

***WORLDWIDE PATTERNS AND DETERMINANTS OF  
NATIONAL IDENTITY:  
THE VARIED INFLUENCE OF EDUCATION***

by

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A thesis submitted to the  
Faculty of the Graduate School of the  
University of Colorado in partial fulfillment  
of the requirement for the degree of  
Doctor of Philosophy  
Department of Sociology

2012

This thesis entitled:  
Worldwide Patterns and Determinants of National Identity:  
The Varied Influence of Education  
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## ***Abstract***

Harris, Pavla (Ph.D., Sociology)  
 Worldwide Patterns and Determinants of National Identity:  
 The Varied Influence of Education  
 Thesis directed by Professor Fred Pampel

Nationalist attitudes and nationalism have long been of interest to social scientists yet studies have been inconclusive on many of their aspects. My research examines national identity from a new perspective and provides outlines of relationships that exist between education, national identity, economic development in the world, and other country-level characteristics. National identity is operationalized in several different ways: first as national pride and a national pride scale, then separately as the ethnic and the civic components of national identity, and as combined national identity. I also consider additional macro-structural variables: human development, democracy, ethnic, linguistic, and religious homogeneity, and the values-related variables of levels of self-expression and secularity. I combine the micro and macro approaches to national identity by considering individual level characteristics (focusing on education) that are associated with national identity, and macro-level ones that might influence how micro-structural factors determine national identity. I theorize that in developed countries national identity decreases with higher levels of education but that in developing countries the levels of national identity are higher among the more educated. I use the fifth wave of the World Values Survey with 57 countries at all levels of development with data collected in 2005-2008. Matching the individual-level survey data with aggregate measures of economic development and political and cultural factors allows for multilevel analyses with cross-level interactions that link national identity and education in varied societal contexts. The results support my hypotheses and suggest that people's national identity is influenced by micro- and macro-structural factors, and that the levels of economic development, human development, and democracy have a facilitating effect on the negative influence of education on national identity that pushes this relationship even more into the negative territory for wealthier, more developed countries. The results for country-level variables related to culture are mixed but in their majority support my hypotheses and are theoretically explainable. Finally, I test my hypotheses by examining how people's education influences preferences for restrictive immigration policies across the countries of the world. This is a more practical application of the abstract concepts investigated in my dissertation. On the individual level, education decreases the preferences for restrictive immigration policies; on the country-level, it increases preferences for restrictive immigration policies, and on the micro/macro level higher economic development facilitates the negative influence of education on the preferences for restrictive immigration policies. These results confirm the links between education, national identity, and attitudes toward immigration. More research is needed, especially with regard to cultural factors (e.g., religion) influencing national identity on cross-national levels. In addition to the multilevel modeling methods I used in my dissertation, I recommend in-depth historical-comparative studies of countries with varied national characteristics.

### ***Acknowledgements***

I am heartily thankful to my Dissertation Chair, Fred Pampel, whose encouragement, guidance, and support from the initial to the final level of my research enabled me to become a sociologist; to Gini Fink for exceptional personal, moral, and professional support during the course of my graduate studies; to Janet Jacobs for inspiration on more levels than one; and to Stef Mollborn and Bill Safran without whose help and advice this dissertation would not have been possible. Last, but not least, thank you to my children Crystal Harris and Alan Harris for putting up with me and my love for education, for coming to school with me, and for growing up on and around college campuses.

I offer my regards and blessings to all of those who supported me in many ways during the completion of this project and are too numerous to list.

Pavla Harris

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## ***CHAPTER I – INTRODUCTION***

Literature on nationalism shows that high socioeconomic position and education lower national identity and resistance to immigrant groups. Although true for high income nations, such generalizations may not apply to developing countries where high-SES and educated people tend to lead national movements. Some well-known examples from the past are Mohandas (Mahatma) Gandhi and Jawaharlal Nehru in India. This potential difference in the influence of individual characteristics on national identity across countries highlights the effects of economic, political, and social context in understanding not only the level of national identity, but also its social determinants.

It is important to study national identity not only for the sake of the theoretical understanding of how nations and nationalistic feelings develop but also because national identity has profound effects on people's everyday lives by influencing their policy preferences and voting behavior. For example, attitudes toward immigration that stem from varied levels of national identity in individuals will influence for whom those individuals will vote in both local and national elections depending on candidates' views and plans for addressing immigration issues. This scenario generally applies in developed, industrialized countries or developing countries with stable political systems and at least somewhat democratic regimes. In developing, typically poorer, countries that tend to be politically less stable the levels of national identity will be most important for nation building (discussed in detail later in the theoretical part of this chapter) and/or restructuring of the political landscape in differing degrees. In extreme cases such restructuring can lead to uprisings and revolutions, as illustrated on the example of the Arab Spring in 2011. During that period groups of more educated people that were not a part of establishment elites mobilized and attempted, in several instances successfully, to instigate social

change and install new governments. These groups of people were mainly comprised of younger people with few perspectives for the future (frequently because they were a part of ethnic or religious minorities). Research cannot predict when these events would happen or if they would be successful, but it can identify the characteristics of the individuals and groups that would be in the forefront of the social change efforts.

Although education has different meanings for nationalist attitudes across the world, many studies assume its meaning is the same everywhere. Research often ignores how differences between high and low educated groups vary across national contexts. The question thus remains as to why SES and education have shifting, even contradictory, influences on national identity.

According to Ernest Renan (1882) national identity includes a shared past and a will to share a future on a level of a national community. Smith (1992), obviously drawing on Renan, calls this will a "common destiny." Anthony Smith (1991) considers national identity "the subjective feelings and valuations of any population that possesses common experiences and one or more shared cultural characteristics (usually customs, language or religion)." Both individuals and nations vary in the strength of national identity, which has crucial implications for public policy on many issues, including immigration.

My research strives to combine micro and macro approaches to the topic of national identity, considering first individual-level characteristics such as socioeconomic position that are associated with it, and, second, macro-level ones, such as economic and political development. Macro-level factors may, in turn, influence how micro factors determine national identity in the respective countries. Examining how groups with varied socioeconomic characteristics and in countries with varied levels of economic development differ in their levels of national identity

gives insight into how people across the world come to form key social values and related political attitudes on topics such as immigration. Existing research usually examines individuals within particular countries or the differences in average levels of national identity between countries, but not the differences in individual relationships or determinants across countries. To answer questions about changing sources of national identity, my study aims to examine these differences.

While there is agreement among scholars that education does influence national identity, there has been so far no consensus on the direction of its influence, the levels on which it works and the mechanisms that are involved in the processes that cause it. Based on existing theoretical approaches and prior empirical studies on various levels of analysis I theorize that in developed countries national identity will decrease with higher levels of education, but that in the developing countries levels of national identity will be higher among the more educated. Thus the theory has a micro-component on how education affects individuals and a macro-component on how social and economic development shapes the meaning of education for national identity. The theory aims to explain levels of national identity across individuals and nations but also to take the relationship between SES and national identity as varying across nations and to understand this micro-macro variation. The significance of the effort comes from deepening our understanding of how national context shapes the group-based stratification of values, meanings, and identities.

My research tests the theory using combined micro- and macro-level data in a new way. It uses the World Values Survey with 57 nations at all levels of development in the fifth wave from 2006 to 2008. The data set includes a wide variety of individual measures, but, more importantly, it contains a remarkably diverse set of nations. Matching the individual-level survey

data with aggregate measures of economic development and cultural and political factors allows for multilevel analyses that link national identity and education under varied economic conditions. The multilevel model which examines variations within and across nations tests the new theory and offers new insights into the sources of different levels and conceptions of national identity across the world.

### ***Theoretical Perspectives***

The main theoretical approaches to the relationships between education and national identity can be grouped into micro-structural theories and macro-structural ones. The first group considers how the social positions of individuals affect their national identity. The second group examines how characteristics of groups and nations affect national identity.

The micro-structural theories offer two arguments. One set of micro arguments applied to developing economic and political nations posits that education increases nationalistic views and actions. Another set applied to developed countries posits that high SES and education groups are prone to have lower national identity and those with lower SES and education have stronger national identity. The macro-structural argument focuses on the national- and macro-level characteristics in societies such as modernism, communication, and literacy that affect all people in a country. Within the macro-structural approach there are also two sets of arguments: one states that economic development increases national identity, the other one claims that it decreases it. The combined micro-macro or integrative approach that I have developed focuses on how individual and national characteristics jointly influence national identity and how national characteristics such as modernism, communication, and literacy change the relationship SES and education have with national identity. It helps to make sense of the contrasting micro



arguments about the effects of SES and education and the contrasting macro arguments about economic development.

### ***Micro-Structural Approaches to the Relationship between Education and National Identity***

Micro-structural approaches to the relationship between education and national identity offer competing accounts of why and how education affects national identity. On one hand, theories focusing on the emergence of nationalistic movements in past centuries in the West and recent decades in the developing world highlight the interests of highly educated persons in having nationalistic values. On the other hand, theories focusing on Europe and the West in more contemporary periods offer several reasons why high SES and highly educated individuals have lower levels of national identity: education increases cognitive skills, education increases post-materialist values, and educated individuals have economic opportunities that give them an advantage in the competition with individuals from other countries and immigrants.

While all theorists covered in this section assume the importance of membership in a dominant/non-dominant group for the feelings of national identity, there are two different sets of arguments when it comes to education: The first set claims that education increases national identity, the second one that it decreases it. Both approaches support the idea that education is a key micro-structural factor regarding national identity; the only disagreement is contextual – when/under which conditions does education increase or decrease national identity? Hechter and Hroch are more concerned with nationalism in the context of emerging national and political development; Inglehart, Bollen and Medrano, and Bonacich focus on economically and politically developed nations.

One of the explanations of how education influences national identity positively on the micro-structural level focuses on group solidarity. According to Michael Hechter (1987)

individuals identify with a certain national identity or join nationalistic movements because they desire private goods; in other words, they are making a rational choice to gain benefits of a group identity or membership. Thus group behavior can be explained by rational action of individuals. Hechter outlines three conditions that need to be fulfilled for individuals to join such groups; the first condition is an interest articulation: people joining a group, in this case a group tied together by nationalistic interests, must be aware they have common interests and must be able to get together and articulate those interests. The second condition assumes constitutional choice: procedure to make decisions must be established and that is easier for culturally homogenous groups. Thirdly, the production and allocation of the joint good must be addressed: there must be resources available, a process how to get them established, and a system of distribution in place. In the case of nationalism and national identity, the first two points are quite obvious: nationalist groups and parties exist and they have bylaws and administrative procedures in place. The third condition is less intuitive and less tangible: the results of a nationalist movement can be government positions (political), administrative jobs, physical security, access to food supplies, and benefits and advantages available exclusively to certain groups of people and decreed by the government (e.g., special treatment for ethnically "pure" Germans in Germany as opposed to naturalized Germans).

Considering national identity and relating to my research I draw from Hechter that, for members of dominant groups, increased SES and educational levels enable people to get substantial benefits concerning jobs and income, and so their membership in nationalist groups might not seem as appealing. When the most educated group does not have the opportunity to realize the full benefits of its levels of education, however, education increases national identity as a means to gain access to greater resources.

While group membership and solidarity is necessary for nationalism, Hechter also claims it is not sufficient (Hechter 2000). What is needed is the demand for sovereignty. This varying demand arises especially with regard to peripheral nationalism where direct rule and resulting inequality limits the success of the local elites that are culturally distinct from the distant ruling powers, and the members of such groups realize that only by fighting for independence they can improve their social status, and thus they mobilize. The members of local elites that become the leaders of nationalistic movements tend to be privileged and educated, with high SES, and one might argue that high SES and education leads to nationalistic views in this particular scenario. Under conditions of lack of access to social and economic opportunities, such individuals' membership in nationalist groups and parties thus can have almost instantaneous benefits for the emerging educated elites in instances where the power does eventually get transferred to the nationalist party fighting for independence.

In a similar and supporting view, emerging educated minority elites facing inequality and blocked opportunities get into the conflict of interest with the current elites of the dominant group, specifically in the area of language and religion (Hroch 1993). The political conflict grows till it reaches a national level and leads to the creation of a new national identity. The educated individuals from the minority groups have a vested interest in the creation of a new national identity (nation) because they are prevented from being successful and having power by the existing dominant elites. Provided that there is a developed culture of the minority group, and an uneven development situation, Hroch (1993) recognizes three factors for the development of a nationalist movement: relatively high social mobility of the new elites, sufficiently dense communication networks, and a nationally relevant conflict of interest. These conditions also correspond to Michael Hechter's (1987, 2000) emphasis on culturally distinct and economically

and politically unequal peripheral elites under the direct rule system. Thus being educated as a member of a non-dominant group clearly increases nationalistic feelings in individuals. Hroch (1993) goes even farther and says that even the beginnings of nations are contingent upon the presence of educated people (from non-dominant ethnic groups) collecting information about the history, language, and customs of their groups.

In the second type of approach, one that predicts an inverse relationship of education and national identity, the cognitive skills model suggests that the level of cognitive skills can help explain the level of attachment to a group: "The greater an individual's cognitive skills, the greater his or her ability to identify with ever larger communities" (Bollen and Medrano 1998, drawing on Deutsch 1961 and Inglehart 1970). Thus, in contrast with arguments of Hechter (1987, 2000) and Hroch (1993), more educated individuals have weaker attachment to nations; in other words, lower levels of national identity than individuals with lower educational levels. Persons with higher education are not as strongly attached to groups on national levels and often identify with groups at levels above the national one.

Another way to look at how education influences national identity on the individual level is through the prism of values. National identity is considered a traditional, materialist, value (Inglehart 1970, 1977, 1990, and 2008). According to Inglehart materialist values in individuals are gradually being replaced by post-materialist values under conditions of increased economic security and prosperity. Materialist values emphasize survival, and economic and physical security; the post-materialist values include self-expression and autonomy. Inglehart (1990) draws on two hypotheses to account for the development of post-materialist values: the scarcity hypothesis and the socialization hypothesis. The scarcity hypothesis postulates that people most value those resources that are in short supply, and the socialization hypothesis emphasizes that

one's values depend on what the person experiences during his or her most formative years, in other words, during their adolescence and young adulthood. Those values do not change significantly during people's lifetimes, and, therefore, values are essentially stable and change only very slowly, with the replacement of generations. Consequently, the scarcity hypothesis can be related to period effects (short-term), and the socialization hypothesis to the long-term cohort effects. The times of scarcity will then lead to the prevalence of materialist values, especially among younger generations, and the times of prosperity to more post-materialist values. These value orientations affect national identity. Post-materialist values lead to less intense feelings of nationalism. Materialist values focus on survival and lead to a sense of group or national common interests. Thus strong national identity is consistent with materialistic values and inconsistent with post-materialist values. With high SES groups having more privileged economic positions and more freedom from focusing on basic survival needs, they are more likely to have post-materialist values.

Additional theory tying education, national identity, and economic conditions is the split labor market theory (Bonacich 1972) that focuses on economic interests in its micro-structural approach to national identity. According to Bonacich, ethnic antagonisms depend on basic economic processes in society, namely the price of labor. Individuals with higher education and higher SES are more competitive in the labor market and do not have as much to fear from cheaper labor originating in other countries or offered by immigrants as lower-educated workers. Thus the workers with lower levels of human capital are more nationalistic because they feel the exclusion of ethnically different groups or rigid ethnic stratification and the consequent privileging of their own group preserves their position on the market of labor.

In summary, existing theoretical approaches acknowledge the key importance of education for the feelings of national identification in individuals, but they explain it differently and assume different directions of the influence of education on national identity.

### ***Macro-Structural Approaches***

Similarly to the theoretical framework on the micro-, individual-level, macro-structural theorizing on the relationship between education and national identity also covers two opposing directions: in one view economic development and other country-level variables increase national identity, and in another view the level 2 factors decrease it. Macro-structural elements most commonly considered in scholarship on nationalism and national identity are: economic development, including industrialization, political conditions, and cultural characteristics. The key question is what country-level characteristics most affect societal levels of national identity.

Many theoretical works on nationalism imply that economic development tends to reduce national identity. However, historical studies suggest the opposite: traditional nationalism and national identity emerged as a consequence or simultaneously with the advancing industrialization in early modern society.

If one follows Kunovich's (2009) assumption that nationalism is an ideological movement that links the nation with the state, and given that one of the basic characteristics of each state is its economy and its level of economic development, it is inevitable that nationalism and national identity have close connection to economic conditions in the respective states. Kunovich (2009) finds that countries with higher economic development have lower national identity, and that countries with higher levels of democracy also have lower levels of national identity. In another example of this approach Miroslav Hroch (1993) advances the principle that it is advisable to study new nationalist movements of the 20<sup>th</sup> and 21<sup>st</sup> centuries on the bases of

their classical European 19<sup>th</sup> century predecessors because all national movements have the same basic preconditions. Hroch defines nation as: "a large social group integrated not by one but by a combination of several kinds of objective relationships (economic, political, linguistic, cultural, religious, geographical, and historical), and their subjective reflections in collective consciousness," and distinguishes two basic situations (and one transitional one) with respect to the development of national identity: In the first scenario are countries with one homogenous ethnic group that had one culture and one ruling class. In these countries the modern nation-state developed as a community of equal citizens. Examples of this situation might be England, France, Poland, Spain, Portugal, and the Netherlands. For my research the second scenario is the most important one as it includes countries with a dominant and a non-dominant ethnic group (mainly Eastern and South-Eastern Europe within the scope of Hroch's studies). Most of these countries had an exogenous ruling class and the dominated ethnic group or groups which did not have their own "nobility, political unit, or continuous literary tradition." In some countries the non-dominant ethnic groups were assimilated – for example the Catalan. In many other countries (most of Central and Eastern Europe) the non-dominant ethnic groups started the process of national awareness and nation-building by processes that included increased vertical mobility, educational developments, and the increase of the density of their social networks. Hroch's is basically a modernization argument even as he stresses that many pro-nationalistic characteristics have been observed in agrarian societies. However, his analysis of the differences concerning various countries or groups of countries implies that those (groups or countries) that did not fully fulfill the conditions for successful nationalist movements might not have become independent and thus did not have as high nationalistic feelings or national pride as those that successfully did go through all the outlined phases. The final, transitional group of countries had

their own ruling class and literary tradition, but did not have their own state at the time (19<sup>th</sup> century) – for example, Germany and Italy. The analysis of this group of countries is not directly relevant to my research.

I follow Hroch's focus on the second situation that can be theoretically applied to current and recent developing countries, the majority of which started their nation-building process and created their national identities as colonies dominated by external forces. The successful national movements in these countries had to have the following essential elements: a crisis of legitimacy, a basic volume of vertical social mobility (some educated people had to come from the non-dominant ethnic group), a fairly high level of social communication, including literacy, schooling, and market relations, and a nationally relevant conflict of interest (Hroch 1993). Thus having made education one of the basic elements of a successful national movement Hroch, in support of his argument, offers several examples of countries where there was no substantial and consistent level of education on a large scale, and a homogenous national identity had not resulted – for example in the Baltic states, in the former republics of Yugoslavia, or in Romania. Hroch contends that the institution of the civil education in these countries was replaced by linguistic and cultural demands.

The positive role of education in the rise of nations is also stressed in the work of Benedict Anderson, Ernest Gellner, and Anthony D. Smith. Anderson (1983) considers the beginnings of nations directly linked to the decreased influence of religion during the development of capitalism and the development of print technology. Print capitalism enabled mass communications and the increase in literacy on a large scale and that allowed big groups of people to grasp the concept of national identity. Educational developments thus influenced the political and cultural roots of the modern nation. If one extends Anderson's historical thesis into



the current and recent developments, one might predict that the more developed a country is, the higher national identity it has. However, Anderson writes of the situation in developing countries at the time, so his principles may not apply to countries that are already highly developed.

