***} \end{array}$	$ \begin{array}{c} Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_1 \end{array} $	0.100^{\dagger} 0.073° -0.014° -0.926^{*} 0.007° 0.002° 0.011° -0.031° -0.031° 0.787^{*} 0.374° -0.023° 0.080^{***} 0.045^{**} 0.045^{**} 0.045^{**} 0.045^{**} 0.005° 0.057^{*} 0.056^{**} 0.194^{***} 0.022° 1.012^{**} 1.285^{*} 0.606^{**}	Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061** 0.061** 0.087*** 0.160 1.276* 1.488* 0.071** 0.040 -0.047† 0.187*** 0.221*** 0.051* 1.258** 5.813*** 0.002**
$\begin{array}{c} \text{Z-1} \\ \text{Z-2} \\ \text{Z-3} \\ \text{Z-4} \\ \text{Z-5} \\ \text{Z-6} \\ \text{Z-7} \\ \text{Z-8} \\ \text{Z-9} \\ \text{X-1} \\ \text{X-2} \\ \text{X-3} \\ \text{X-4} \\ \text{X-5} \\ \text{X-6} \\ \text{X-7} \\ \text{X-8} \\ \text{X-9} \\ \text{X-10} \\ \text{X-11} \\ \text{X-10} \\ \text{X-11} \\ \text{X-12} \\ \text{X-13} \\ \text{X-14} \\ \text{X-15} \\ u_0 \\ u_1 \\ u_7 \end{array}$	0.160 [†] 0.275 [†] -0.008 -1.376 -0.062 0.056 -0.114 0.029 0.000 -2.209*** -0.405 0.015 0.051* 0.051* 0.068*** 0.548* 1.183** 1.954** -0.013 0.028 0.012 0.267*** 0.273*** 0.034 [†] 1.049 [†] 0.817***	$ \begin{array}{c} \text{Intercept} \\ \text{Z-1} \\ \text{Z-2} \\ \text{Z-3} \\ \text{Z-4} \\ \text{Z-5} \\ \text{Z-6} \\ \text{Z-7} \\ \text{Z-8} \\ \text{Z-9} \\ \text{X-1} \\ \text{X-2} \\ \text{X-3} \\ \text{X-4} \\ \text{X-5} \\ \text{X-6} \\ \text{X-7} \\ \text{X-8} \\ \text{X-9} \\ \text{X-10} \\ \text{X-11} \\ \text{X-12} \\ \text{X-10} \\ \text{X-11} \\ \text{X-12} \\ \text{X-13} \\ \text{X-14} \\ \text{X-15} \\ u_0 \\ u_1 \\ u_7 \end{array} \right. $	$\begin{array}{c} -0.137^{*}\\ -0.38\\ 0.300^{***}\\ 0.486\\ 0.054\\ 0.142\\ -0.001\\ -0.010\\ -0.004\\ -0.291\\ -0.249\\ -0.095^{***}\\ 0.075^{***}\\ 0.075^{***}\\ 0.075^{***}\\ 0.074^{***}\\ -0.062\\ 0.035\\ 0.046\\ -0.006\\ 0.020\\ 0.014\\ 0.281^{***}\\ 0.259^{***}\\ 0.076^{**}\\ 0.260^{***}\\ 0.070^{**}\\ 0.260^{***}\\ 0.056^{***}\\ 70.276\end{array}$	$ \begin{array}{c} Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \end{array} $	0.100† 0.073 -0.014 -0.926* 0.007 0.002 0.011 -0.031 -0.013 0.787* 0.374 -0.023 0.080*** 0.045** 0.045** 0.083*** 0.221 0.107 0.715 0.005 0.057* 0.056** 0.194*** 0.247*** 0.022 1.012** 1.285* 0.696**	$ \begin{array}{c} Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 \\ u_7 \end{array} $	-0.088 0.210** 0.187* -0.317 0.075 0.103 -0.126 0.012 -0.006 -0.018 -1.260 -0.043 0.102*** 0.061** 0.087*** 0.160 1.276* 1.488* 0.071** 0.047† 0.187*** 0.221*** 0.051* 1.258** 5.813*** 0.908** 5.604

Paraguay		Poland		Russian Federation		Slovak Republic	
Intercept	52.771***	Intercept	49.876***	Intercept	51.015***	Intercept	48.005***
Z-1	0.187*	Z-1	0.159**	Z-1	-0.042	Z-1	0.020
Z-2	0.207†	Z-2	0.024	Z-2	-0.066	Z-2	0.080
Z-3	-0.010	Z-3	0.119*	Z-3	0.133**	Z-3	0.066
Z-4	-0.794	Z-4	0.309	Z-4	0.516	Z-4	0.407
Z-5	0.215*	Z-5	0.081	Z-5	0.036	Z-5	0.012
Z-6	0.039	Z-6	0.003	Z-6	0.092*	Z-6	-0.071
Z-7	-0.006	Z-7	-0.082	Z-7	-0.035	Z-7	0.018
Z-8	0.067**	Z-8	0.012	Z-8	0.003	Z-8	-0.025
Z-9	0.026	Z-9	-0.013	Z-9	-0.014	Z-9	-0.003
X-1	-1.103†	X-1	-0.741*	X-1	0.653†	X-1	0.000
X-2	-2.700	X-2	-0.785	X-2	0.313	X-2	4.041
X-3	-0.062*	X-3	0.031	X-3	0.009	X-3	-0.023
X-4	0.100**	X-4	0.086**	X-4	0.037	X-4	0.070***
X-5	0.116***	X-5	0.069**	X-5	0.038†	X-5	0.053**
X-6	0.070*	X-6	0.098***	X-6	0.104***	X-6	0.076***
X-7	0.047	X-7	0.050	X-7	-0.489**	X-7	0.045
X-8	0.401	X-8	-0.048	X-8	1.132**	X-8	0.594†
X-9	1.164*	X-9	0.356	X-9	1.602**	X-9	0.434
X-10	0.039	X-10	0.069**	X-10	0.026	X-10	0.020
X-11	0.025	X-11	0.082**	X-11	0.021	X-11	-0.013
X-12	-0.044	X-12	-0.037	X-12	-0.026	X-12	-0.009
X-13	0.241***	X-13	0.136***	X-13	0.300***	X-13	0.218***
X-14	0.313***	X-14	0.251***	X-14	0.354***	X-14	0.257***
X-15	0.090**	X-15	0.030	X-15	0.047*	X-15	0.086***
u_0	5.440***	u_0	1.808***	u_0	1.689***	u_0	0.081
u_1	6.811***	u_1	2.132*	u_I	3.665***	u_I	_
u_7	0.196**	u_7	0.261*	u_7	0.341*	u_7	—
r	64.323	r	58.642	r	58.294	r	55.659
Slov	enia	S	pain	Sw	eden	Switz	erland
Slov Intercept	enia 49.326***	SI Intercept	pain 47.522***	Sw Intercept	eden 47.982***	Switz Intercept	verland 46.176***
Slov Intercept Z-1	enia 49.326*** 0.009	Intercept Z-1	pain 47.522*** 0.078	Sw Intercept Z-1	eden 47.982*** -0.014	Switz Intercept Z-1	verland 46.176*** -0.007
Slov Intercept Z-1 Z-2	enia 49.326*** 0.009 0.072	SI Intercept Z-1 Z-2	2000 2000 2000 2000 2000 2000 2000 200	Sw Intercept Z-1 Z-2	eden 47.982*** -0.014 0.075	Switz Intercept Z-1 Z-2	zerland 46.176*** -0.007 0.121†
Slov Intercept Z-1 Z-2 Z-3	enia 49.326*** 0.009 0.072 0.245***	Intercept Z-1 Z-2 Z-3	2000 47.522*** 0.078 0.098 0.103†	Sw Intercept Z-1 Z-2 Z-3	eden 47.982*** -0.014 0.075 0.067	Switz Intercept Z-1 Z-2 Z-3	zerland 46.176*** -0.007 0.121† 0.220**
Slov Intercept Z-1 Z-2 Z-3 Z-4	enia 49.326*** 0.009 0.072 0.245*** -0.375	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-4	2000 47.522*** 0.078 0.098 0.103† -0.466 -0.466	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-4	eden 47.982*** -0.014 0.075 0.067 0.341 0.020	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-4	zerland 46.176*** -0.007 0.121† 0.220** -0.262
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152**	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5	223 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.056	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5	eden 47.982*** -0.014 0.075 0.067 0.341 0.099	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.012
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015	SJ Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	247.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-7 Z-0	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.097	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-6 Z-7	223 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.020	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-6 Z-7	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 027	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-7	2erland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 -0.023
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8 Z-8	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.103	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.005	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-8	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 0.216
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 V-1	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.271	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	yain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.272*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.202***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 V 1	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.160	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 V 2	223 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.252	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 V 2	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** 1.25(1)	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 Y-2	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 1.406*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-2 X-2	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 0.020	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-2	223 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 0.020***	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-2	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† 0.002	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-2	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042*	SJ Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406* -0.040 0.952*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 V 5	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050±	SJ Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 V 5	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.404	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.009***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 Z-9	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406* -0.040 0.053*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-7 Z-8 Z-9 Z-9 Z-9 Z-9 Z-9 Z-9 Z-9 Z-9	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.050†	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048* 0.048*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Z-9 X-1	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406* -0.040 0.053* 0.150*