Ernest Gellner (1983) places highest significance on the concept of "high culture," by which he means the increase of the levels of education in society, literacy, and the development of a more sophisticated bureaucratic system that requires improved communication and more educated people to function. Gellner emphasizes the importance of print per se, in contrast to Anderson's (1983) focus on print capitalism. According to Gellner, only the state is big enough and has enough power to provide education-based culture, and the state and the educational system need each other to exist. Gellner's approach to national identity is culturally-political in the classic modernization spirit. Systematic, mass scale education is needed to produce common language among workers and for their retraining. Smith (1992) comments on contemporary ethnic revival in Europe and elsewhere, and recognizes three important factors: the increased power of the state, widespread literacy, and the development of mass media and public mass education systems. The three factors "create divisions along pre-existing ethnic lines." Drawing on his own concept of the ancient ethnies, Smith claims these factors bring up resentment in minority populations that are newly capable of becoming aware of the neglect and suppression they experience by the ruling majority elites. In this aspect Smith comes close to Hroch's argument on the role of the emerging minority elites. Smith (1992) argues that periodic ethnic revivals appeared in different parts of the world since the early nineteenth century and emphasizes that as long as the world is economically organized into national states, economic development will play a role in ethnic nationalism. Smith and Gellner have in some ways similar approaches, but Smith definitely puts the roots of national identity firmly into ancient history,

while Gellner concentrates on more modern times. Their emphases are comparable in their foci on educational systems. Extending these similarities in Smiths' and Gellner's thoughts on education, nationalism should be higher in countries that have highly developed mass, public, educational systems funded by the state apparatus and oriented toward the strengthening of the state. However, that does not seem to be the case in developed countries of today. Another similarity between Smith and Gellner is that they both place importance on the unequal treatment of the non-dominant groups in the countries that are ethnically diverse. Drawing on O'Leary (1997), Gellner (1983) specifically mentions the uneven diffusion of industrialization and modernization that create stratification that, one might theorize, can happen in different geographical areas or in the same ones but at different times, or successively in one country.

Thus Gellner's "uneven diffusion" can, in some ways, correspond to Smith's "periodic waves of ethnic nationalism" or ethnic revival in the sense that economic development that is uneven directly influences minority groups in the affected countries and their subsequent actions have impact on the level of national identity in their respective countries. More inequality in a country would then mean more nationalist movements and higher national identity. Smith (1992) mentions that the waves of ethnic nationalism are applicable to "Western as well as Eastern Europe, not to mention the Third World." The processes Anderson, Gellner, and Smith describe can be applied not only to emerging nations in the historical perspective, but also to more contemporary socio-political theatres with analogous conditions – i.e., developing countries in which the nation building process is in its early stages or perhaps not fully complete.

The "classical" theorists of nationalism – Smith, Gellner, and Anderson – do not really address the situation that happens after countries are fully developed, or at least not in their basic theoretical approaches, even though, for example, Hroch talks about small nationalistic groups

within the European Union. The "classical" or modernist approach might presuppose that the higher intensity of characteristics needed to be present to *create* a nation, the stronger the nationalistic feelings and national pride in the nation already *created* and fully developed. However, other processes might be at work. A body of scholarship shedding more light on the differences between more or less economically developed countries relates to the study of values and provides a slightly different perspective worthy to draw on. For example, Inglehart and Baker (2000) claim that values change with economic development but are also path-dependent; in other words, that the overall orientation of society (specifically its cultural and religious historical heritage) plays a role, as well. This view is somewhat different from the traditional modernization theory which suggests that countries follow the same, or a very similar, path while being industrialized and while continuing their economic development after that. In this aspect Inglehart and Baker share some common ideas with Anthony D. Smith (1992) who privileges culture in his treatment of national identity even as he acknowledges the effect of the economy. Inglehart and Baker (2000) show that prevailing values are different in rich and poor societies, implying that as cultural backgrounds matter, some characteristics of the value changes and their rates can, in fact, be predicted. Inglehart's (2008) theory of intergenerational value change among individuals thus extends to the level of countries, as well: countries on the lower level of industrial development have predominantly materialist values present in their populations, while in advanced industrialized countries the post-materialist values prevail. With regard to national identity, in one of his original arguments Inglehart (1990) describes the decline of national pride as an indicator of national identity in industrialized countries and the emergence of a "sense of European citizenship." Inglehart and Baker (2000) distinguish two dimensions of national values: traditional v. secular-rational values, and survival v. self-expression values. In largely

post-materialist societies secular-rational and self-expression values prevail, while in materialist societies traditional and survival values are more common. A strong sense of national pride is, according to Inglehart and Baker, one of the traditional values. Consequently, in a certain contrast to the more "classical" theorists, Inglehart and Baker conclude that in more developed societies national pride and national identity are lower than when those societies were still in their developmental stages and the emerging nationalist groups and movements "needed" strong sense of national pride and identity to succeed.

In addition to Inglehart and Baker's (2000) focus on post-materialism, others have offered explanations of current differences in national identity across nations. These explanations are tested empirically with quantitative cross-national data. Explaining current differences across nations as opposed to historical national movements suggests several other macro-level determinants of national identity. Jones and Smith (2001) concentrate on the level of (economic) development to explain the differences in national identity across nations; the more developed nations should have lower levels of national identity. The authors also consider the influence of post-industrialization and globalization. Their post-industrialism argument is similar to Inglehart and Baker's (2000) emphasis on the difference in values in more industrialized nations and the resulting decrease in nationalistic feelings and national pride. Their globalization argument says that global forces reduce national identity by supporting independence of people as opposed to the obedience to the traditional national authority and by exposing people to other cultures, and thus possibly fostering supra-national ties over the local ones. However, although theoretically plausible, Jones and Smith's predictions about globalization find only partial support in their analyses.

Theoretically, ethnic-linguistic fragmentation should reduce national identity through encouraging sub-national ties at the expense of the supra-national ones. Kunovich (2009) fails to prove a relationship between national identity and internal cultural diversity. This theoretical assertion is, however, at least partially supported by Jones and Smith (2001) who suggest that internal diversity (including linguistic diversity and regional versus national ties) decreases national identity. On the other hand Kunovich (2006) finds that, for example, in European countries with larger Muslim populations the identification with Christianity increases national identity. These findings support the importance of internal diversity for the national identity, but do not address definitively in which direction, and under which conditions this is happening.

Increased level of democracy should decrease national pride and national identity. Democratic institutions provide feelings of stability and security and are more likely to fulfill people's needs so that the polity need not search for alternative institutions to fulfill said needs like, for example, nationalist movements. Support for this argument is found, for example, in Kunovich (2009) who argues that countries with stronger democracies have lower levels of national identity; his findings show that political pluralism in countries with strong democracies, indeed, decreases national identity.

### ***Combined Micro-Macro Approach***

An overview of theories and research suggests that, at the micro-structural level, education can have both a positive or negative influence on national identity, depending on the national context. A country's level of development, democracy, and internal cultural diversity may affect not only the level of national identity, but they may also may reduce or increase the influence of education on national identity. A combined approach specifies the direction of this

influence by integrating the micro-structural and macro-structural components and by developing hypotheses that have yet to be systematically tested.

To summarize, at the *micro-structural* level some theorists treat education as strengthening national identity (Hechter 1987, Hroch 1993). People with more education and in countries with lower economic development, diversity, and cultural homogeneity recognize that national independence or more power for their ethnic group increases their opportunity to use their education to their advantage. Other social scientists treat education as weakening national identity (Inglehart 2008, Bollen and Medrano 1998, Bonacich 1972). Individuals with higher education do not feel the need to join together in nationalist groups because their position in society gives them various advantages, is relatively secure and stable, and is not threatened by people with lower education or immigrants. This situation is typically found in countries that are highly developed economically and politically and have higher cultural homogeneity.

The theories on the *macro-structural* level take two broad forms. One set of theories argues that economic development and related societal transformations increase national identity by enabling formerly disadvantaged groups of people to get educated, mobilize, and to disseminate nationalist ideas through improved technology. The increased density of the upwardly mobile population and the development of the modern state also contribute to the emergence of nationalist identities (Anderson 1983, Gellner 1983, Smith 1991 and 1992, and Hroch 1993.) Another set of theories posits that economic development and related societal characteristics decrease national identity because large groups of people have achieved material security and their interests shift from the focus on physical survival to post-materialist values such as personal fulfillment and tolerance (Inglehart 1970, 1977, 1990, 2008, Inglehart and Baker 2000, Jones and Smith 2001, and Kunovich 2009.) Most authors consider economic

development a crucial factor influencing national identity; however, some consider other factors such as the level of democracy (Kunovich 2009), culture (Inglehart and Baker 2000), or globalization (Jones and Smith 2001.) Thus, depending on the stage of development and historical period, economic development and related characteristics can either facilitate or inhibit national identity.

These differences in theoretical approaches at the micro and macro level suggest a multilevel approach that captures the diversity of influences of education across national contexts. Education increases national identity in societal contexts where opportunities of the most educated are blocked by low economic development, lack of democracy, or ethnic-linguistic-religious divisions. From a rational choice viewpoint, the adoption of nationalist attitudes by more educated groups represents a means to greater resources. This argument extends macro theories about the facilitative influence of economic development and related characteristics to fit arguments about the positive influence of education on national identity.

However, where the societal context offers greater opportunities for the most educated, where economic development is high, political procedures are democratic, and ethnic-linguistic-religious divisions are moderate, education will lead to lower national identity. From a post-materialist viewpoint, the adoption of less nationalist attitudes by highly educated groups represents a response to economic security and concerns with self-expression, pluralism, and tolerance. This argument extends macro theories about the inhibitive influence of economic development and related characteristics to fit arguments about the negative influence of education on national identity.

The micro-relationship between individual education and national identity thus varies across macro-contexts of economic development, democratic politics, and cultural diversity.

Applied to diverse nations across the world today, these claims can be laid out in the form of hypotheses at the micro, macro, and micro-macro levels:

1. Micro: Education, on average, tends to have modest influence on national identity across diverse nations.
2. Macro: Economic development, democratic political institutions, and cultural homogeneity tend to reduce national identity.
3. Micro-Macro: Economic development, democratic political institutions, and cultural homogeneity tend to shift the influence of education on national identity from toward the negative.

While the hypotheses are presented in a general form, variations may apply to different components of national identity. Smith (1991) emphasizes the importance of national pride as a component of national identity, Kunovich (2009) distinguishes between ethnic and civic forms of national identity, and Quillian (1995) and Kunovich (2009) treat attitudes toward immigrants as closely related to national identity. The chapters that follow adapt the hypotheses to fit the specific outcome under study, but these three summarize the general framework.



## ***CHAPTER II – METHOD***

### ***Data***

In order to test the hypotheses outlined in the theoretical section I utilize the World Values Survey (WVS). WVS is a large, world-wide dataset consisting of national surveys that cover almost 90 percent of the world's population (Inglehart 2010). The World Values Survey was founded in 1981 in Stockholm, originally as the European Values Study with the goal of examining how economic and technological changes impact values in industrialized countries. Over time it was decided not to limit the surveys to developed countries, and additional nations were added. The World Values Survey operates on the premise that social values are a global phenomenon and need to be considered in a global context. The primary goal of the World Values Survey, according to its Mission Statement (World Values Survey 2012), is to monitor and analyze changes in social values across the world and to share the results of this large-scale social research with scientists and policy makers. An important part of the surveys is to investigate how social change influences economic and political life. Another, more pragmatic, goal is to establish a world-wide network of social scientists for the collaboration on the social change research and the dissemination of the results of such research free of charge. A secondary, yet very pronounced, goal of the World Values Survey is to broaden and spread cutting edge social survey methodology to support its stated mission.

The surveys are carried out by using a standardized questionnaire on a representative national sample in each society (society corresponds to an individual country, except for two or three countries, depending on the wave. For example, the territories of the former East and West Germany are sampled separately and results reported as both two separate societies and as one country). The samples aim to be representative on the basic variables, for example age, sex,

occupation, and regional distribution within a given society. The World Values Survey allows quota sampling when full probability samples would be too expensive to obtain (World Values Survey 2011a). The rules for Principal Investigators pertaining to sampling are in Appendix A.

The sampling details, principal investigators, and other technical information including the national questionnaires in the original languages are available on the WVS website:

[www.wvs.org](http://www.wvs.org). The technical specifications also describe in detail the training of the interviewers in each country, and issues, if any, that arise with each variable in the questionnaire. For example, in Ghana, where there are not many governmental structures in society, respondents had problems distinguishing between "official" and community organizations (World Values Survey 2011b).<sup>1</sup> The main advantage of the WVS dataset is that it contains data from many varied countries on different levels of economic development, with different cultures, political systems, diversity/ cultural homogeneity, and values. I use the fifth, newest, wave of the WVS that was conducted in 2005-2008 in 57 countries and had 82 992 total respondents. The World Values Survey is used to examine the individual-level data within the countries. The countries in the World Values Survey dataset are not randomly selected. Most of the countries that have been participating in the survey have been self-selected and have financed their own research under the guidance of the World Values Survey's Executive Committee in return for getting data on the rest of the countries in the Survey (World Values Survey 2012). Occasionally, the Executive Committee determines that additional information would be beneficial to the overall goals of the Survey and countries with certain characteristics (e.g., specific religious makeup) need to be included in the World Values Survey. Depending on funds available, the World Values Survey Association subsidizes some or all of the cost for these countries' research. The list of the

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<sup>1</sup> This particular issue is not relevant to my research, but shows how diligently the research design is done and how well documented, and increases confidence in the secondary data.

countries included in the fifth wave is in Appendix B. There are seven countries in the Sub-Saharan African region, ten countries in the Asian region, nine countries in the Eastern European region, six countries in the Middle East and North African region, nine countries in the South American region, and sixteen countries in Western Europe and the West, for a total of six regions.

## ***Dependent Variables***

### **National Pride**

Following Gaber (2006), national pride is used as the main measure of national identity.

Gaber defines national identity as:

...the recognition of one's own membership in the nation and one's emotional attachment to this group. National pride can be interpreted as a strong positive attitude toward one's own nation. It covers cognitive and affective aspects of this attitude measuring the extent to which the respondent recognizes himself/herself as a member of the nation and feels emotionally attached to it.

The WVS questionnaire asks: "How proud are you to be [substitute your own nationality; for example, French]?" with four possible answers: "very proud," "quite proud," "not very proud," and "not at all proud." If the respondent volunteers that he or she is not of the particular nationality, the fifth answer is: "I am not [substitute your own nationality]." After consulting with several principal investigators in different countries it is clear that the fifth answer, if present, is recorded as missing data. National pride's values range from 1-4 with 4 being the highest (most national pride). National pride is the main dependent variable in the analysis and has 79,339 cases in 56 countries. Only one country is missing all data on this variable (Peru). Even though used in prior research (Gaber 2006), the national pride variable has limitations. There are four possible answers and there is no neutral answer available. While having a neutral option would be useful, it is possible that the methodologists of the World Values Survey were trying to eliminate fence-sitter answers among the respondents. Shuman and Presser (1981)

report that fence-sitters can comprise up to 10 to 20 percent of respondents in surveys. The World Values Survey does not provide information about pretests and posttests of its items, but it is plausible they were done and this option was not included for an undisclosed research design reasons. The way the question is currently worded does force an answer, but it is a feelings-based (as opposed to a knowledge-based) question with an implicit positive charge. Possibly including an “I have no opinion” option would require negatively charged answers on the opposite end, and there is no clear and precise antonym to national pride if one does not want to include “hate” – an admittedly much stronger word emotionally. In absence of the neutral answer I believe most respondents that are not particularly proud can choose the “not very proud” option which does not point to great pride but also does not connote excessively negative feelings.

### **National Pride Scale**

Second measure used to examine national pride is the national pride composite scale. Following Norris and Inglehart (2009) the standardized scale is created by averaging of the national pride variable, the feelings of being a citizen of a nation, and the feelings of belonging to a local community. Norris and Inglehart use the identical three items from the World Values Survey (fifth wave) as a basis for several of their measures of national identification and cosmopolitanism and illustrate their validity by principal-component factor analysis. The "local" component is the answer to the statement: "I see myself as member of my local community" with 1 being "strongly disagree" and 4 being "strongly agree." The item values in my research are reversed from the original dataset so they increase in the same direction as the national pride values. The same is true for the "national" variable, which is an answer to the statement: "I see myself as citizen of the [country] nation," 1 means "strongly disagree" and 4 means "strongly agree." National pride scale's values range from -4.11 to 1.01. The scale is skewed to the left

because of the components used to create it. Many respondents have a strong tendency to be proud, but relatively few who disagree skew the scale. The Cronbach's alpha (standardized items) for the scale is 0.6034. The national pride component is the same as described above. The composite scale has 80,780 cases in 56 countries.

There is an additional item in the World Values Survey that, theoretically, could have been used in the scale, and that is the answer to the statement: "I see myself as a world citizen." However, there are several problematic issues regarding this item. First, the inclusion of the "world citizen" variable lowered the scale's reliability. Second, it is possible that in many countries the term "world citizen" does not have enough meaning to get accurate responses. After reading on the World Values Survey's website how investigators in less developed countries are facing difficulties even with defining government services versus community-based services and organizations (World Values Survey 2011b), I realized that being a world citizen might not make any sense to people outside of Western industrialized nations. I searched for the origins of the term, and found out that it was officially used for the first time in 1993 by the United Nations Commission for Sustainable Development (Bahá'í International Community 1993), aside from the classic quote ascribed to Socrates. I believe the analytical results would be skewed by its possible erroneous understanding. Third, while attempting different types of scales' creation with the world citizen item, STATA kept confusing the reversed and unreversed items, and produced warnings about errors in the analysis. Fourth, the world citizen item is also conspicuously absent from Norris and Inglehart's (2009) measures, even though the authors research cosmopolitanism and certainly one can assume that Ronald Inglehart as one of the directors of the World Values Survey is aware of the variables included in it. These occurrences have lead me to believe there might be a technical and/or sampling problem with the world citizen variable and I decided not

to use it. The national pride and the national pride scale as indicators of national identity are examined in Chapter III.

### **Ethnic and Civic National Identity**

The ethnic and civic dimensions of national identity are analyzed in Chapter IV. While many scholars study national identity as a homogenous concept (see, for example, McCrone and Bechthofer 2010), others (Hobsbawm [1990] 1992) follow the theoretical framework of Meincke ([1907] 1970) and Kohn (1944) that distinguishes between ethnic and civic dimensions of national identity. Social science research consistently confirms that the concepts of the ethnic and civic components of national identity are important for understanding of people's opinions, attitudes, and behaviors in various situations (Jones and Smith 2001, Kunovich 2009, Pehrson, Vignoles and Brown 2009, Meeus et al. 2010, and Pehrson and Green 2010). Using International Social Survey Programme's (ISSP) 2003 National Identity II Module Kunovich (drawing on Medrano 2005) creates ethnic and civic constructs of national identity. Kunovich (2009) uses the ISSP dataset to divide the following eight national identity survey items into the ethnic and civic categories:

Some people say that the following things are important for being truly [e.g., American]. Others say they are not important. How important do you think each of the following is?

[Not important at all, not very important, fairly important, or very important]

1. To have been born in [America]
2. To have [American] citizenship
3. To have lived in [America] for most of one's life
4. To be able to speak [English]
5. To be a [Christian]
6. To respect [America's political institutions and laws]
7. To feel [American]
8. To have [American] ancestry

Kunovich includes being born in a country, having lived in a country, having ancestry, being a citizen, and having the same religion as ethnic factors, and to feel as a national, to speak

the same language, and to have respect for political institutions and laws as the civic factors. The World Values Survey does not include as many items on national identity (its main advantage being the number of countries surveyed), but it does contain questions on what should be used to grant citizenship. While citizenship itself can belong to both civic and ethnic categories of national identity depending on restrictions each country places on it (Kunovich 2009), the items asking about citizenship can clearly be used to distinguish the ethnic and the civic dimensions of national identity that are important to people. Kunovich (2009), employing factor analysis, considers the most unambiguous indicators of ethnic and civic national identity the items "ancestry" for the ethnic and "respect" for the civic form. Even though the World Values Survey contains fewer items on the ethnic / civic indicators, the most important ones are included. I create two scales, one for the ethnic, and one for the civic dimension of national identity. Each scale has two items based on the answer to the question (number of countries missing data on each variable are in parentheses):

In your opinion, how important should the following be as requirements for somebody seeking citizenship of your country? Specify for each requirement if you consider it as very important, rather important, or not important:

- a. Having ancestors from my country (12)
- b. Being born on my country's soil (13)
- c. Adopting the customs of my country (12)
- d. Abiding by my country's laws (12)

Items a) and b) are pertinent to the ethnic dimension of national identity; items c) and d) to its civic dimension. Additionally, I use a combined dependent variable called national identity that includes all four items. Cronbach's alphas (unstandardized items) are as follows: Ethnic: 0.8241, civic: 0.5967, combined (national identity): 0.6837.

Since the ISSP and the WVS items are similar, I am able to compare my results with Kunovich (2009). I analyze the ethnic and civic dimensions of national identity, and national

identity as one variable, and their relation to education and economic development in a way similar to my analysis of the national pride variables. The advantage of my research over Kunovich's (2009) is that the World Values Survey includes data for many more countries than Kunovich uses, and they are countries on all levels of economic development.<sup>2</sup>

### **Policy Preferences**

To fully test my theory I needed to extend the analyses of the effect of education on national identity to the “real world.” Levels of national identity are directly linked to political behavior, for example preferences for immigration policies (Quillian 1995, Kunovich 2009). Education influences national identity and has an effect on people’s policy preferences, as well.

The item in the World Values Survey asking about attitudes toward immigrants can be used to examine the preferences for restrictive immigration policies:

How about people from other countries coming here to work. Which one of the following do you think the government should do?

- a. Let anyone come who wants to?
- b. Let people come as long as jobs are available?
- c. Place strict limits on the number of foreigners who can come here?
- d. Prohibit people coming here from other countries?

Policy preferences are examined in Chapter V.

### **Independent Variables**

#### **Individual-Level (Level 1) Independent Variables**

Key sociodemographic variables used in my research are: education, gender, age, marital status, number of children, employment status, income, financial satisfaction, savings in the past year, social class, religiosity, and the immigration status of the respondent's parents. Number of countries missing data on each variable is in parentheses.

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<sup>2</sup> Although Shulman (2002) suggests a third, cultural, dimension of national identity, Kunovich's analyses of the resulting three-factor model encounter severe estimation problems, and the author determines that a two-factor model best fits the data.



Education (none missing): is coded as the highest attained (or, for students, expected to be attained) educational level out of nine categories: no formal education, incomplete primary school, complete primary school, incomplete secondary school (technical/ vocational type), complete secondary school (technical/ vocational type), incomplete secondary school (university-preparatory type), complete secondary school (university-preparatory type), some university-level education without degree, and university-level education with degree. Values range from 1 to 9.

- Gender (none missing): female (0) or male (1).
- Age (none missing): in years, 15-98.
- Marital status (none missing): not married (0) or married (1).
- Number of children (none missing): 0-8 (8 indicates eight or more children).
- Employment status (2 missing) is recoded as not employed or other (0), and employed or student (1).
- Income (2 missing) in deciles: 1 indicates the "lowest income decile" and 10 the "highest income decile" within each country, including all wages, salaries, pensions and other incomes that come in.
- Satisfaction with the financial situation of household (none missing): range of 1-10 (least to most satisfied).
- Family savings during past year (5 missing): spent savings and borrowed money (1), spent some savings and borrowed money (2), just got by (3), and saved money (4).
- Self-reported social class (7 missing) is recoded as: lower class (1), working class (2), lower middle class (3), and upper or upper middle class (4).
- Religiosity (none missing) is recoded as not religious (0) or religious (1).

- Immigrant status of the respondent's mother and father (separately; 13 missing): not an immigrant (0), an immigrant (1).

### ***Country-Level (Contextual, Aggregate, Level 2) Independent Variables***

I use the terms country-level, level 2, contextual, and aggregate variables interchangeably in my dissertation. The main conceptual differences between the various terms are attributable to the way these variables are constructed, yet are often used interchangeably (Roux 2002), along with the terms derived or integral variables. For my study it is most important to note the level of analysis – the level of countries (macro-structural) and the consideration of individuals as nested within countries. Listing all terms at all times or specifying how each of the eight level 2 variables was constructed in every instance would be confusing. The country-level measures come from several different sources and can be divided into four groups:

#### **A. Economic Development and Social Modernization:**

GDP (Gross Domestic Product) in dollars per capita (based on purchasing power parity) as reported by the World Bank in the Penn World Tables (Heston, Summers, and Aten 2006). The missing GDP values are estimated for the correct years by using countries' values from earlier years and HDI values.

The UN Human Development Index (United Nations 2011). The Human Development Index is a composite index that reflects both social and economic development. Its components consist of life expectancy at birth, education or "knowledge" expressed by adult literacy and school enrollment, and the GDP per capita adjusted for purchasing-power parity that indicates income or a standard of living (U.N. 2011). The HDI formula has changed in 2009, and now includes a slightly different measures (for example GNI [Gross National Income] instead of the GDP), but I use the values from the original formula used in 2005, corresponding to the fifth

wave of the WVS. The HDI gives less weight than GDP to oil-rich countries with high inequality. For 2005 it ranges from 361-968.

### **B. Political Characteristics:**

Democracy. The democracy measure is created by averaging of two scales by Freedom House (Freedom House 2011): political rights and civil liberties. Freedom House (2011) states that *political rights*: "... enable people to participate freely in the political process, including to right to vote freely for distinct alternative in legitimate elections, compete for public office, join political parties and organizations, and elect representatives who have a decisive impact on public policies and are accountable to the electorate." *Civil liberties* "... allow for the freedoms of expression and belief, associational and organizational rights, rule of law, and personal autonomy without interference from the state." The measures are recoded so that the highest values mean the highest levels of democracy. This is the opposite of the Freedom House's original coding. The democracy values in my research range from 1.5 (lowest) to 7 (highest).

### **C. Measures of Cultural Homogeneity:**

While cultural characteristics of countries can be many, in existing literature and with regard to economic development, the most important ones usually addressed are linguistic and ethnic fragmentation or fractionalization, and religious fragmentation (Kunovich 2009, Alesina et al. 2003, Easterly and Levine 1997, Fearon 2003). The theoretical maximum of fractionalization measures happens when each person belongs to a different group (Alesina, et al. 2003). In my research I use reversed measures – measures of homogeneity to show the probability of people belonging to the same groups, because national identity as a traditional value is assumed to be higher among people in the same groups (valuing national sentiments).

The ethnic, linguistic, and religious homogeneity measures are created by taking their respective fractionalization measures and deducting them from 1, which results in the homogeneity measures. Alesina et al. (2003) create new, separate indices describing ethnic, linguistic, and religious fragmentation. The authors use sources from Encyclopedia Britannica, CIA, and Minority Rights International. I adopt these new measures because having three separate variables avoids possible obscuring of the studied relationships by multicollinearity sometimes present in indices with closely-related items. The values of ethnic homogeneity in my sample range from .2192 (Zambia) to .9980 (South Korea). The values of linguistic homogeneity range from .1266 (Zambia) to .9979 (South Korea). The values of religious homogeneity range from .1397 (South Africa) to .9965 (Morocco).

#### **D. Values-Related Indices:**

National identity is related to culture as shown in the theoretical part of my dissertation. The countries of the world are culturally different in many ways. Since I set to examine the influence of education on national identity in various cultural contexts I decided, in addition to considering ethnic, linguistic, and religious homogeneity, to take into account Inglehart's (1997) and Inglehart and Baker's (2000) ideas on how cross-cultural differences are path dependent and not contingent on economic factors alone. Inglehart perceives culture as positioned along two dimensions, the traditional/secular-rational dimension that focuses on the importance of religion in society and associated values, and the survival/self-expression dimension that signifies the continuum between materialist and post-materialist values. The two dimensions are expressed in the World Values Survey as two scales (originally described in Inglehart 1997 and Inglehart and Baker 2000). Variables representing these scales are calculated from the World Values Survey and provided as part of the World Values Survey dataset. In the present research I call them

secularity and self-expression and they are coded so that their higher values mean the countries are more secular, or exhibit more self-expression values on average. Secularity ranges from -1.94 to 1.96, and self-expression from -1.66 to 2.35.

### ***Missing Data***

There are several types of missing data in my research:

1. Not all items are asked in all countries.
2. Individuals do not always answer every question (for various reasons not necessarily predictable ones).
3. Some of the aggregate variables do not include all countries from the World Values Survey's fifth wave.

The above indicates that at least some of the data are not missing at random; in other words, they vary systematically. To ensure the missing variables are not unduly influencing the results of the analyses I start with a very simple model that includes one contextual variable (GDP) and basic independent, individual-level variables (sex, marital status, employment status, age, age squared, education, and satisfaction with financial situation). This model has 71, 475 cases in 53 countries. The next model has 62, 362 cases in 51 countries; the numbers of respondents and countries get reduced by the addition of the number of children, religiosity, and income to the equation. In the third model I add savings in the past year, social class, and the immigrant status of the respondent's mother and father. Because the immigration status questions are not asked in certain countries, this final model contains 44, 526 cases in 40 countries.

After running the analyses for different contextual variables for each model described above I double check the results by running the equations casewise. The regression equation with fewest variables (and, therefore, originally with the most cases and countries) is applied to the

models with medium and fewest cases, as well (using the same subsets of cases as the latter models have). This ascertains that the results are robust and not caused by the reduction in the number of cases due to the missing values. \*I might have to add this on Tuesday.

For the analyses focusing on national identity (Chapters III and IV; five dependent variables total) there are no substantial differences in the means of basic demographic variables for the largest samples with the most cases and countries (Model 1) as compared to the smallest samples with the least cases and countries (Model 3). The samples with the least numbers of cases and countries appear to have slightly older respondents (the biggest observed difference being 0.6 years), and less than one percent more of the respondents are married (between 63 and 64 percent). There is a very slight increase in education: at the most 0.03 – 0.06 of a category (there are 9 categories for education total). The rest of the differences are trivial, if any. For the basic demographic variables in Chapter V, where the dependent variable is “preferences for restrictive immigration policies,” there is no difference in the means of education for the samples, and the differences for age and marital status are about the same as in the samples used in Chapters III and IV: 0.7 for age and one percent for being married. Thus the smaller samples reveal a bias that is most likely due to the fact that the battery of questions on immigration was not asked in certain countries. Judging from the differences, the country samples were biased toward more developed countries, with older and higher educated population, but only very slightly. However, even with the bias present, my results are consistent for samples of different sizes for all dependent variables.

## ***Models***

Multilevel models are well suited for the consideration of connections between national identity, education, and contextual factors in the countries of the world. The models allow

coefficients relating individual (micro) determinants of national identity to vary randomly across nations and for contextual (macro) determinants to influence that variation (Raudenbush and Bryk 2002). The WVS and the aggregate level measures provide enough data for an adequate number of level 2 countries (57). Most authors recommend 20 and 50 cases for a random intercept model, and a random slopes model, respectively (Bickel 2007, Hox 2002, Kreft and de Leeuw 1998).

Restricted maximum likelihood estimates of multilevel model coefficients in `xtmixed` in STATA 11 adjust for clustering by nation, different sample sizes for level 1 and level 2 units, and heteroscedastic error terms – issues that would otherwise cause estimated standard error terms to have a downward bias (Raudenbush and Bryk 2002). The disadvantage of the `xtmixed` command in STATA 11 is that it does not allow for probability weighting within countries. I ran linear regression models with and without weighting and the results differ very little.

Given the focus of the study, I limit the number of predictors to one random slope (education) in the multilevel models. This process reduces the number of error covariances and increases the level 2 degrees of freedom. At level 1, the national pride for an individual  $i$  in a nation  $j$  ( $NP_{ij}$ ) is a function of two sets of individual predictors, education ( $E_{ij}$ ) and  $p$  control variables ( $X_{pij}$ ), and an error term ( $r_{ij}$ ):

$$(1a) \quad NP_{ij} = \beta_{0j} + \beta_{1j} * E_{ij} + \sum \beta_{pj} * X_{pij} + r_{ij}$$

All determinants are centered at their means.  $\beta_{0j}$  shows the mean national pride, and  $\beta_{ij}$  and  $\beta_{pj}$  show the effects of two groups of predictors for each nation – education is treated as random and one set  $p$  is treated as fixed. At level 2, a set of equations treat the level 1  $\beta$  coefficients as outcomes. With  $m$  contextual measures ( $C_{mj}$ ) as determinants of the  $\beta$  coefficients for education, the level 2 equations have the following form (Luke 2004):

$$(1b) \quad \beta_{0j} = \gamma_{00} + \sum \gamma_{0m} * C_{mj} + u_{0j}$$

$$(1c) \quad \beta_{1j} = \gamma_{10} + \sum \gamma_{1m} * C_{mj} + u_{1j}$$

$$(1d) \quad \beta_{pj} = \gamma_p$$

The model treats the intercept ( $\beta_{0j}$ ) and education effects ( $\beta_{1j}$ ) as random and the p effects ( $\beta_{pj}$ ) as fixed. The  $\gamma_{0m}$  coefficients then represent the effects of the aggregate variables on the nation-specific level of national pride and the  $\gamma_{1m}$  coefficients represent the effects of the aggregate variables on the country-specific effects of education. I analyze the effect of one aggregate variable at a time, since preliminary analyses show that the level 2 variables strongly influence each other. The error terms in equations 1b and 1c are assumed to be multivariate normally distributed; each with a mean of zero, and non-zero variances and covariances.

### ***Recap of Hypotheses***

On the micro-structural level theorists agree that education influences national identity. Some treat it as strengthening national identity; others consider it a weakening force. Overall, from theoretical and empirical studies it seems that education, on average, tends to reduce national identity. Thus the micro-structural hypotheses state:

**H1null:** There is no association between education of individuals and their levels of national pride.

**H1 alternate:** Education has a statistically significant, negative, effect on national pride across diverse countries.

On the macro-structural level some theories point to economic development as increasing national identity by helping emerging minority elites to get education, mobilize, and spread ideas through new technology. Another set of theories claims that economic development (and other macro-level characteristics) decreases national identity as people's values shift from more



traditional, materialistic values to the post-materialistic ones. Economic development, democratic political institutions, and cultural homogeneity, on average, tend to reduce national identity. The macro-structural hypotheses state:

**H2 null:** There is no association between the levels of aggregate (contextual) variables and the national pride of individuals living in those respective countries.

**H2 alternate:** The average level of aggregate variables in a country influences the level of national pride of individuals living in that country in a statistically significant way. Theoretical framework points to this influence being negative.

On the combined micro/macro level the multilevel approach suggests that education influences national identity differently on differing levels of economic development – education increases national identity where opportunities for educated people are blocked by low economic development, lack of democracy, or cultural divisions, and decreases it in countries where the opportunities for educated people are greater. Thus, the third set of hypotheses states:

**H3 null:** There is no association between the levels of aggregate variables and the effect of education on national pride.

**H3 alternate:** Aggregate-level variables influence the relationship between education and national pride in a statistically significant way. Theoretical framework points to this influence being negative.

### ***CHAPTER III – ANALYSIS: NATIONAL IDENTITY***

In this chapter, I use multilevel analysis to test the hypotheses outlined in the theoretical section of this dissertation. In Chapter II hypothesize that on the micro-level education has an influence on national identity across diverse nations, that on the macro-level higher economic development reduces national identity, and that on the combined micro/macro level economic development pushes the influence of education toward the negative.

In multilevel models individuals are treated as nested within societies, and variations within and across nations thus become apparent. National pride is used as an indicator of national identity, following prior studies (e.g., Gaber 2006). I first test the influence of individual-level characteristics (with focus on education) on national pride. Second, I test the effects of contextual level variables on national pride, and the effects contextual level variables have on the relationship between education as an individual characteristic and national pride.

I use two dependent variables to examine national identity: national pride and national pride scale, a standardized scale created by averaging the national pride variable, the feelings of being a citizen of a nation, and the feelings of belonging to a local community. To assess the influence of education on national identity, education is allowed to vary randomly across countries in the multilevel models, both its intercepts and the slopes. The models assume that there is a cross-level interaction between education and country-level variables. Level 2 variables are allowed to shape the outcome of level 1 (Luke 2004). For my research this means that the models show how country-level (level 2) variables influence the relationship between education and national pride (national pride being level 1 variable). This is due to the nested structure of the relationships studied – individuals are considered as nested within countries and there is an

assumption that country characteristics can influence individual behavior (in this case national pride) as much as other individual factors (Luke 2004).

## Results

Table 1 describes means and sample sizes of the individual- and country-level variables (also referred to as level 2, or contextual, variables) used in the analysis in this chapter.

Variable (Type)	N (Indiv.)	N (Ctry.)	Mean	St. Dev.	Min	Max
<b>Dependent Variables</b>						
National Pride	79,339	56	3.49	.71	1	4
National Pride (composite scale)	80,780	56	-.03	.83	-4.11	1.01
Member of Local Community (used for scale creation)	67,228	47	3.32	.67	1	4
Member of National Community (used for scale creation)	67,791	47	3.50	.61	1	4
<b>Independent Variables (Individual Level)</b>						
Marital Status	82,731	57	.63	.48	0	1
Number of Children	77,692	57	1.92	1.84	0	8
Financial Satisfaction	78,921	57	5.22	2.47	1	10
Religiosity	80,039	57	.70	.46	0	1
Father immigrant	60,501	44	.06	.25	0	1
Mother immigrant	60,568	44	.07	.25	0	1
sex	82,896	57	.48	.50	0	1
Age	82,725	57	41.41	16.48	15	98
Age Squared	82,725	57	1,986.89	1,533.84	225	9,604
Education	82,408	57	5.25	2.50	1	9
Employed	79,652	55	.60	.49	0	1
Savings in the Past Year	72,632	52	2.87	.93	1	4
Income	74,680	55	4.58	2.31	1	10
Social Class	68,901	50	2.61	.97	1	4
<b>Independent Variables (Country Level)</b>						
GDP	82,992	57	16,458.07	13,021.46	1,110	48,393
Human Development Index (HDI)	79,064	55	807.8	154.36	361	968
Democracy (composite scale)	81,740	56	5.51	1.68	1.5	7
Political Rights (used for scale creation)	81,740	56	2.54	1.89	1	7
Civil Liberties (used for scale creation)	81,740	56	2.45	1.52	1	6
Secularity (scale)	81,492	56	-.25	1.01	-1.94	1.96
Self-Expression (scale)	81,492	56	.10	1.06	-1.68	2.35
Ethnic Homogeneity	82,992	57	.61	.24	.22	1
Language Homogeneity	80,265	55	.65	.27	.13	1
Religious Homogeneity	81,772	56	.54	.24	.14	1

**Table 1: Descriptive Statistics of Individual-Level and Country-Level Variables Used in Chapter III Analysis**

The main dependent variable in the analysis is national pride. National pride's values range from 1 to 4 with 4 being the highest (most national pride). National pride as the main dependent variable in the analysis has 79,339 cases in 56 countries.

The second dependent variable is the national pride scale comprised of the following components: national pride scale's values range from -4.11 to 1.01. The components of the scale are:

1. National Pride (as mentioned above).
2. Feelings of being a member of a local community. The "local" component is the answer to the statement: "I see myself as member of my local community" with 1 being "strongly disagree" and 4 being "strongly agree."
3. Feelings of being a citizen of a national community. The "national" variable is an answer to the statement: "I see myself as citizen of the [country] nation," 1 means "strongly disagree" and 4 means "strongly agree."