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Y 7	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** 0.172	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Y 7	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.048*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 Y-7	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406* -0.040 0.053* 0.128*** 0.128***
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 -0.200	SJ Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-9	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.081*** 0.408†	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-9	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 -0.280	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-6 X-7 X-8	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406* -0.040 0.053* 0.050† 0.128*** 0.134
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 0.208 1.025	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-0	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.048* 0.515 0.617	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-0	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 0.159 0.208	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-9 X-7 X-8 X-9 X-9 X-7 X-8 X-9 X-9 X-7 X-8 X-9 X-9 X-7 X-8 X-9 X-9 X-7 X-8 X-9 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-7 X-8 X-9 X-9 X-9 X-7 X-8 X-9 X-9 X-9 X-9 X-9 X-9 X-9 X-9 X-9 X-9	zerland 46.176*** -0.007 0.121† 0.220** -0.262 -0.098* 0.013 -0.023 0.043 -0.010 0.330 -1.406* -0.040 0.053* 0.050† 0.128*** 0.134 0.856† 0.552
Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-7 X-7 X-7 X-7 X-7 X-7	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 0.208 1.035 0.011	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	ypain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.048 0.048 0.048* 0.048* 0.515 0.617 0.922	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-7 X-8 X-9 X-10	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 0.159 -0.298 0.047±	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-2 X-3 X-4 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-8 X-9 X-1 X-2 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-7 X-8 X-7 X-8 X-7 X-8 X-7 X-8 X-9 X-1 X-7 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-1 X-8 X-9 X-10 X-7 X-8 X-9 X-10 X-7 X-8 X-9 X-10	zerland 46.176^{***} -0.007 0.121^{\dagger} 0.220^{**} -0.262 -0.098^{*} 0.013 -0.023 0.043 -0.010 0.330 -1.406^{*} -0.040 0.053^{*} 0.128^{***} 0.134 0.856^{\dagger} 0.553 0.075^{*}
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Slov Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 ""	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 0.208 1.035 0.011 0.025 0.037 0.082*** 0.265*** 0.265***	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 Y-1	Jain 47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.048* 0.048* 0.048* 0.048* 0.012 0.030 0.012 0.198*** 0.39* 0.198*** 0.039*	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 X-16 X-15 X-16 X-17 X-18 X-10 X-11 X-12 X-11 X-12 X-13 X-11 X-12 X-13 X-11 X-12 X-13 X-14 X-15 X-16 X-17 X-17 X-18 X-17 X-1	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 0.159 -0.298 0.047† -0.005 -0.036 0.151*** 0.186*** 0.048* 2.114***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 "	terland 46.176^{***} -0.007 0.121^{\dagger} 0.220^{**} -0.262 -0.098^{*} 0.013 -0.023 0.043 -0.010 0.330 -1.406^{*} -0.040 0.053^{*} 0.050^{\dagger} 0.128^{***} 0.134 0.856^{\dagger} 0.553 0.076^{*} 0.001 0.227^{***} 0.218^{***} 0.024 0.070
Slow Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 0.208 1.035 0.011 0.025 0.037 0.082*** 0.265*** 0.082**	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 	47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.048* 0.048* 0.048* 0.048* 0.012 0.030 0.012 0.198*** 0.039† 0.185	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 0.159 -0.298 0.047† -0.005 -0.036 0.151*** 0.186*** 0.048* 2.114*** 1.760*	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0	terland 46.176^{***} -0.007 0.121^{\dagger} 0.220^{**} -0.262 -0.098^{*} 0.013 -0.023 0.043 -0.010 0.330 -1.406^{*} -0.040 0.053^{*} 0.050^{\dagger} 0.128^{***} 0.134 0.856^{\dagger} 0.553 0.076^{*} 0.015 0.001 0.227^{****} 0.218^{***} 0.024 0.079