The item values are reversed from the original dataset so they increase in the same direction as the national pride values. The composite scale has 80,780 cases in 56 countries. However, owing to the relatively small number of cases with the highest values on the national pride variables, the scale skews it to the left.

From independent variables, the variable describing sex has the most cases (82,896), and the GDP has the most cases on the contextual level (82,992), both in 57 countries. On level 1, the least number of cases is observed for the immigrant status of the father of the respondent (60,501 in 44 countries), and on level 2 for the Human Development Index (79,064 in 55 countries).

To preview, the multilevel analyses support the hypotheses outlined in Chapter I. At the micro-structural level education tends to have, on average, a negative influence on national

identity. The theories that posit that education has a positive effect on national identity are not supported overall, but the average may hide diversity across countries. More detailed discussion of this finding is provided in the Discussion and Conclusions section of this chapter.

### **National Pride**

Table 2 presents the results of the multilevel regression of national pride on individual-level characteristics controlling for the GDP. Included in the table are unstandardized coefficients that show the change in national pride for a one unit change in a predictor. The z-ratios are used to determine statistical significance at the 0.05, 0.01, and 0.001 levels. The analyses are run for three different sets of variables and cases. The first model has the most countries and most cases, but fewer individual independent variables. As individual-level variables are added, the numbers of countries and cases decline because of missing values.

<b>National Pride</b>						
	<b>Model 1</b>		<b>Model 2</b>		<b>Model 3</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Sex (Male)	.0038	.76	.0184**	3.48	.0235***	3.83
Married	.0359***	6.36	.0231***	3.71	.0226**	3.13
Employed	-.0136*	-2.33	-.0133*	-2.14	-.0095	-1.31
Age	-.0020*	-2.32	-.0030**	-3.20	-.0032**	-2.91
Age2	.0000***	5.02	.0000***	4.85	.0000***	4.02
Education	-.0141***	-3.92	-.0114**	-3.22	-.0143***	-4.10
Financial Satisfaction	-.0211***	-19.92	-.0199***	-16.53	-.0182***	-12.48
Children			.0078***	4.09	.0089***	3.94
Religiosity			.1316***	20.85	.1330***	17.48
Income			-.0008	-0.58	.0016	0.91
Savings					.0053	1.50
Social Class					.0057	1.46
Father Immigrant					-.0162	-0.83
Mother Immigrant					-.0540**	-2.80
Log GDP	-.1446***	-3.70	-.1214**	-3.13	-.0569	-1.41
Var (_cons)	.0946		.0891		.0827	
Var (residual)	.4052		.3937		.3822	
N (cases)	71,475		62,362		44,526	
N (countries)	53		51		40	
ICC	.2160					
L1 R2	.0128		.0193		.0206	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 2: Coefficients from the 2-Level Regression of National Pride on Individual-Level Characteristics and GDP – Slopes and Intercepts of Education Vary Randomly Across Countries**

Predictors that most clearly and consistently influence national pride are, in the first model, education, satisfaction with one's financial situation, marital status, and age. The gender of the respondent tends not to have a significant effect on national pride. Education, satisfaction with financial situation, employment status, and age all influence national pride negatively.<sup>3</sup> Only being married consistently increases national pride in this model. One standard deviation increase in education decreases the standard deviation of national pride by 0.0480.

In the second model, adding the number of children, religiosity, and income to the equation decreases the number of respondents and countries, but the additional variables do not change the effect of education, being married, financial satisfaction, or age. Being male also becomes significant and has a positive effect on national pride, as does having children and being religious. Income does not have an effect, and GDP has a significant and negative effect on national pride in this model.

In Model 3 adding subjectively determined class, savings in the past year, and having an immigrant mother or father further decreases the number of observations and countries. Being religious and having children mostly increase national pride, as does being male and being married.

In Model 3 GDP does not have a significant effect for the national pride variable. The addition of several variables dilutes the effect of the GDP, possibly because some of them are related to economic conditions of the respondent. Repeating the analysis casewise, in other words, running Model 1 with Model 3 number of cases and Model 1 with Model 2 number of cases, does not change the significances or the coefficients substantially. The coefficients are almost the same. These results indicate that the models are robust and fewer cases do not detract

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<sup>3</sup> The effect of age is curvilinear – negative up to about age 22, then positive. That can be explained by the notion that older people tend to have more traditional values than younger people and national pride is considered a traditional value (Inglehart 1997, Inglehart and Baker 2000).

from the findings, but that perhaps adding more variables has a slightly diluting effect. In the original Model 3 log GDP is on the border of insignificance, in the corresponding casewise model it is barely significant at  $p < .05$ .

Employment, income, savings, and having an immigrant father do not have significant effects; however having an immigrant mother is significant and influences national pride negatively in Model 3. Other outcome variables relating to immigration and attitudes toward immigrants are examined in Chapter V.

The Intra-class Correlation Coefficient as a measure of homogeneity indicates that there is approximately 22 percent of variation in national pride between countries and approximately 78 percent can be attributed to variations within countries. The level 1 r-squared (proportional reduction in individual-level variance) explains how much level 1 variance is explained by level 1 variables. Although the percentages in the models are fairly small, the effects of many of the independent variables are statistically significant. Interestingly, adding children, religiosity, and income into the equation makes bigger difference than the subsequent addition of savings, social class, and the immigrant status of the parents of the respondent.

### ***National Pride Scale***

The results of the multi-level modeling for the national pride scale variable, summarized in Table 3, are in many ways similar to the results of the analyses of national pride. Being male and married and having children increases national pride, as does being religious. Age has a curvilinear effect. Education decreases national pride but is not significant for this dependent variable. Higher income and financial satisfaction decrease national pride, and GDP also lowers national pride and its effect is significant in all three models. One standard deviation increase in education decreases the standard deviation of the national pride scale by 0.020.

Overall, GDP influences the national pride scale variable more strongly than the national pride variable. The effect of education on national pride is significant for the national pride variable, and not significant for the national pride scale variable. More educated people have lower national pride on average, but when national pride is combined with other variables (the feelings of belonging to local or national communities) in the scale, the effect is not as pronounced – it points in the same direction, but is not statistically significant. That implies that educated people might have lower national pride, but could still feel attached to their immediate or national communities.

	National Pride Scale					
	Model 1		Model 2		Model 3	
	b	z	b	z	b	z
Sex (Male)	.0061	1.07	.0250***	4.10	.0248***	3.59
Married	.0485***	7.46	.0375***	5.22	.0388***	4.77
Employed	-.0036	-.53	-.0015	-.21	.0019	.23
Age	-.0017	-1.7	-.0019	-1.75	-.0016	-1.32
Age2	.0001***	5.90	.0001***	4.82	.0001***	3.99
Education	-.0069	-1.82	-.0040	-1.02	-.0041	-1.16
Financial Satisfaction	-.0202***	-16.55	-.0189***	-13.64	-.0159***	-9.66
Children			.0065**	2.97	.0074**	2.92
Religiosity			.1728***	23.83	.1757***	20.61
Income			-.0043**	-2.72	-.0041*	-2.05
Savings					.0090*	2.27
Social Class					.0156***	3.55
Father Immigrant					-.0459*	-2.13
Mother Immigrant					-.0401	-1.87
Log GDP	-.1940***	-4.66	-.1747***	-4.31	-.1272**	-3.18
Var (_cons)	.1062		.0982		.0820	
Var (residual)	.5497		.5315		.4937	
N (cases)	72,811		63,396		45,387	
N (countries)	53		51		40	
ICC	.2025					
L1 R <sup>2</sup>	.0141		.0222		.0249	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 3: Coefficients from the 2-Level Regression of National Pride Expressed as a Composite Scale on Individual-Level Characteristics and GDP – Slopes and Intercepts of Education Vary Randomly Across Countries**

The results for the ICC and the L1R2 for the national pride scale are very similar to the results for the national pride as a separate variable. The Intra-class Correlation Coefficient as a measure of homogeneity indicates that there is approximately 20 percent of variation in national



pride between countries and approximately 80 percent can be attributed to variations within countries. The L1 r-squared (proportional reduction in individual-level variance) explains how much level 1 variance is explained by level 1 variables. Although the percentages in the models are fairly small, the effects of many of the independent variables are statistically significant. Adding children, religiosity, and income into the equation makes bigger difference than the subsequent addition of savings, social class, and the immigrant status of the parents of the respondent.

### ***Interactions***

Overall, higher education and SES make people less nationalistic on average, i.e. they have lower national pride. It is necessary to emphasize that this finding pertains to individuals. The main focus of my work is to explore how the relationship of education and national pride is affected by contextual variables, in other words, variables measured on the level of whole countries. The reasoning behind the consideration of the macro-structural variables is as follows: Each individual, educated, or uneducated, with a high or a low SES also possesses a certain "base" or "background" level of a set of characteristics unique to his or her country, and that set is, statistically speaking, the same for every individual in that particular country.

The micro/macro structural relationship which is the focus of my research must be studied across countries, and can be best expressed statistically by using interaction terms within the multilevel models. Interaction terms reveal how the values of one variable change on different levels of another variable – in the present study those would be the contextual variables of the second level. In one-level models interaction terms can help answer the question how educational levels of individuals differ, for example, for different genders or age groups. In multilevel models the interaction terms can explain how, for example, the effect of education on

national pride is influenced by GDP. The influence can be facilitating (making the relationship in whichever direction more pronounced), or inhibiting.

Democracy is another example of a contextual variable used in an interaction term. Depending on various aspects of democracy (e.g., freedom of speech, free elections, or multiple political parties) each country is assigned a level of democracy represented by a number.<sup>4</sup> While performing the multilevel analyses, the democracy level is considered the same for each individual in that country. To illustrate, Britain has a level of democracy 7 (the highest score), Mexico 6, India 5.5, and China 1.5.

The analyses summarized in Tables 4 through 11 are used to test the hypotheses about how the relationship between education and national pride is influenced by eight aggregate variables (Hypothesis 3): GDP, Human Development Index (HDI), democracy, ethnic, linguistic and religious homogeneity, self-expression, and secularity. The tables also show the average effect of the contextual (level 2) variables on national pride. For clarity and brevity, the tables present only a subset of predictors - other individual variables are not listed, yet are included in the models as shown in Tables 2 and 3 (the same subsets of variables are used for each model).

The number of cases in the multilevel models range from 42,827 cases in 38 countries (for linguistic homogeneity and the national pride variable) to 72,811 cases in 53 countries (for GDP and the national pride scale variable).

### ***Detailed Results for Aggregate Variables***

Each aggregate variable's effect is analyzed separately as to avoid problems with collinearity.

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<sup>4</sup> In my research the democracy variable was created from the civil liberties score and the political rights score (Freedom House 2011).

**GDP**

On average, both GDP and education lower national pride across countries. The addition of the interaction term between education and GDP provides more in-depth explanation of the relationship between education, GDP, and national pride. The cross-interaction term is statistically significant at the 0.001 level and can be interpreted that, following my hypotheses, the negative effect of education on national identity pride is stronger in richer countries; in other words, higher GDP facilitates the negative effect of education on national pride. To illustrate, consider the effect in a very poor country with a GDP of \$500 per person per year, and in a very rich country with a GDP of \$30,000 per person per year. Calculating the predicted effect of education shows that the negative effect is actually 156 percent stronger in the richer country. As shown in Table 4, the coefficient for education in Model 1 is  $b = -.0129$ , and the coefficient for the interaction term between education and log GDP is  $-.0120$ .

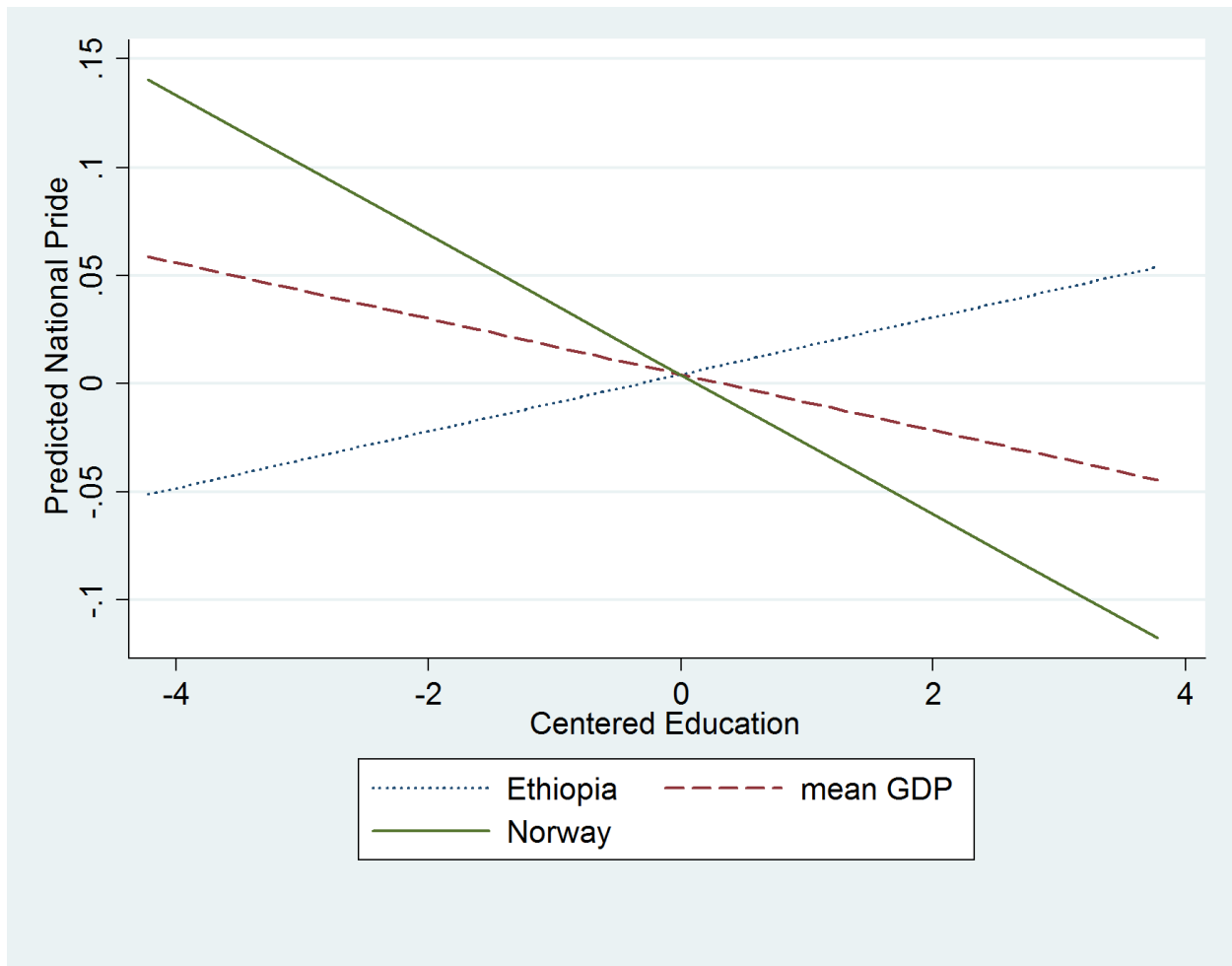
For the composite variable of national pride, the effects and relationship between education, GDP, and national identity are not as consistent, but the direction of the influence is the same. GDP lowers the national pride scale and is significant. The interaction term between GDP and education is significant, and facilitates the negative effect of education on national identity in richer countries. In other words, the negative effect of education on national identity is stronger in countries with higher GDP.

National Pride						
	Model 1: most countries		Model 2: fewer		Model 3: fewest	
	b	z	b	z	b	z
Education	-.0129***	-4.09	-.0106**	-3.36	-.0139***	-4.91
Log GDP	-.1343**	-3.42	-.1257**	-3.24	-.0990*	-2.39
Interaction Term:	-.0120***	-4.16	-.0105***	-3.64	-.0118***	-4.72
Education x Log GDP						
N (cases)	71,475		62,362		44,526	
N (countries)	53		51		40	
National Pride Scale						
	Model 1: most countries		Model 2: fewer		Model 3: fewest	
	b	z	b	z	b	z
Education	-.0058	-1.69	-.0034	-.92	-.0038	-1.22
Log GDP	-.1979***	-4.75	-.1842***	-4.52	-.1636***	-3.95
Interaction Term:	-.0109***	-3.45	-.0096**	-2.84	-.0098***	-3.61
Education x Log GDP						
N (cases)	72,811		63,396		45,387	
N (countries)	53		51		40	
*p< .05	**p< .01	***p< .001				

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 4: Selected Coefficients from Multilevel Regression of National Pride on Education and GDP - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and GDP**

Figure 1 illustrates how the effect of education on national identity differs between a high-GDP and a low-GDP country. The high-GDP country referenced in the graph is Norway (GDP = \$48,393 per capita), and the low-GDP country is Ethiopia (GDP = \$1,110 per capita). The mean GDP is \$15,223 per capita. The graph contains three lines showing that the effect of education on national identity is positive for a low-income country, negative on average, and negative for a high income country.

**Figure1: National Pride by Education and Country GDP**

### **Human Development Index**

An additive effect similar to the effect of the GDP can be seen in Table 5 for the Human Development Index. The HDI facilitates the negative effect of education on national pride. In countries with higher Human Development Index (typically more developed, richer countries) the negative effect of education on national pride is stronger. Both the interaction term's and the HDI's coefficients are also negative and significant for the national pride scale variable.

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0132***	-3.99	-.0106**	-3.20	-.0143***	-4.66
HDI	-.0010***	-3.87	-.0009***	-3.51	-.0007**	-2.64
Interaction Term:						
Education x HDI	-.0001***	-3.87	-.0007**	-3.42	-.0007***	-3.87
N (cases)	67,672		58,778		43,321	
N (countries)	51		49		39	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0057	-1.56	-.0028	-.71	-.0033	-1.00
HDI	-.0014***	-5.52	-.0012***	-5.08	-.0010***	-4.40
Interaction Term:	-.0001**	-2.91	-.0001*	-2.23	-.0000*	-2.27
Education x HDI						
N (cases)	69,008		59,812		44,182	
N (countries)	51		49		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 5: Selected Coefficients from Multilevel Regression of National Pride on Education and HDI - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and HDI**

### **Democracy**

Democracy, on average, reduces feelings of national pride across countries. The effect is stronger in more developed countries. The interaction terms are significant in all models for both dependent variables, allowing the conclusion that higher levels of democracy facilitate the negative effect of education on national pride in more democratic countries as predicted by my hypotheses and theoretical outlines. This is true for both the national pride and the national pride as a composite scale variable.

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0125***	-4.06	-.0104**	-3.34	-.0102**	-3.44
Democracy	-.0527*	-2.07	-.0510*	-2.06	-.0685*	-2.24
Interaction Term:						
Education x Democracy	-.0081***	-4.62	-.0071***	-4.08	-.0087***	-4.74
N (cases)	70,347		61,377		44,526	
N (countries)	52		50		40	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0056	-1.66	-.0033	-.90	-.0003	-.08
Democracy	-.0846**	-3.13	-.0808**	-3.12	-.1031**	-3.22
Interaction Term:	-.0076***	-3.92	-.0064**	-3.08	-.0083***	-4.43
Education x Democracy						
N (cases)	71,683		62,411		45,387	
N (countries)	52		50		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 6: Selected Coefficients from Multilevel Regression of National Pride on Education and Democracy - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Democracy**

### **Secularity**

Table 7 describes the multilevel model that includes the interaction between secularity and education. Secularity on the level of countries is significant and negative, but it shows mixed results for the interaction term; however, even when insignificant, its negative direction supports the hypothesis that in more secular countries the negative influence of education on national pride is stronger. The processes that cause the mixed results might not be reflected fully in this particular multilevel model. Inglehart's secularity and self-expression scales (Inglehart 1997, Inglehart and Baker 2000) have been criticized (Haller 2002) for methodological inconsistencies and they might not be best suited for the examination of the relationship between education and national identity across countries, but even if imperfect, they are necessary to include as expressions of post-materialist values since national pride is a traditional and materialist value, and, therefore, almost an opposite conceptually. Moreover, religiosity as an individual characteristic is statistically significant in all models and raises national pride which points to the

importance of religion for national identity. As for the reasons for the irregular results, secularity as a scale might not reflect, for example, religious diversity, types of denominations, and the size of various religious groups in a given country which are considered important in determining national identity (Kunovich 2006).

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0138***	-3.88	-.0108**	-3.09	-.0139***	-4.29
Secularity (SEC)	-.2669***	-8.73	-.2426***	-7.64	-.2070***	-5.24
Interaction Term:						
Education x SEC	-.0054	-1.50	-.0065	-1.90	-.0091**	-2.76
N (cases)	70,003		60,938		43,234	
N (countries)	52		50		39	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0064	-1.70	-.0036	-.90	-.0037	-1.07
Secularity (SEC)	-.2923***	-7.98	-.2632***	-7.09	-.2332***	-5.54
Interaction Term:						
Education x SEC	-.0049	-1.30	-.0050	-1.27	-.0059	-1.67
N (cases)	71,328		61,963		44,088	
N (countries)	52		50		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 7: Selected Coefficients from Multilevel Regression of National Pride on Education and Secularity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Secularity**

### **Self-Expression**

The possible methodological flaws of Inglehart's scales do not, however, seem to be as determining in the analysis involving self-expression.<sup>5</sup> The interaction terms including self-expression and education are significant in all three models for national pride, and in two out of three models for the national pride scale. These results confirm the hypothesis that in countries with higher self-expression levels there is a stronger negative effect of education on national pride than in countries with lower self-expression levels. Self-expression is a non-traditional, post-materialist characteristic that contrasts with the traditional values associated with national

<sup>5</sup> The correlation between self-expression and secularity is 0.1553.



pride. Educated people in countries with strong self-expression values tend to reject feelings of national pride.

The national pride scale coefficients are negative and significant for the interaction term in two out of the three models, but not for the separate self-expression as an aggregate, macro variable. That suggests, on average, a weak influence of the self-expression scale on the relationship between education and national pride for this variable across countries, albeit still in the predicted direction.

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0133***	-4.15	-.0112**	-3.41	-.0138***	-4.23
Self-Expression Scale (SESc)	.0311	0.69	.0338	.76	.0500	1.04
Interaction Term: EducationxSESc	-.0121***	-4.00	-.0102**	-3.31	-.0088**	-2.78
N (cases)	70,003		60,938		43,234	
N (countries)	52		50		39	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0062	-1.72	-.0040	-1.02	-.0038	-1.09
Self-Expression Scale (SESc)	-.0131	-.26	-.0080	-.16	.0049	.09
Interaction Term: EducationxSESc	-.0100**	-2.96	-.0082*	-2.25	-.0052	-1.56
N (cases)	71,328		61,963		44,088	
N (countries)	52		50		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 8: Selected Coefficients from Multilevel Regression of National Pride on Education and Self-Expression Scale - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Self-Expression Scale**

### **Ethnic Homogeneity**

Ethnic homogeneity lowers national pride in all but the two most complex models with fewest countries and fewest cases where its effect might be diluted by the addition of more independent variables. In general, then, national pride is higher in societies with greater ethnic diversity. The interaction term of education with ethnic homogeneity is negative and statistically

significant in all three models for national pride. That means that higher ethnic homogeneity (or, in other words, lower ethnic diversity), facilitates the negative effect of education on national pride. Thus in countries with few ethnic groups the higher educated people have lower national pride than in more diverse countries where the competition for power, status, or resources can foster stronger group identifications (Bonacich 1972). This finding supports my hypotheses.

The results for the national scale variable are mixed. The ethnic homogeneity variable itself is negative and significant in two out of the three models, but the interaction term is not.

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0134***	-3.89	-.0106**	-3.20	-.0147***	-4.76
Ethnic Homogeneity (EthnoH)	-.6136**	-3.46	-.5409**	-3.10	-.2980	-1.52
Interaction Term:						
EducationxEthnoH	-.0331*	-2.32	-.0366**	-2.70	-.0435***	-3.50
N (cases)	71,475		62,362		44,526	
N (countries)	53		51		40	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0064	-1.74	-.0036	-.92	-.0043	-1.27
Ethnic Homogeneity (EthnoH)	-.0201**	-3.28	-.5797**	-2.90	-.3332	-1.54
Interaction Term:						
EducationxEthnoH	-.6735	-1.67	-.0273	-1.73	-.0202	-1.46
N (cases)	72,811		63,396		45,387	
N (countries)	53		51		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 9: Selected Coefficients from Multilevel Regression of National Pride on Education and Ethnic Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Ethnic Homogeneity**

### **Linguistic Homogeneity**

The results for the aggregate variable of linguistic homogeneity are mixed (analogously, one may think of the lack of linguistic diversity). For the national pride variable in two of the three models its effects are negative and significant; in other words, linguistic homogeneity lowers national pride, possibly due to the lack of competition between groups speaking different

languages (when there are few groups as this result suggests). The interaction term is negative and significant for the national pride variable, but the results for the national pride scale are, again, mixed. The negative effect of education on national pride is thus stronger in more linguistically homogenous countries. In such countries the educated people might feel they have even less competition for jobs and power, because they mostly compete with members of the linguistically same group where the education gives them an advantage to start with. In linguistically more diverse countries there might be several groups, and all could have educated people, so competition within the country, as well as with immigrants, increases.

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0135***	-3.79	-.0110**	-3.14	-.0151***	-4.66
Language						
Homogeneity (LingH)	-.3549*	-2.07	-.3289*	-1.94	-.2355	-1.34
Interaction Term:						
EducationxLingH	-.0312*	-2.40	-.0272*	-2.14	-.0371**	-3.33
N (cases)	69,384		60,450		42,827	
N (countries)	51		49		38	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0069	-1.79	-.0044	-1.09	-.0050	-1.39
Language						
Homogeneity (LingH)	-.4010*	-2.05	-.3502	-1.83	-.2676	-1.39
Interaction Term:						
EducationxLingH	-.0194	-1.38	-.0165	-1.11	-.0179	-1.45
N (cases)	70,580		61,370		43,587	
N (countries)	51		49		38	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 10: Selected Coefficients from Multilevel Regression of National Pride on Education and Language Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Language Homogeneity**

### **Religious Homogeneity**

The results of the analyses including religious homogeneity are the most uneven ones. Although on individual-level religiosity has a significant and positive effect on education, on the country-level religious homogeneity is not significant, and the interaction terms are not

significant for either national pride variable, or the national pride scale variable. From prior literature (Kunovich 2006) it is obvious that the role religion plays in the levels of national pride is very complicated – dependent on the size and number of religions in a country, types of denominations, and other factors. The results of my analysis seem to suggest that religious homogeneity on the country level as one variable does not capture the depth of relationships that are involved.

<b>National Pride</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0141***	-3.85	-.0113**	-3.14	-.0142***	-4.02
Religious Homogeneity (ReligH)	.2192	1.07	.2337	1.14	.1227	.59
Interaction Term:						
Education x ReligH	.0000	.00	-.0047	-.31	-.0126	-.88
N (cases)	70,487		61,498		43,739	
N (countries)	52		50		39	
<b>National Pride Scale</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0071	-1.84	-.0043	-1.06	-.0043	-1.20
Religious Homogeneity (ReligH)	.1859	.79	.1886	.81	.0959	.42
Interaction Term:						
Education x ReligH	-.0004	-.02	-.0008	-.05	-.0135	-.94
N (cases)	71,684		62,419		44,499	
N (countries)	52		50		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 11: Selected Coefficients from Multilevel Regression of National Pride on Education and Religious Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Religious Homogeneity**

To verify the strengths of the results, I ran the multilevel analyses for the Model 1 with Models 2 and 3's cases, respectively. Overall, the results are in line with the original analysis and support my hypotheses. Neither control for other variables nor the smaller sample eliminates the significance of the interaction terms and the results are robust and not sensitive to the changes in sample sizes or to adding variables.

### ***Missing Values***

Variables used in this chapter do not have extraordinarily high levels of missing values; where the numbers of cases and numbers of countries go down, it is because particular batteries of questions were not asked in every country. Such items were used when adding variables to Models 2 and 3, as to obscure the results in the least possible way. However, even with diminished numbers of cases and diminished numbers of countries case-wise analyses show that the lower numbers did not influence the robustness of the results. Future research should consider biases with regard to countries that are being skipped during the World values Surveys.

### ***Discussion***

The hypotheses I present in this dissertation have not been systematically tested before. Existing literature, although addressing similar topics, overwhelmingly uses theoretical approaches, limited-scope comparative analyses, or case studies, but not world-wide samples to determine the relationships between education, national identity, and economic development.

Hypothesis 1: The micro-structural hypothesis. The results of my analyses support the hypothesis that education significantly influences national pride. Education has, on average, a negative effect on the levels of national pride across countries.<sup>6</sup> This finding is consistent with prior studies (Bonacich 1972, Bollen and Medrano 1998, Smith and Kim 2006, and Inglehart 2008). While one cannot say from looking at the statistical results which countries exactly might be possible exceptions (and where education would influence national pride in a positive way), when considering subsequent analyses it is clear that the negative influence of education is more pronounced in developed countries which leaves developing countries with weaker, if any, negative influence of education on national pride as outlined in the theory

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<sup>6</sup> National pride is used as a measure of national identity following prior literature (e.g., Gaber 2006), as outlined in the methods section.

chapter. Although some scholars (Hechter 1987, Hroch 1993) assume a positive effect of education on national pride, my empirical analysis does not support it. The theoretically-described positive effect can be implied, however, indirectly for poorer countries, and it certainly cannot be ruled out entirely.

The results for the national pride scale variable point in the same direction of influence, but they are not consistently significant. As outlined in the results section, the make-up of the scale is the likely cause.

Hypothesis 2: the macro-structural hypothesis. On the micro-structural level, education influences national pride, on average, negatively. On the macro-structural level I observe several different results concerning the aggregate variables. GDP, the Human Development Index, and democracy clearly and strongly support the initial hypothesis. Existing studies, although usually limited in scope, also point in this direction (Inglehart 1970, 1977, 1990, 2008, Bollen and Medrano 1998, Inglehart and Baker 2000, Jones and Smith 2001, and Kunovich 2009). All three macro-structural variables with the most robust results are related to economic development, and/or social development in general, including political and civil liberties. Jones and Smith (2001) and Kunovich (2009) come to similar conclusions on the relationship between democracy and national identity as I do.

The secularity variable also has significant and negative results. Inglehart's secularity and self-expression scales (Inglehart 1997, Inglehart and Baker 2000) have been criticized (Haller 2002) for methodological inconsistencies and they might not be best suited for the examination of the relationship between education and national identity across countries, but even if imperfect, they are necessary to include as expressions of post-materialist values since national pride is a traditional and materialist value, and, therefore, almost an opposite

conceptually. Moreover, religiosity as an individual characteristic is statistically significant in all models and raises national pride which points to the importance of religion for national identity. As for the reasons for the irregular results, secularity as a scale might not reflect, for example, religious diversity, types of denominations, and the size of various religious groups in a given country which are considered important in determining national identity (Kunovich 2006).

The results for ethnic homogeneity are mixed, analogously to Kunovich (2009). Another variable with mixed results is linguistic homogeneity. In theory, ethnic and linguistic fragmentation should reduce national identity by privileging smaller-group cohesion over national identification. My results offer support for this theory in agreement with Jones and Smith (2001) who look at linguistic diversity in Spain, among other factors.

The self-expression scale is not significant on the macro-structural level. At least a partial explanation might be found in Inglehart's (2008) claim that although countries do develop economically in the same direction, their paths are not convergent, but are culturally-dependent. That resonates with the more ambiguous results for aggregate variables related to culture and their connections to national pride that are exhibited in my research, as well as in Kunovich (2009).

My analyses were run separately for each level 2 variable to avoid multicollinearity issues. However, it is interesting to note that in a trial multilevel run that included all contextual variables, or various combinations thereof, the values-related scales (secularity and self-expression scales) had the most consistently statistically significant effects, followed by logged GDP that was on the margin of being significant at  $p=.05$ .

Hypothesis 3: On the combined micro-macro level GDP, HDI, and democracy influence the relationship between education and national pride by pushing it into the negative, in other words, facilitating the negative effect. To summarize:

**GDP:** The interaction term between GDP and education is significant, and is facilitating the negative effect of education on national identity in richer countries. In other words, the negative effect of education on national identity is stronger in countries with higher GDP for both the national pride and the national pride scale variables.

**Human Development Index:** In countries with higher Human Development Index (typically more developed, richer countries) the negative effect of education on national pride is stronger for both national pride and the national pride scale variables.

**Democracy:** The level of democracy also facilitates the negative effect of education on national pride in more democratic countries as predicted by my hypotheses and theoretical outlines. This is true for both the national pride and the national pride as a composite scale variable.

**Secularity:** Secularity shows mixed results for the interaction term; however, its negative direction supports the hypothesis that in more secular countries the negative influence of education on national pride is stronger, at least for the national pride variable. The interaction term is not significant for the national pride scale.

**Self-Expression:** The interaction term including self-expression and education is significant in all three models for national pride, and in two out of three models for the national pride scale. That means that in countries with higher self-expression levels there is a stronger negative effect of education on national pride. These findings are consistent with Inglehart's classification and theoretical framework on materialist and post-materialist values. Increased



education and financial satisfaction decrease national pride, reflecting the fact that, as Inglehart says, people with those characteristics do not need to worry about their material survival as much, and creativity, freedom, and self-expression become more important to them.

**Ethnic Homogeneity:** The interaction term of education with ethnic homogeneity is negative and statistically significant in all three models for the national pride variable. Thus in countries with few ethnic groups the higher educated people have lower national pride than in more diverse countries where the competition for power, status, or resources can foster stronger group identifications (Bonacich 1972). The results for the national scale variable are mixed.

**Linguistic Homogeneity:** The interaction term is negative and significant for the national pride variable, but the results for the national pride scale are, again, mixed. The negative effect of education on national pride is stronger in more linguistically homogenous countries.

**Religious Homogeneity:** The interaction terms are not significant for either national pride variable. From prior literature (Kunovich 2006) it is obvious that the role religion plays in the levels of national pride is very complicated – dependent on the size and number of religions in a country, types of denominations, and other factors. The results of my analysis seem to suggest that religious homogeneity on the country level as one variable does not capture the depth of relationships that are involved.

Existing literature on the topic of national identity usually does not take into account multiple levels of the factors that influence it with a few notable exceptions (Bollen and Medrano 1998, Inglehart 2008, Kunovich 2009). Inglehart (2008) provides an explanation of the shift from traditional, or materialist, values, of which national pride is an example, to post-materialist values, represented in my analysis by the secularity and self-expression scales on level 2. My results fit in well with Inglehart's assumptions that the level of economic

development influences value-shifts in society because my analyses suggest that higher GDP pushes the education's effect on national pride toward the negative in countries on higher level of economic development. Inglehart's studies on values are quantitative yet he does not employ a multilevel analysis, but rather a combination of comparative research, cohort analysis, and an examination of trends (Inglehart 2008).

Although Bollen and Medrano (1998) employ multilevel analysis in their study of national identity on the level of different regions in Spain, and not on cross-national data, my results (in the areas where our research overlaps) are very similar to theirs. The authors report that on the individual level, education lowers national identity; and on the second regional level, there is a negative, statistically significant effect of the interaction term between education and levels of economic development on the attachment to Spain.

The main limitation of my study is the fact that not all countries of the world participate in the World Values Surveys, and of those who do, not every question is asked in every country which limits the number of countries available for analysis. Thus out of the 195 independent states in the world (Department of State 2011) the data for my analysis was available for only 57. On the other hand, that number is higher than for most of other cross-national studies, especially considering the topic.

## ***Conclusions***

In this chapter I have shown that people's national identity is influenced by micro and macro-structural factors, and that certain aggregate variables, especially those related to the levels of economic development, human development, and democracy, have a facilitating (additive) effect on the negative influence of education on national pride that pushes this relationship even more into the negative territory for wealthier, more developed nations. Thus

the influence of GDP, HDI, and democracy on the relationship between education and national identity is predictable across nations.

The existing theoretical views on the positive influence of education on national pride are not supported, yet are impossible to dismiss at this point because with careful consideration there are patterns in the statistical examinations that seem to suggest that for poorer countries the possible positive influence of education on national pride weakens the overall negative effect for the national pride scale variable.

I recommend that future research concentrates on deeper assessments of the roles of cultural (ethnic, linguistic, religious, and materialistic and post-materialistic values-oriented) macro-structural factors that can provide fine-tuning of the predictions for the above mentioned relationships. Multilevel modeling is an excellent tool to do so.

## ***CHAPTER IV – ANALYSIS: ETHNIC AND CIVIC COMPONENTS OF NATIONAL IDENTITY***

In this chapter, I compare the results of the analyses from Chapter III to analyses for different dependent variables that express the two dimensions of national identity – ethnic and civic, and for national identity in itself (as a combined variable). The method used is analogous to the method used in Chapter III, except for the number of dependent variables (three instead of two). First, I consider the effects of education on all three variables of national identity, then the effects of the eight country-level characteristics on national identity, and, finally, the effects of these macro-structural variables on the relationship between education and national identity using multilevel models with interactions included. This process deepens the understanding of conceptual relationships that exist between education, national identity, and the country-level characteristics.

Many social scientists employ the ethnic and civic categories in describing the national identity content. The distinct concepts of the ethnic and the civic components of national identity were first introduced by Kohn (1944) who was writing about different types of national identity and nationalism in the countries of Eastern and Western Europe. Since then the strictly geographical understanding of these terms has been blurred and the concepts are generally understood as present in countries, groups, and people at the same time in various degrees (Smith 1991, Hobsbawm [1990] 1992, Jones and Smith 2001, Pehrson, Vignoles, and Brown 2009, Meeus et al. 2010). Thus the ethnic / civic distinctions are not mutually exclusive and can coexist within one country (Hjerm 1998, Pehrson, Vignoles, and Brown 2009).

The ethnic (ascriptive) component of national of national identity describes common ancestry of a group of people and/or the importance they place on it. Smith (1992, 1998) derives

national identification of the ethnic kind (which he privileges) from his own concept of ancient "ethnies" in his ethno-symbolic perspective. Overall, the ethnic dimension of national identity is usually approached on the basis of exclusion – for example when people are not sharing common ancestry with the national group, they can never become a part of it. The exclusion/inclusion principle comes from social psychology and its concepts of in-groups and out-groups as relating to collective identity (Tajfel 1982, Turner 1985, Tajfel and Turner 1986). Extending these ideas to national identity results in the exclusion / inclusion dichotomy (Meeus et al. 2010, Pehrson and Green 2010), and the defining of the ethnic and civic components of national identity as ascriptive or, respectively, voluntaristic.

The voluntaristic or civic dimension can be explained as behavior and attitudes that people can influence – such as following laws and customs of their country or national group, or an adopted country. The civic form or dimension of national identity emphasizes inclusion that can be achieved regardless of one's ancestry. Many Western industrialized nations exemplify this concept by allowing people not born in the country to become naturalized citizens.

The different forms of national identity – ethnic and civic – may respond differently to education and economic development than national identity expressed by national pride alone, as examined in Chapter III. While existing literature indicates that education lowers national identity in general, many social scientists point out that with regard to the ethnic and civic dimensions, educated people (assuming greater cognitive skills) favor the civic form of national identity over the ethnic one (Bollen and Medrano 1998, Jones and Smith 2001, Kunovich 2009). Jones and Smith also relate the preference for the civic content to higher levels of economic development, and Kunovich (2009) confirms this result and adds higher levels of democracy to contextual variables shifting the preferences to the civic form.