Slow Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_1 u_1	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 0.208 1.035 0.011 0.025 0.037 0.082*** 0.265*** 0.082** 0.265***	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 v	47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.048* 0.048* 0.048* 0.048* 0.012 0.030 0.012 0.198*** 0.039† 0.185	$\begin{array}{c} \text{Sw} \\ \hline \text{Intercept} \\ Z-1 \\ Z-2 \\ Z-3 \\ Z-4 \\ Z-5 \\ Z-6 \\ Z-7 \\ Z-8 \\ Z-9 \\ X-1 \\ X-2 \\ X-3 \\ X-4 \\ X-5 \\ X-6 \\ X-7 \\ X-8 \\ X-9 \\ X-10 \\ X-11 \\ X-12 \\ X-13 \\ X-14 \\ X-15 \\ u_0 \\ u_1 $	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 0.159 -0.298 0.047† -0.005 -0.036 0.151*** 0.186*** 0.048* 2.114*** 1.12***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1	terland 46.176^{***} -0.007 0.121^{\dagger} 0.220^{**} -0.262 -0.098^* 0.013 -0.023 0.043 -0.010 0.330 -1.406^* -0.040 0.053^* 0.050^{\dagger} 0.128^{***} 0.134 0.856^{\dagger} 0.553 0.076^* 0.015 0.001 0.227^{***} 0.218^{***} 0.024 0.079 $ 0.072^{*}$
Slow Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_7 u_7 u_7	enia 49.326*** 0.009 0.072 0.245*** -0.375 -0.152** 0.015 0.097 0.020 0.033 0.374 0.109 -0.020 0.042* 0.050† 0.086*** -0.173 0.208 1.035 0.011 0.025 0.037 0.082*** 0.265*** 0.082** 0.545* - - - - - - - - - - - - -	Sj Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7 T	47.522*** 0.078 0.098 0.103† -0.466 -0.056 -0.030 0.011 0.029 0.010 0.878* 0.363 -0.080*** 0.048 0.048* 0.048* 0.048* 0.048* 0.012 0.030 0.012 0.198*** 0.298*** 0.039† 0.185 - - 72.260	Sw Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7 T	eden 47.982*** -0.014 0.075 0.067 0.341 0.099 -0.040 -0.085 0.005 0.027* 1.392*** -1.216† -0.009 0.074*** 0.098*** 0.076*** -0.280 0.159 -0.298 0.047† -0.005 -0.036 0.151*** 0.186*** 0.048* 2.114*** 1.760* 1.113***	Switz Intercept Z-1 Z-2 Z-3 Z-4 Z-5 Z-6 Z-7 Z-8 Z-9 X-1 X-2 X-3 X-4 X-5 X-6 X-7 X-8 X-9 X-10 X-11 X-12 X-13 X-14 X-15 u_0 u_1 u_7	terland 46.176^{***} -0.007 0.121^{\dagger} 0.220^{**} -0.262 -0.098^{*} 0.013 -0.023 0.043 -0.010 0.330 -1.406^{*} -0.040 0.053^{*} 0.050^{\dagger} 0.128^{***} 0.134 0.856^{\dagger} 0.553 0.076^{*} 0.015 0.001 0.227^{***} 0.218^{***} 0.024 0.073^{*}

Thailand

FIXED EFFECTS	
Intercept	56.743***
Z-1. School mean of civic participation at school	-0.047
Z-2. School mean of discussion of political and social issues outside of school	0.083
Z-3. School mean of civic participation outside of school	0.071
Z-4. Average school SES	-0.523
Z-5. Collective perceptions of openness in classroom discussions	0.060
Z-6. Collective perceptions of students' influence on decisions about school	0.035
Z-7. Collective perceptions of student-teacher relationships	-0.100
Z-8. Availability of resources in the local community	0.002
Z-9. Social tension in the community	0.001
X-1. Gender (Female)	-1.439***
X-2. Immigrant background	-1.661†
X-3. Civic knowledge	-0.045*
X-4. Civic participation at school	0.000
X-5. Discussion of political and social issues outside of school	0.025
X-6. Participation in organized activities outside of school	0.075***
X-7. Family SES	-0.139
X-8. Parents: Quite interested in social and political issues	-0.074
X-9. Parents: Very interested in social and political issues	-0.200
X-10. Openness in classroom discussions	0.059*
X-11. Students' influence on decisions about school	0.037
X-12. Student-teacher relationships	-0.019
X-13. Political interest	0.130***
X-14. Internal political efficacy	0.299***
X-15. Collective school efficacy	0.086***
RANDOM EFFECTS	
u_0 . Between-school (Intercept)	0.049***
u_1 . Gender (Female) slope	1.988***
u_7 . Family SES slope	0.163***
r. Within-school variance component	48.668

p < .1, *p < .05, **p < .01, ***p < .001