I hypothesize that education influences the ethnic and civic components of national identity separately and together; on average the relationship should be negative, and weaker for the civic form. However, this effect can vary depending on contextual variables: higher economic development, human development and democracy should lower national identity, but more so for the ethnic than the civic dimension.

## Results

Table 12 describes means and sample sizes of the individual- and country-level variables used in the analysis in this chapter.

Variable (Type)	N (Indiv.)	N (Ctry.)	Mean	St. Dev.	Min	Max
<b>Dependent Variables</b>						
Ethnic Component of NI (composite scale)	61,753	45	2.05	.78	1	3
Civic Component of NI (composite scale)	61,956	45	2.55	.52	1	3
National Identity (composite scale)	62,247	45	2.31	.53	1	3
Importance of Ancestry (used in scales)	61,150	45	2.01	.85	1	3
Importance of Being Born in Country (used in scales)	59,315	44	2.10	.84	1	3
Importance of Following Customs (used in scales)	61,521	45	2.40	.70	1	3
Importance of Respecting Laws (used in scales)	61,753	45	2.71	.53	1	3
<b>Independent Variables (Individual Level)</b>						
Marital Status	82,731	57	.63	.48	0	1
Number of Children	77,692	57	1.92	1.84	0	8
Financial Satisfaction	78,921	57	5.22	2.47	1	10
Religiosity	80,039	57	.70	.46	0	1
Father immigrant	60,501	44	.06	.25	0	1
Mother immigrant	60,568	44	.07	.25	0	1
Sex	82,896	57	.48	.50	0	1
Age	82,725	57	41.41	16.48	15	98
Age Squared	82,725	57	1,986.89	1,533.84	225	9,604
Education	82,408	57	5.25	2.50	1	9
Employed	79,652	55	.60	.49	0	1
Savings in the Past Year	72,632	52	2.87	.93	1	4
Income	74,680	55	4.58	2.31	1	10
Social Class	68,901	50	2.61	.97	1	4
<b>Independent Variables (Country Level)</b>						
GDP	82,992	57	16,458.07	13,021.46	1,110	48,393
Human Development Index (HDI)	79,064	55	807.8	154.36	361	968
Democracy (composite scale)	81,740	56	5.51	1.68	1.5	7
Political Rights (used for scale creation)	81,740	56	2.54	1.89	1	7
Civil Liberties (used for scale creation)	81,740	56	2.45	1.52	1	6
Secularity (scale)	81,492	56	-.25	1.01	-1.94	1.96
Self -Expression (scale)	81,492	56	.10	1.06	-1.68	2.35
Ethnic Homogeneity	82,992	57	.61	.24	.22	1
Language Homogeneity	80,265	55	.65	.27	.13	1
Religious Homogeneity	81,772	56	.54	.24	.14	1

**Table 12: Descriptive Statistics of Individual-Level and Country-Level Variables Used in Chapter IV Analysis**

The dependent variables are the ethnic and the civic components of national identity and the combined national identity variable. All three dependent variables are scales and their values range from 1 to 3 (with 3 being the highest national identity). The ethnic and civic component scales each contain two items based on the answer to the question:

In your opinion, how important should the following be as requirements for somebody seeking citizenship of your country? Specify for each requirement if you consider it as very important, rather important, or not important:

- a. Having ancestors from my country
- b. Being born on my country's soil
- c. Adopting the customs of my country
- d. Abiding by my country's laws

Items a) and b) are used to create the ethnic dimension of national identity; items c) and d) its civic dimension. Additionally, I use a combined dependent variable called national identity that includes all four items. Cronbach's alphas (unstandardized items) are as follows: Ethnic: 0.8241, civic: 0.5967, combined (national identity): 0.6837. The ethnic component of national identity scale has 61,753 cases in 45 countries, the civic component 61,956 cases in 45 countries, and the combined national identity variable has 62,247 cases in 45 countries.

It is evident from Table 12 that the civic component of the national identity has the highest mean (2.55) and is the strongest across the nations in my sample. National identity as a composite scale follows (2.31); the ethnic component is the weakest (2.05). Based on these values one can speculate that education and the contextual variables might not have as much effect on the civic component of the national identity as on the other two dependent variables because most people strongly agree on them.

For independent variables, the variable describing sex has the most cases (82,896), and the GDP has the most cases on the contextual level (82,992), both in 57 countries. On level 1, the



least number of cases is observed for the immigrant status of the father of the respondent (60,501 in 44 countries), and on level 2 for the Human Development Index (79,064 in 55 countries).

The analyses are run for three different sets of variables and cases. The first model has the most countries and cases, but fewer independent variables. As individual-level variables are added, the numbers of countries and cases decline because of missing values. The first model includes basic demographic variables: sex, marital status, employment status, age (and age squared), education (as the independent variable), and satisfaction with the financial status of the household in the past year. In the second model the number of children, religiosity, and income are added. For the third model savings (or lack thereof), subjectively determined social class, and immigrant status of the respondent's parents are also considered.

To preview, the results of the multilevel analyses support the hypotheses outlined in Chapter I and in the beginning of this chapter. Education tends to have, on average, a negative influence on the measures of national identity. The theories that posit that education has a positive effect on national identity are not supported overall, but the average may hide diversity across countries. GDP facilitates the negative effect of education on national identity for the ethnic component of national identity, and for national identity as a combined scale. Other contextual variables show mixed results. Ethnic homogeneity also facilitates the negative effect of education; in other words, in countries that are more ethnically homogenous education influences national identity more negatively than in countries that are diverse. Ethnic diversity can be considered as increasing national identity, as outlined in Bonacich (1972). The results for the civic component of national identity also support my hypotheses that the ethnic and the civic dimensions of national identity are influenced differently by education and that their relationship to education is affected differently by the contextual variables – because the civic component is

stronger to start with, the overall negative influence in the above described relationships is weaker.

### ***Ethnic Component of National Identity***

Table 13 describes the additive results of the multilevel regression of the ethnic component of national identity on individual-level characteristics controlling for the GDP. Included in the table are unstandardized coefficients that show the change in national identity for a one unit change in a predictor. The z-ratios are used to determine statistical significance at the 0.05, 0.01, and 0.001 levels. The analyses are run for three different sets of variables and cases. The first model has the most countries and most cases, but fewer individual independent variables. As individual-level variables are added, the numbers of countries and cases decline because of missing values.

<b>Ethnic Component of National Identity</b>						
	<b>Model 1</b>		<b>Model 2</b>		<b>Model 3</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Sex (Male)	-.0011	-.18	.0085	1.37	.0090	1.37
Married	-.0027	-.41	-.0072	-.98	-.0081	-1.05
Employed	-.0209**	-3.05	-.0159*	-2.17	-.0192*	-2.45
Age	-.0040***	-3.92	-.0045***	-4.06	-.0056***	-4.71
Age2	.0001***	4.72	.0001***	4.51	.0001***	5.14
Education	-.0359***	-8.44	-.0317***	-8.13	-.0305***	-7.52
Financial Satisfaction	-.0033**	-2.66	-.0064***	-4.53	-.0070***	-4.43
Children			.0062**	2.71	.0049*	1.99
Religiosity			.0834***	10.95	.0813***	9.97
Income			-.0066***	-4.02	-.0022	-1.16
Savings					-.0039	-1.04
Social Class					-.0117**	-2.78
Father Immigrant					-.0324	-1.58
Mother Immigrant					-.0205	-1.00
Log GDP	-.2134***	-6.05	-.2060***	-5.68	-.2010***	-5.75
Var (_cons)	.0636		.0651		.0638	
Var (residual)	.4546		.4491		.4447	
N (cases)	58,649		51,180		44,723	
N (countries)	44		42		40	
ICC	.2312					
L1 R <sup>2</sup>	.0165		.0194		.0185	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 13: Coefficients from the Multilevel Regression of the Ethnic Component of National Identity on Individual-Level Characteristics and GDP – Slopes and Intercepts of Education Vary Randomly Across Countries**

In the first model being employed, being educated, and being financially satisfied all decrease the values of the ethnic component of national identity and are statistically significant. Age has a curvilinear effect – at first negative and later positive, and GDP has a significantly negative effect. The results are similar for the second model except people with greater number of children appear more nationalistic, which is also true for those who are more religious. Income decreases ethnic national identity and is statistically significant. In Model 3 income and savings are not significant (perhaps several variables related to economic status dilute each other's effects), but belonging to a higher social class decreases ethnic national identity. Being religious, having more children, and older age increase the ethnic component of the national identity in this model. One standard deviation increase in education decreases the standard deviation of the ethnic component of national identity by 0.1144.

Sex and marital status are not significant in any of the three models; and education and GDP have statistically significant and negative effect in all three models. That means that people in richer countries tend to, on average, have lower ethnic national identity. These groups of people tend to also be younger, employed, and less religious, and belong to a higher (self-reported) social class. In Model 3 adding social class dilutes or replaces the effect of income on the ethnic component of national identity.

The Intra-Class Correlation Coefficient as a measure of homogeneity indicates that there is approximately 23 percent of variation in the ethnic component of national identity between countries and approximately 77 percent can be attributed to variations within countries. The level 1 r-squared (proportional reduction in individual-level variance) explains how much level 1 variance is explained by level 1 variables. Although the percentages in the models are fairly small, the effects of many of the independent variables are statistically significant. Perhaps

because of the different number of countries and cases, adding children, religiosity, and income into the equation makes bigger difference than the subsequent addition of savings, social class, and the immigrant status of the parents of the respondent.

### ***Civic Component of National Identity***

The results for the civic component of the national identity, described in Table 14, are slightly different from the results for the ethnic component, but the effect of education stays the same – it is negative and statistically significant, even though the coefficients are much smaller for the civic component than there are for the ethnic component, as expected. That implies that with higher levels of education the civic component of national identity goes lower. However, the effect of the GDP, although in the predicted direction, is not statistically significant. The effect of religiosity is always negative and significant, as it is in the previous models.

Satisfaction with financial situation of the household is lowering the civic national identity in all three models. Overall, the effects of education on the civic component of national identity are less well predicted than the effects on the ethnic one and on the combined one. The ICC is lower, at .066, meaning countries differ less, and there are more variables that are not statistically significant.

Civic Component of National Identity						
	Model 1		Model 2		Model 3	
	b	z	b	z	b	z
Sex (Male)	.0249	.58	.0136**	2.94	.0126*	2.53
Married	.0127**	2.59	.0082	1.50	.0118*	2.03
Employed	.0016	.32	.0027	.50	.0099	1.64
Age	.0013	1.69	.0004	.51	-.0001	-.16
Age2	8.3406	1.05	.0000	1.36	.0000	1.85
Education	-.0059**	-2.64	-.0049*	-2.12	-.0062*	-2.51
Financial Satisfaction	-.0025**	-2.67	-.0034**	-3.20	-.0035**	-2.94
Children			.0027	1.59	.0031	1.71
Religiosity			.0619***	10.93	.0594***	9.72
Income			-.0035**	-2.86	-.0050**	-3.48
Savings					-.0027	-.94
Social Class					.00123***	3.90
Father Immigrant					-.00142	-.92
Mother Immigrant					-.0035	-.23
Log GDP	-.0239	-1.31	-.0213	-1.18	-.0220	-1.21
Var (_cons)	.0172		.0164		.0171	
Var (residual)	.2525		.2500		.2510	
N (cases)	58,585		51,379		44,851	
N (countries)	44		42		40	
ICC	.0660					
L1 R <sup>2</sup>	.0063		.0082		.0082	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 14: Coefficients from the Multilevel Regression of the Civic Component of National Identity Scale on Individual-Level Characteristics and GDP – Slopes and Intercepts of Education Vary Randomly Across Countries**

Since the civic component of national identity indicates how important the respondents think it is to follow laws and customs while granting citizenship, it seems that for more educated people the civic component does not decrease as much as the ethnic component – i.e., this group of people might consider that following the laws and customs, a voluntary behavior, more important in determining citizenship than being born in the country or having ancestors from the country (which are ascriptive characteristics and cannot be changed by the person applying for citizenship). In essence, higher education lowers the feelings of the importance of the ethnic component more than that of the civic component. One standard deviation increase in education decreases the standard deviation of the civic component of national identity by 0.0282.

Being religious has a positive effect on the civic component of national identity and it is statistically significant. The logged GDP is not statistically significant, but the direction of the

results is as predicted – negative; in other words, countries' higher GDP lowers the civic component of national identity. Employment status, number of children and savings in the past year do not have a significant effect, either.

The Intra-Class Correlation Coefficient as a measure of homogeneity indicates that there is approximately 7 percent of variation in the civic national identity between countries and approximately 93 percent can be attributed to variations within countries. The level 1 r-squared (proportional reduction in individual-level variance) explains how much level 1 variance is explained by level 1 variables. Although the percentages in the models are fairly small, the effects of many of the independent variables are statistically significant. Adding children, religiosity, and income into the equation makes bigger difference than the subsequent addition of savings, social class, and the immigrant status of the parents of the respondent.

### National Identity – Combined

The results for the combined national identity variable are in Table 15.

	National Identity (Combined)					
	Model 1		Model 2		Model 3	
	b	z	b	z	b	z
Sex (Male)	.0005	.12	.0107*	2.44	.0107*	2.30
Married	.0043	.93	-.0004	-.07	.0014	.25
Employed	-.0089	-1.85	-.0063	-1.22	-.0049	-.88
Age	-.0013***	-1.80	-.0020**	-2.48	-.0028**	-3.35
Age2	.0000***	3.91	.0008***	3.82	.0000***	4.56
Education	-.0211***	-7.44	-.0186***	-6.74	-.0185***	-6.48
Financial Satisfaction	-.0027**	-3.06	-.0047***	-4.64	-.0050***	-4.47
Children			.0048**	2.98	.0043*	2.49
Religiosity			.0718***	13.35	.0697***	12.10
Income			-.0049***	-4.23	-.0035*	-2.58
Savings					-.0030	-1.11
Social Class					.0001	.04
Father Immigrant					-.0249	-1.72
Mother Immigrant					-.0115	-.80
Log GDP	-.1169***	-5.33	-.1111***	-4.98	-.1106***	-5.05
Var (_cons)	.0238		.0235		.0228	
Var (residual)	.2288		.2254		.2236	
N (cases)	58,836		51,558		44,963	
N (countries)	44		42		40	
ICC	.1605					
L1 R <sup>2</sup>	.0156		.0195		.0184	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 15: Coefficients from the Multilevel Regression of the National Identity (Combined) on Individual-Level Characteristics and GDP – Slopes and Intercepts of Education Vary Randomly Across Countries**

The combined national identity variable shows stronger effects than the civic component alone, and very similar results to those of the ethnic component. Overall, age, education, and satisfaction with financial situation influence national identity negatively in all three models, and higher income also lowers national identity in the last two models. Religiosity, being male, and having greater number of children increase national identity. One standard deviation increase in education decreases the standard deviation of the national identity combined by 0.1005. GDP has a statistically significant and negative effect in all models. Being married, being employed, having savings in the past year, and belonging to a higher social class do not show as significant in this set of models. Having an immigrant mother or father also does not seem to make a

difference. My macro-structural hypothesis is strongly supported by the above described results which indicate that national identity is lower in countries on higher levels of economic development.

The Intra-Class Correlation Coefficient as a measure of homogeneity indicates that there is approximately 16 percent of variation in the civic national identity between countries and approximately 84 percent can be attributed to variations within countries. The level 1 r-squared (proportional reduction in individual-level variance) explains how much level 1 variance is explained by level 1 variables. Although the percentages in the models are fairly small, the effects of many of the independent variables are statistically significant. Adding children, religiosity, and income into the equation makes bigger difference than the subsequent addition of savings, social class, and the immigrant status of the parents of the respondent.

### ***Second-Level Variables with Interactions***

Tables 16 through 23 lay out the results of the multilevel analyses with the interaction terms included. Level 2 variables used are the same as in Chapter III: GDP, HDI, democracy, self-expression, secularity, and ethnic, linguistic, and religious homogeneity. The interaction terms include education times each of the level 2 variables, but each interaction term is added to a separate model. As explained in Chapter III, studying micro/macro structural relationship across countries requires not only multilevel models, but also models that include cross-level interaction terms to represent differences across countries in the slopes or effects of the individual determinants. Different countries have varying levels of GDP, democracy, and other macro-structural characteristics. The macro-structural factors can then facilitate or inhibit the effect of education on national identity. The tables illustrate the testing of the hypotheses on the combined micro/macro level about how the relationship between education and national identity



is influenced by country-level (aggregate) factors. The tables summarize the results and do not include complete sets of predictors (as shown in Table 13, Table 14, and Table 15), but the models used in the analysis do include all individual variables.

The number of cases in the multilevel models range from 42,960 in 38 countries (for Model 3 of the ethnic component and language homogeneity) to 58,836 in 44 countries (for Model 1 of the national identity as a combined variable and democracy as the contextual variable).

## Detailed Results for Aggregate Variables

Each aggregate variable's effect is analyzed separately to avoid problems with collinearity.

### GDP

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0355***	-8.88	-.0317***	-8.52	-.0304***	-7.89
Log GDP	-.2286***	-6.40	-.2213***	-5.99	-.2240***	-6.14
Interaction Term: Education x Log GDP	-.0091*	-2.45	-.0070*	-2.05	-.0073*	-2.11
N (cases)	58,349		51,180		44,723	
N (countries)	44		42		40	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0058**	-2.66	-.0049*	-2.17	-.0061*	-2.53
Log GDP	-.0188	-1.00	-.0143	-.77	-.0150	-.79
Interaction Term: Education x Log GDP	-.0029	-1.46	-.0030	-1.46	-.0026	-1.23
N (cases)	58,585		51,379		44,851	
N (countries)	44		42		40	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0209***	-7.79	-.0186***	-7.04	-.0185***	-6.75
Log GDP	-.1197***	-5.46	-.1135***	-5.09	-.1150***	-5.23
Interaction Term: Education x Log GDP	-.0059*	-2.36	-.0049*	-2.02	-.0048	-1.96
N (cases)	58,836		51,558		44,963	
N (countries)	44		42		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 16: Selected Coefficients from Multilevel Regression of National Identity on Education and GDP - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and GDP Included**

Both GDP and education lower national identity across countries. Adding interaction term into the multilevel models draws out additional details about this relationship. The interaction term between education and GDP is significant at the 0.001 level for the ethnic and combined national identity, but not for the civic component of national identity. This can be a consequence of the logged GDP not being significant at the macro-structural level for the civic component. The lack of a significant interaction suggests that, for the civic component, more

educated people are similarly less nationalistic in richer as poorer countries. The construction of the civic component scale might also contribute to this result – the civic component includes the importance of the willingness to follow the laws and customs of the new country in order to be granted citizenship.

Calculating the predicted levels of national identity in a country with a GDP of \$500/year and for the GDP of \$30,000/year yields the following results: the negative effect of education on national identity is 141 percent stronger in richer countries for the ethnic component of national identity, and 142 percent stronger in richer countries for the national identity as combined variable. The effects of the civic component are not statistically significant.

### **Human Development Index**

Table 17 describes the results of the multilevel analyses with the Human Development Index as the aggregate variable. The results are inconsistent. The effects of education on the ethnic component and the combined national identity scale are significant, but not for the civic component of national identity (although pointing in the predicted direction in all models). The same is true for the effects of HDI. The interaction terms are not significant in any models. These results suggest that the influence of education and the HDI on national identity do not vary across different countries. Higher education and higher HDI lower national identity, but HDI does not have a facilitating effect on the relationship between education and national identity.

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0356***	-8.42	-.0317***	-8.10	-.0304***	-7.48
HDI	-.0014***	-5.93	-.0014***	-5.51	-.0014***	-5.47
Interaction Term:						
Education x HDI	-.0000	-1.65	-.0000	-1.29	-.0000	-1.31
N (cases)	57,127		49,964		43,518	
N (countries)	43		41		39	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0062	-2.83	-.0053	*	-.0065**	-2.67
HDI	-.0002	.143	-.0001		-.0001	-1.14
Interaction Term:						
Education x HDI	-.0000	.189	-.0000	-1.03	-.0000	-.95
N (cases)	57,363		50,163		43,646	
N (countries)	43		41		39	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0211***	-7.52	-.0188***	-6.80	-.0187***	-6.52
HDI	-.0008***	-5.37	-.0007***	-4.88	-.0007***	-4.93
Interaction Term:						
Education x HDI	-.0000	-1.71	-.0000	-1.31	-.0000	-1.29
N (cases)	57,614		50,342		43,758	
N (countries)	43		41		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 17: Selected Coefficients from Multilevel Regression of National Identity on Education and Human Development Index - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and HDI Included**

**Democracy**

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0354***	-8.64	-.0316***	-8.33	-.0297***	-7.59
Democracy	-.1154***	-3.98	-.1102***	-3.77	-.1293***	-4.13
Interaction Term:						
Education x Democracy	-.0050	-1.92	-.0038	-1.62	-.0048	-1.89
N (cases)	58,349		51,180		44,723	
N (countries)	44		42		40	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0057**	-2.61	-.0048*	-2.11	-.0058*	-2.39
Democracy	-.0164	-1.30	-.0156	-1.26	-.0189	-1.36
Interaction Term:						
Education x Democracy	-.0018	-1.35	-.0019	-1.34	-.0022	-1.42
N (cases)	58,585		51,379		44,851	
N (countries)	44		42		40	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0208***	-7.62	-.0185***	-6.90	-.0180***	-6.53
Democracy	-.0639***	-3.81	-.0607***	-3.67	-.0713***	-4.04
Interaction Term:						
Education x Democracy	-.0034**	-1.98	-.0028	-1.69	-.0035 *	-1.97
N (cases)	58,836		51,558		44,963	
N (countries)	44		42		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 18: Selected Coefficients from Multilevel Regression of National Pride on Education and Democracy - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Democracy Included**

When examining countries with varying degrees of democracy, the results are similar to those for the Human Development Index. The interaction terms point in the predicted direction, but are significant only for the combined national identity variable. The negative effect of education is significant in all models. Democracy does not seem to facilitate the negative effect of education on national identity.

**Secularity and Self-Expression**

Tables 19 and 20 describe the multilevel analyses for the values-related level 2 variables, secularity and self-expression. Both of them are scales from the World Values Survey data.

There does not appear to be a consistent effect of country-level secularity or self-expression on

national identity, except in the case of the civic component of national identity where self-expression actually facilitates the negative effect of education on the civic portion of national identity. In countries where the overall level of self-expression is higher, the negative effect of education on the civic component of national identity is stronger. This effect, although statistically significant, is, however, not very strong and countered by the generally insignificant interactions.

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0366***	-8.47	-.0321***	-8.18	-.0306***	-7.51
Secularity	-.2753***	-7.11	-.2733***	-7.23	-.2831***	-7.28
Interaction Term:						
Education x Secularity	-.0014	-.31	-.0027	-.69	-.0040	-.95
N (cases)	56,923		49,800		43,466	
N (countries)	43		41		39	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0060**	-2.70	-.0052*	-2.21	-.0062*	-2.47
Secularity	-.0320	-1.59	-.0191	-.95	-.0164	-.77
Interaction Term:						
Education x Secularity	-.0024	-1.02	-.0019	-.82	-.0024	-.97
N (cases)	57,136		49,977		43,575	
N (countries)	43		41		39	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0215***	-7.52	-.0188***	-6.80	-.0186***	-6.46
Secularity	-.1528***	-6.80	-.1455***	-6.52	-.1490***	-6.47
Interaction Term:						
Education x Secularity	-.0023	-.79	-.0028	-.99	-.0036	-1.22
N (cases)	57,385		50,155		43,687	
N (countries)	43		41		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 19: Selected Coefficients from Multilevel Regression of National Pride on Education and Secularity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Secularity Included**

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0365***	-8.77	-.0326***	-8.41	-.0314***	-7.72
Self-Expression	-.1722***	-3.77	-.1675***	-3.54	-.1805***	-3.73
Interaction Term:						
Education x						
Self-Expression	-.0072	-1.77	-.0044	-1.17	-.0041	-1.04
N (cases)	56,923		49,800		43,466	
N (countries)	43		41		39	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0062**	-2.92	-.0055**	-2.48	-.0066**	-2.74
Self-Expression	.0208	1.10	.0210	1.11	.0215	1.08
Interaction Term:						
Education x						
Self-Expression	-.0047*	-2.26	-.0048*	-2.22	-.0049*	-2.12
N (cases)	57,136		49,977		43,575	
N (countries)	43		41		39	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0216***	-7.87	-.0193***	-7.12	-.0191***	-6.74
Self-Expression	-.0697*	-2.50	-.0669*	-2.36	-.0727*	-2.51
Interaction Term:						
Education x						
Self-Expression	-.0054*	-2.02	-.0040	-1.54	-.0040	-1.47
N (cases)	57,385		50,155		43,687	
N (countries)	43		41		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 20: Selected Coefficients from Multilevel Regression of National Pride on Education and Self-Expression - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Self-Expression Included**

### **Ethnic Homogeneity**

In Table 21, ethnic homogeneity shows slightly mixed, but not wholly inconsistent, results for the interaction term with education. Only one coefficient in this set of equations is not statistically significant (the interaction term of education and ethnic homogeneity for the most countries and the ethnic component). Higher educated people have, on average, lower levels of national identity for the ethnic component of national identity, but higher ethnic homogeneity (i.e., lower diversity) facilitates the negative effect of education on national identity. That means that higher educated people in more ethnically homogenous countries have lower national

identity than higher educated people in more ethnically diverse countries. In other words, educational differences in national identity are larger in ethnically homogenous than in diverse countries. The results are similar for the civic component of national identity, although the coefficients are smaller and the effects weaker. The combined national identity is also negatively influenced by education and the effect facilitated by higher ethnic homogeneity

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0356***	-8.58	-.0314***	-8.39	-.0302***	-7.82
Ethnic Homogeneity	-.6370**	-3.11	-.6278**	-3.08	-.6550**	-3.16
Interaction Term:						
Education x Ethnic Homogeneity	-.0282	-1.61	-.0318*	-2.07	-.0347*	-2.21
N (cases)	58,349		51,180		44,723	
N (countries)	44		42		40	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0056**	-2.63	-.0046*	-2.11	-.0059*	-2.57
Ethnic Homogeneity	-.1047	-1.24	-.0607	-.72	-.0575	-.66
Interaction Term:						
Education x Ethnic Homogeneity	-.0219*	-2.48	-.0224*	-2.52	-.0246**	-2.68
N (cases)	58,585		51,379		44,851	
N (countries)	44		42		40	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0208***	-7.77	-.0183***	-7.15	-.0182***	-7.00
Ethnic Homogeneity	-.3877**	-3.36	-.3622**	-3.18	-.3736**	-3.23
Interaction Term:						
Education x Ethnic Homogeneity	-.0281*	-2.50	-.0299**	-2.85	-.0322**	-3.05
N (cases)	58,836		51,558		44,963	
N (countries)	44		42		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 21: Selected Coefficients from Multilevel Regression of National Pride on Education and Ethnic Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Ethnic Homogeneity Included**

### **Language Homogeneity**

Table 22 examines the influence of language homogeneity as the contextual variable. The results are as predicted for the ethnic component of national identity and for the national identity as the combined variable, but mixed and largely not significant for the civic component, even



though they still point in the predicted direction. The coefficients are greatest for the ethnic component, as the civic component likely weakens the overall national identity results.

In countries with higher language homogeneity (one or a few prevailing languages; lower diversity), more educated people have lower levels of national identity, especially regarding its ethnic component than people in countries with greater linguistic diversity. The results for both the ethnic and the linguistic homogeneity variables support my hypotheses, based on the split labor market theory (Bonacich 1972). In countries with greater linguistic diversity the competition within the country, as well as with (possibly educated) immigrants, is more intense. This means that educational differences in national identity are largest in more homogenous countries.

The comparisons between the results for the ethnic homogeneity and for the language homogeneity as the aggregate variables justify the separate analysis of each of these variables – although close, the results are not the same, and while it is common to use various ethno-linguistic fragmentation indexes, in this particular case two separate variables make more sense, because the ethnic and linguistic homogeneity contextual variables do not produce the exact same results.

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0361***	-8.79	-.0324***	-8.64	-.0315***	-8.04
Language Homogeneity	-.5574**	-3.10	-.5418**	-2.96	-.6176**	-3.38
Interaction Term: Education x Language Homogeneity	-.0329*	-2.25	-.0310*	-2.35	-.0304*	-2.23
N (cases)	56,175		49,204		42,960	
N (countries)	42		40		38	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0058*	-2.53	-.0051*	-2.16	-.0066*	-2.63
Language Homogeneity	-.1267	-1.78	-.1035	-1.46	-.1128	-1.51
Interaction Term: Education x Language Homogeneity	-.0105	-1.31	-.0090	-1.09	-.0085	-.097
N (cases)	56,399		49,388		43,076	
N (countries)	42		40		38	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0212***	-7.71	-.0191***	-7.10	-.0193***	-6.92
Language Homogeneity	-.3496***	-3.49	-.3301**	-3.29	-.3756***	-3.72
Interaction Term: Education x Language Homogeneity	-.0231*	-2.37	-.0217*	-2.29	-.0207*	-2.13
N (cases)	56,644		49,564		43,185	
N (countries)	42		40		38	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 22: Selected Coefficients from Multilevel Regression of National Pride on Education and Language Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Language Homogeneity Included**

### **Religious Homogeneity**

The results for religious homogeneity in Table 23 are inconsistent. Education, on average, does lower national identity, but its effect seems to be the same across nations, because the interaction terms are not significant. On the individual-level, religiosity consistently increases national identity; but on the country level, the religious homogeneity does not suggest clear connections. Kunovich (2006) in his analysis of Christianity and national identity in Europe stresses that relationships between national identification and religion are complex and dependent not only on the number of religions or denominations in a country, but also on types

of denominations and other factors. Thus the information my study uses for religious homogeneity on the country level appears to be insufficient to fully examine how religious homogeneity influences the relationship between education and national identity.

<b>Ethnic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0369***	-8.71	-.0325***	-8.35	-.0314***	-7.73
Religious Homogeneity	.2192	.99	.1982	.86	.1819	.76
Interaction Term:						
Education x Religious Homogeneity	.0086	.49	-.0054	-.34	-.0028	-.017
N (cases)	57,273		50,247		43,869	
N (countries)	43		41		39	
<b>Civic Component of National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0058*	-2.59	-.0049*	-2.12	-.0063*	-2.58
Religious Homogeneity	-.0684	-.84	-.0426	-.52	-.0553	-.63
Interaction Term:						
Education x Religious Homogeneity	-.0138	-1.53	-.0153	-1.65	-.0149	-1.52
N (cases)	57,498		50,432		43,986	
N (countries)	43		41		39	
<b>National Identity</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0216***	-7.58	-.0190***	-6.90	-.0190***	-6.69
Religious Homogeneity	.0610	.48	.0610	.47	.0470	.35
Interaction Term:						
Education x Religious Homogeneity	-.0039	-.33	-.0114	-1.01	-.0100	-.85
N (cases)	57,743		50,608		44,095	
N (countries)	43		41		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 23: Selected Coefficients from Multilevel Regression of National Pride on Education and Religious Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Religious Homogeneity Included**

## Discussion

In this chapter I examine the influence of education on national identity while distinguishing the varied content of the national identity concept – its ethnic and civic dimensions, and the national identity as a combined variable. While some scholars approach national identity as a homogenous concept, others (Hjerm 1998, Bollen and Medrano 1998, Jones and Smith 2001, Kunovich 2009) distinguish its ethnic and civic components. Shulman (2002) adds a cultural component, but Kunovich (2009) finds that empirically this third

component cannot be confirmed as separate. The literature on the ethnic and civic components of national identity acknowledges that education lowers national identity overall, and that educated people tend to favor the civic form of national identity over its ethnic form (Bollen and Medrano 1998, Jones and Smith 2001, Kunovich 2009). I hypothesized that while education should lower the ethnic component of national identity significantly, its effect on the civic form of national identity would be weaker, and the negative effect on the overall national identity as a combined variable would be stronger than on that of the civic one, but weaker than on that of the ethnic one.

The analytical results support my hypotheses that a) on the micro-structural level higher education, on average, lowers national identity across countries, b) on the macro-structural level greater economic development and related components of social development decrease national identity, and c) on the micro/macro level countries with more advanced economic development and higher ethnic and linguistic homogeneity facilitate the negative effect of education on national identity.

The results of the analyses in this chapter are robust and hold for varied sample sizes and varied control variables. The results of my analyses are double-checked by running the multilevel models with various numbers of cases – Model 1 with Model 2's cases and Model 3's cases, respectively. The results do not change substantively. Neither controlling for more variables nor smaller samples eliminate the significance of the interaction terms which suggests that the results are robust.

### ***Missing Values***

There are higher levels of missing values my analyses in Chapter IV than in Chapter III. The questions on granting citizenship were asked in a more limited number of countries in the

Fifth Wave of the World Values Survey. Even with these limitations the number of countries is around 40, which is sufficient for multilevel analysis, and the countries are diverse enough for a meaningful analysis. Within the number of countries that were surveyed there are not extraordinary amounts of missing data, and running the analyses with lower numbers of countries and cases does not influence the robustness of the results.

### ***Theoretical Implications***

Hypothesis 1: The micro-structural hypothesis. The results for the relationship of education and national identity confirm the results from Chapter III (with the consideration that in this chapter the ethnic and the civic components of national identity are examined separately and together). Higher education tends to lower both the ethnic and the civic forms of national identity, and their combined form, as well. This negative effect of education is statistically significant for all three variables in all three models (of various sample sizes – nine models total); however, the coefficients are highest for the ethnic form of national identity, followed by the combined national identity, and lowest for the civic form. The results support my hypothesis and the theoretical framework outlined in Chapter 1. According to many theorists (Bonacich 1972, Bollen and Medrano 1998, Inglehart 1970, 1977, 1990, 2008) more educated people have lower levels of national identity due to the increase in their cognitive skills, higher post-materialist values, and better position to compete on the market of labor. This is especially true for the ethnic form of national identity, which is lowered most by the education of individuals, as it is related to ascribed characteristics, i.e. ancestry and being born in the country. Education might be lowering the civic form the least because this component relates to achieved, voluntary (non-exclusionary) characteristics, and people capable of achieving those characteristics might pose a certain threat to educated/ high SES people due to their ability to

compete. The work of Kunovich (2009), Jones and Smith (2001), Hjerem (1998) and Bollen and Medrano (1998) indicates that more educated people favor the civic form of national identity over the ethnic forms, and that seems to be the case here, as well. Pehrson and Green (2010) describe reactions to immigrants that are more hostile when the ethnic component of national identity is considered, but less so when the civic one is. Michael Hechter's (1987, 2000) and Miroslav Hroch's (1993) arguments that education increases national identity are not supported. Quite possibly it can be true in some countries, but in the cross-national average such effects are not discernible other than possibly weakening the negative effects of education.

Hypothesis 2: the macro-structural hypothesis. On the macro-structural level the results are mixed, but my basic hypothesis is supported: aggregate variables related to development and democracy (GDP, HDI, and democracy) do, on average, lower national identity. However, the coefficients are statistically significant for the ethnic component of national identity and the national identity as a combined variable only, and not for the civic component. This is an interesting outcome that implies that there is something about the civic form of national identity that is not influenced by the levels of the contextual variables in the sampled countries.

Conceptually, the biggest difference between the ethnic and the civic dimension of national identity is that the civic dimension is voluntaristic, and the ethnic one is ascribed. It is plausible the residents of the countries in my sample, on average, consider the civic dimension more important, and so the aggregate variables do not lower it as much as the ethnic dimension. The outcomes for the combined national identity variable then reflect this pattern. This reasoning is in agreement with Kunovich (2009) who finds that higher economic development and democracy lead to higher values of the civic dimension of national identity, even as both of these country-level variables lower national identity overall. Jones and Smith (2001) come to the conclusion

that economic development lowers national identity, but that more development also means higher civic forms of national identity.

Similar patterns as for the economic development, human development, and democracy can be seen also for secularity, self-expression, ethnic homogeneity, and linguistic homogeneity. These contextual variables' coefficients all show as statistically significant and lowering the ethnic and the combined dimensions of national identity, but not its civic component. These results follow previously cited literature, for example Inglehart (1970, 1977, 1990, 2008) for the secularity and self-expression. As Inglehart theorizes, national identity is a traditional value that is lower in more secular countries and in countries where people strive for self-expression and not solely for material survival any more. People living in countries that are ethnically and linguistically less diverse (i.e., have higher homogeneity) have lower ethnic component of national identity and national identity overall, perhaps because, as Bonacich (1972) suggests, they do not experience as much competition for resources from varied ethnic and linguistic groups.

Religious homogeneity does not significantly affect national identity. I see the main issue with religious homogeneity as an aggregate variable to be the lack of information on the type of religions in each country and relative incomparability of the effects of various religions on people's values. To explain, religions and spiritual outlooks definitely influence people's values, opinions, and behaviors, but the mere information on a number of religions present in a country cannot account for all their effects. On an individual-level, religiosity is statistically significant in lowering national identity consistently in all models; but on a country level, the number of religions does not provide enough information. As previously noted, this result agrees with

Kunovich's (2006) study on the effect of religions in European countries on national identification.

In a trial multilevel run that included all contextual variables except HDI (that is too highly intercorrelated with GDP) the most consistent statistically significant effects are shown for linguistic homogeneity, secularity, self-expression (all three for the ethnic component of national identity), democracy and self-expression (civic), and democracy, linguistic homogeneity, and secularity (for the national identity combined). All of the coefficients are negative, except for the civic form and self-expression. Obviously, there are issues with multicollinearity in the equation containing all second-level variables, but it is interesting to look at these relationships at least in a cursory way.

Hypothesis 3: The micro/macro hypothesis. On the micro/macro level the GDP, and the ethnic and linguistic homogeneity are most consistent in facilitating the negative effect of education on national identity (on all three dependent variables for the ethnic homogeneity, and on the ethnic component and the combined national identity variables only for the GDP and the linguistic homogeneity), and the results for the rest of the contextual variables are mixed. To summarize:

**GDP:** GDP facilitates the negative effect of education on the ethnic component of national identity and for national identity as a combined variable. This result means that more educated people in richer countries have lower national identity than educated people in poorer countries. This finding is consistent with Ronald Inglehart's (1970, 1977, 1990, 2008) theoretical framework on values. In richer, typically more developed, countries more educated people do not care as much about traditional values of which national identity is one expression. Insofar as the differences between ethnic and civic dimensions of national identity go, the ethnic dimension can



be considered as the more traditional of the two, drawing overwhelmingly on history, collective memory and tradition, while the civic dimension reflects more modern conceptions of state-defined national identity that came to be with the rise of the industrial society and modernism.

**Human Development Index:** For the Human Development Index the results are inconsistent. The interaction terms are not significant in models for any of the three dependent variables (the ethnic component, the civic component, and the national identity overall). In other words, the HDI does not facilitate the negative effect of education on national identity (even though on the macro-structural level the Human Development Index lowers national identity for the ethnic and the combined variables). The items that the HDI is composed of seem to dilute the additive effect of the GDP on national identity.

**Democracy:** Democracy as a contextual variable exhibits mixed results. In two out of three models for the national identity as a combined variable the interaction terms are significant but not for the ethnic or the civic components separately. More educated people in more democratic countries (than in countries with lower levels of democracy) have lower levels of national identity overall, but they do not seem to care for the distinction between the ethnic and the civic forms of it.

**Secularity and Self-Expression:** The results for these value-related variables are mixed. The interaction terms are mostly not significant, except in one case: the self-expression on the country-level facilitates the negative effect of education on the civic component of national identity. This result indicates that in countries with higher levels of self-expression more educated people have lower levels of the civic form of national identity than people in countries with lower self-expression levels (typically poorer, less-developed countries).

**Ethnic Homogeneity:** Ethnic homogeneity facilitates the negative effect of education on national identity in eight out of the nine models considered for the three dependent variables. More educated people in more ethnically homogenous countries (less ethnically diverse) have lower levels of national identity than educated people in more diverse countries. An argument can be made that in such countries more educated people possibly face greater competition for resources (status, power, economic opportunities) since there are more ethnic groups that can include educated elites, and/or educated immigrant groups resulting from the "brain drain" processes. This type of a speculative argument resonates with the theories of Miroslav Hroch (1993) about nationalist processes in countries with several ethnic groups, and with Edna Bonacich's split labor market theory (1972).

**Linguistic Homogeneity:** Linguistic homogeneity results exhibit similar, but not identical, characteristics as the results for the ethnic homogeneity. The interaction terms are significant for the ethnic component and for the national identity overall, but not for its civic component. Since in many (albeit not all) countries the ethnic and the linguistic make-up of the population are closely related, theoretical connections mentioned in the preceding paragraph also apply here.

**Religious Homogeneity:** On the country-level the religious homogeneity variable does not exhibit clear connections with national identity, nor does it significantly influence the relationship between education and national identity. Similarly to Kunovich (2006) I am not able to determine these processes solely from the information on the number or religions without additional information.

The main limitation of the analysis in this Chapter is, similarly to Chapter III, the limited number of countries in my sample because for financial and logistical reasons not all countries

are included in the World Values Surveys. On the other hand, no other study I am aware of has as many countries in its sample as mine does. The World Values Survey's batteries of items relevant to the ethnic and the civic dimensions of national identity were asked in 45 countries in its fifth wave out of approximately 195 countries in the world (Department of State 2011).

## **Conclusion**

This chapter of my dissertation shows how different components of national identity (ethnic and civic) and national identity in general are influenced by micro-structural and macro-structural factors. To examine these relationships in detail I use dependent variables that are different from the dependent variables used in Chapter III.

The results of the analyses in Chapter IV confirm the results from Chapter III, but also deepen the understanding of the conceptual relationships that exist between national identity, education, and various contextual (country-level) factors. Education lowers both ethnic and civic components of national identity, and this influence is more pronounced for the ethnic component, and for national identity overall. The civic component is not as strongly negatively influenced because per existing literature (Bollen and Medrano 1998, Jones and Smith 2001, Kunovich 2009) more educated people favor the civic component over the ethnic one.

On the micro/macro level the clearest and strongest results pertain to the aggregate variable of ethnic homogeneity – the statistically significant results for all three dependent variables show that in countries that are less diverse ethnically, more educated people have lower national identity in general, and also have lower the ethnic and civic components of national identity than more educated people in countries that are more ethnically diverse.

The facilitating effect is consistent across all analytical models used. This result supports Bonacich's (1972) split labor market theory and Hroch's (1993) theories on the emerging

minority elites. Both of these theoretical frameworks point to the importance of labor market and power competition on the level of the educated groups in society. Linguistic homogeneity has similar, although not identical, effects – the exception being the civic form of national identity which, even though not significant, still points in the predicted direction. This is not an unexpected result because in many countries ethnic and linguistic groups are closely related. However, the slightly differing results indicate that the decision to study the two characteristics separately, and not as one index, was the correct one.

Economic development has an additive effect on the negative influence of education on national identity, as well, but it is only statistically significant for the ethnic component and for the national identity overall. More educated people in richer countries have lower national identity than more educated people in poorer countries. Although the results for the civic form of national identity are not statistically significant, they still point in the predicted direction.

In closing, the influence of GDP and ethnic and linguistic homogeneity on the relationship between education and the varied contents of national identity and on national identity in general is predictable across nations. The meaning of national identity is complex and, as I have shown, when expressed by different variables, the examination of the complexity can tell a more nuanced story on the levels of individuals and countries, and also while examining individuals as being part of their respective countries with unique characteristics each.

Future research would make a fascinating addition to the story of national identity by focusing on the role of religion in the complex relationships between national identification and contextual variables, especially with a more detailed consideration of the types of religions and religious denominations present in individual countries. Kunovich (2006) makes a significant

contribution concerning Europe and Christianity, but a large-scale multilevel examination of this topic is as of yet missing.

## ***CHAPTER V – EXPANDED TEST OF THE THEORY: PREFERENCES FOR RESTRICTIVE IMMIGRATION POLICIES***

In the analytical Chapters III and IV I examined the effects of education on national identity and found support for my theory. The results are statistically significant and conclusions clear, yet a full test of the theory also demands testing of how the results relate to "real" life and people's direct behavioral consequences. For example, attitudes toward immigration can directly translate general views on national identity into specific policies and political controversies. In this chapter I address the effect of education on the preferences for restrictive immigration policies. I reason that education influences national identity as described in previous chapters, and that education, in extension, also has an effect on people's policy preferences related to the national identity issues. Thus the abstract theoretical concepts and results for national identity can be extended to a more concrete outcome.

The World Values Survey contains the following item related to the preferences for restrictive immigration policies:

How about people from other countries coming here to work. Which one of the following do you think the government should do?

- a. Let anyone come who wants to?
- b. Let people come as long as jobs are available?
- c. Place strict limits on the number of foreigners who can come here?
- d. Prohibit people coming here from other countries?

My analyses in this chapter use this item as a dependent variable that expresses people's preferences for restrictive immigration policies. The values range from 1 (the weakest preference for restrictive policies) to 4 (the strongest preference for restrictive policies). Analytical runs analogous to those in the previous chapters are used to examine how education influences preferences for restrictive immigration policies, how macro-level (country-level) variables affect

these preferences, and how the country-level, or contextual, variables influence (facilitate or inhibit) the relationship between education and the preferences for restrictive immigration policies.

The literature on the relationships between education and restrictive immigration policies is surprisingly scarce, especially if one considers studies in some way related to national identity. Based on my analyses in Chapters III and IV and theoretical framework, I expect that education on the micro-, individual, level will influence the preferences for restrictive immigration negatively; in other words, that more educated people will favor less restrictive immigration policies on average. Empirically, this influence is found, for example, in Quillian (1995) or in Kunovich (2009). On the macro- level, where contextual variables enter into the equations, the relationships get interesting. Existing literature (Quillian 1995, Hjerm 2003, Pehrson, Vignoles, and Brown 2009, Pehrson and Green 2010, and Kunovich 2009) suggests that people in more developed countries with higher GDP have, overall, stronger preferences for restrictive immigration policies. Following the above empirical studies I expect that preferences for restrictive immigration policies will be higher in higher GDP countries. Theoretically, one may draw on Blumer's (1958) concept that threat relates to group privileges, and thus groups (nations) with greater privileges will feel more threatened by the perceived possibility of losing them to immigrants.

I anticipate that the results for the multilevel models with the cross-level interactions will be similar to the results of the cross-level interactions for the national identity variables examined in Chapters III and IV. As shown in the theoretical outline for this chapter, attitudes toward immigrants are related to national identity and I expect education to have a stronger negative effect in richer countries. The test of the interaction hypothesis in this chapter is more

stringent than in preceding chapters because, unlike for national identity, the preferences for restrictive immigration policies on the macro-structural level are stronger in high income countries.

## Results

Table 24 describes means and sample sizes of the individual and country-level variables used in this chapter.

Variable (Type)	N (Indiv.)	N (Ctry.)	Mean	St. Dev.	Min	Max
<b>Dependent Variable</b>						
Restrictive Immigration Policy	68,193	51	2.46	.85	1	4
<b>Independent Variables (Individual Level)</b>						
Marital Status	82,731	57	.63	.48	0	1
Number of Children	77,692	57	1.92	1.84	0	8
Financial Satisfaction	78,921	57	5.22	2.47	1	10
Religiosity	80,039	57	.70	.46	0	1
Father immigrant	60,501	44	.06	.25	0	1
Mother immigrant	60,568	44	.07	.25	0	1
Sex (Male)	82,896	57	.48	.50	0	1
Age	82,725	57	41.41	16.48	15	98
Age Squared	82,725	57	1,986.89	1,533.84	225	9,604
Education	82,408	57	5.25	2.50	1	9
Employed	79,652	55	.60	.49	0	1
Savings in the Past Year	72,632	52	2.87	.93	1	4
Income	74,680	55	4.58	2.31	1	10
Social Class	68,901	50	2.61	.97	1	4
<b>Independent Variables (Country Level)</b>						
GDP	82,992	57	16,458.07	13,021.46	1,110	48,393
Human Development Index (HDI)	79,064	55	807.8	154.36	361	968
Democracy (composite scale)	81,740	56	5.51	1.68	1.5	7
Political Rights (used for scale creation)	81,740	56	2.54	1.89	1	7
Civil Liberties (used for scale creation)	81,740	56	2.45	1.52	1	6
Secularity (scale)	81,492	56	-.25	1.01	-1.94	1.96
Self-Expression (scale)	81,492	56	.10	1.06	-1.68	2.35
Ethnic Homogeneity	82,992	57	.61	.24	.22	1
Language Homogeneity	80,265	55	.65	.27	.13	1
Religious Homogeneity	81,772	56	.54	.24	.14	1

**Table 24: Descriptive Statistics of Individual-Level and Country-Level Variables Used in Chapter V Analysis**

The mean for the dependent variable Preferences for Restrictive Immigration Policies is 2.46. There are 68,193 cases available for analysis in 51 countries. For the rest of the variables the number of countries and the number of cases is the same as in preceding chapters: For



independent variables, the variable describing sex has the most cases (82,896), and the GDP has the most cases on the contextual level (82,992), both in 57 countries. On level 1, the least number of cases is observed for the immigrant status of the father of the respondent (60,501 in 44 countries), and on level 2 for the Human Development Index (79,064 in 55 countries).

As previously stated, the analyses are run for three different sets of variables and cases. The first model has the most countries and cases, but fewer independent variables. As individual-level variables are added, the numbers of countries and cases decline because of missing values. The first model includes basic demographic variables: sex, marital status, employment status, age (and age squared), education (as the independent variable), and satisfaction with the financial status of the household in the past year. In the second model the number of children, religiosity, and income are added. For the third model savings (or lack thereof), subjectively determined social class, and immigrant status of the respondent's parents are also considered.

To preview, the results of the multilevel analyses support my hypotheses. Education has, on average, a negative effect on the preferences for the restrictive immigration policies which means that more educated people favor less restrictive immigration policies. On the macro level economic development increases the tendency to favor restrictive immigration policies. On the micro/macro level GDP and other development-related and values-related variables facilitate the negative influence of education on the preferences for restrictive immigration policies. The results for the culture-related variables on the country level are mixed.

### ***Preferences for Restrictive Immigration Policies and GDP***

Table 25 describes the additive results of the multilevel regression of the restrictive immigration policies on individual-level characteristics controlling for the GDP. Included in the table are unstandardized coefficients that show the change in restrictive immigration policies for

a one unit change in a predictor. The z-ratios are used to determine statistical significance at the 0.05, 0.01, and 0.001 levels.

Preferences for Restrictive Immigration Policies						
	Model 1		Model 2		Model 3	
	b	z	b	z	b	z
Sex (Male)	-.017**	-2.71	-.0213**	-3.12	-.0187*	-2.44
Married	.0065	.91	.0085	1.05	.0147	1.63
Employed	.0049	.66	.0097	1.21	.0103	1.13
Age	.0028*	2.51	.0028*	2.25	.0021	1.51
Age2	-.0000	-1.63	-.0000	-1.68	-.0000	-.83
Education	-.0303***	-7.13	-.0251***	-6.14	-.0221***	-4.57
Financial Satisfaction	.0122***	8.99	.0079***	5.09	.0079***	4.35
Children			.0024	.96	.0011	.39
Religiosity			.0296***	3.56	.0325**	3.46
Income			-.0114***	-6.39	-.0063**	-2.87
Savings					-.0054	-1.23
Social Class					-.0256***	-5.26
Father Immigrant					-.0701**	-2.96
Mother Immigrant					.0141	.60
Log GDP	.1137**	2.80	.1109**	2.61	.1083**	2.45
Var (_cons)	.0878		.0919		.0932	
Var (residual)	.5942		.5932		.5826	
N (cases)	63,884		56,311		43,880	
N (countries)	49		47		40	
ICC	.1442					
L1 R <sup>2</sup>	.0010		.0110		.0110	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 25: Coefficients from the Multilevel Regression of the Preferences for Restrictive Immigration Policies on Individual-Level Characteristics and GDP – Slopes and Intercepts of Education Vary Randomly Across Countries**

On the individual level, being male slightly decreases the preferences for restrictive immigration policies, as does having higher income and being in higher self-reported social class. Having an immigrant father also decreases the restrictive immigration policies. All the above mentioned effects are statistically significant. The individual-level variables that increase the preferences restrictive immigration policies are being religious and satisfaction with financial situation. The results for age are inconsistent although the direction of this relationship is positive. One standard deviation increase in education decreases the standard deviation of the preferences for restrictive immigration policies by 0.0880. On the macro level, higher GDP increases the preferences for restrictive immigration policies.

The Intra-Class Correlation Coefficient as a measure of homogeneity indicates that there is approximately 14 percent of variation in the preferences for restrictive immigration policies and approximately 86 percent can be attributed to variations within countries. The level 1 r-squared (proportional reduction in individual-level variance) explains how much level 1 variance is explained by level 1 variables. Although the percentages in the models are small, the effects of many of the independent variables are statistically significant.

### ***Second-Level Variables with Interactions***

Tables 26 through 33 describe the results of the multilevel analyses with the interaction terms included. Level 2 variables used are the same as in Chapters III and IV: GDP, HDI, democracy, self-expression, secularity, and ethnic, linguistic, and religious homogeneity. The interaction terms include education times each of the level 2 variables, but each interaction term is added to a separate model. As explained in Chapter III, studying micro/macro structural relationship across countries requires not only multilevel models, but also models that include cross-level interaction terms to represent differences across countries in the slopes or effects of the individual determinants. Different countries have varying levels of GDP, democracy, and other macro-structural characteristics. The macro-structural factors can then facilitate or inhibit the effect of education on the preferences for restrictive immigration policies. The tables illustrate the testing of the hypotheses on the combined micro/macro level about how the relationship between education and the preferences for restrictive immigration policies is influenced by country-level (aggregate) or, in other words, contextual, factors. The tables summarize the results and do not include complete sets of predictors (as shown in Table 25), but the models used in the analysis do include all individual variables.

The number of cases in the multilevel models range from 42,173 in 38 countries (for Model 3 and language homogeneity) to 63,883 in 49 countries (for Model 1 and GDP and also for Model 1 and ethnic homogeneity).

### ***Detailed Results for Aggregate Variables***

Each aggregate variable's effect is analyzed separately to avoid problems with collinearity.

#### ***GDP***

<b>Preferences for Restrictive Immigration Policies</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0296***	-8.87	-.0251***	-7.49	-.0221***	-5.82
Log GDP	.1229**	3.03	.1247**	2.95	.1249**	2.83
Interaction Term:						
Education x Log GDP	-.0175***	-5.52	-.0154***	-4.90	-.0173***	-5.12
N (cases)	63,884		56,311		43,880	
N (countries)	49		47		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 26: Coefficients from Multilevel Regression of the Preferences for Restrictive Immigration Policies on Education and GDP - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and GDP Included**

Education, on average, lowers the preferences for restrictive immigration policies, but GDP raises them. This is in agreement with existing literature and my hypotheses. Adding the interaction term changes the dynamic somewhat; it seems that even though as a separate macro-variable the GDP increases the preferences for restrictive immigration policies, in the cross-interaction term it actually facilitates the negative effect of education on the preferences for restrictive immigration policies. This means that in richer countries more educated people have lower preferences for restrictive immigration policies, on average, than more educated people in less developed countries. From a theoretical perspective rich countries probably get more immigrants, and also the relative difference between the wealth and position of the immigrants and the native inhabitants are much larger. Poorer countries likely do not have immigration of

similar magnitude as do the more developed countries, the differences between the existing population and immigrants might not be as great, and the threat not as pronounced. Education, GDP, and their interaction terms are statistically significant in all three models.

Calculating the predicted levels of the preferences for restrictive immigration policies in a country with a GDP of \$500 per year and for the GDP of \$30 thousand per year yields the following results: the negative effect of education on the preferences for restrictive immigration policies is 152 percent stronger in richer countries.

### **Human Development Index**

Table 27 describes the results of the multilevel analyses with the Human Development Index as the aggregate variable. The results are fairly consistent and statistically significant for both education and the interaction term, but mixed for the HDI (only in one model out of three is the coefficient statistically significant). Again, the same pattern emerges as it did for the GDP – education decreases the preferences for restrictive immigration policies, HDI increases them, and in the interaction term HDI facilitates the negative effect of education on the preferences for restrictive immigration policies. Since HDI includes a substantial economic development portion, this is not surprising. The significance of the interaction terms is important since it supports the main hypothesis of this dissertation.

<b>Preferences for Restrictive Immigration Policies</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0286***	-8.17	-.0240***	-6.90	-.0211***	-5.10
HDI	.0006*	1.96	.0006	1.93	.0006	1.82
Interaction Term:						
Education x HDI	-.0001***	-4.72	-.0001***	-4.07	-.0001***	-3.77
N (cases)	62,661		55,096		42,676	
N (countries)	48		46		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 27: Coefficients from Multilevel Regression of Preferences for Restrictive Immigration Policies on Education and Human Development Index - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and HDI Included**

### **Democracy**

The next contextual variable that is considered is democracy. Since economic development, human development, and democracy often go hand in hand, I expect the results of the multilevel analyses to be similar for this particular variable. Table 28 describes the results.

<b>Preferences for Restrictive Immigration Policies</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0288***	-7.33	-.0241***	-6.27	-.0185***	-4.31
Democracy	.0277	.96	.0255	.85	.4282	1.23
Interaction Term:						
Education x Democracy	-.0082**	-3.42	-.0070**	-3.05	-.0104***	-3.77
N (cases)	62,724		55,298		43,880	
N (countries)	48		46		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 28: Coefficients from Multilevel Regression of the Preferences for Restrictive Immigration Policies on Education and Democracy - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Democracy Included**

When examining countries with varying degrees of democracy, the results are similar to those for the Human Development Index. The interaction terms point in the predicted direction, and are significant. The negative effect of education is significant in all models. Democracy as a separate macro-structural variable increases the preferences for restrictive immigration policies, but the coefficients are not significant. That means that although the levels of democracy vary across countries, these variations do not significantly influence the people's preferences for restrictive immigration policies. The coefficients for the interaction terms are negative and significant in all three models and indicate that educated people in more democratic countries have lower preferences for restrictive immigration policies than educated people in countries with lower levels of democracy. Thus democracy facilitates the negative effect of education on the preferences for restrictive immigration policies.

### **Secularity and Self-Expression**

Table 29 and 30 describe the multilevel analyses for the values-related level 2 variables, secularity and self-expression. Both of them are scales from the World Values Survey data.

Preferences for Restrictive Immigration Policies						
	Model 1: most countries		Model 2: fewer		Model 3: fewest	
	b	z	b	z	b	z
Education	-.0286***	-7.52	-.0232***	-6.49	-.0192***	-4.70
Secularity	.0107	.23	.0158	.34	.0175	.31
Interaction Term:						
Education x Secularity	-.0140***	-3.78	-.0143***	-4.21	-.0186***	-4.51
N (cases)	62,509		54,980		42,667	
N (countries)	48		46		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 29: Coefficients from Multilevel Regression of Preferences for Restrictive Immigration Policies on Education and Secularity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Secularity Included**

Preferences for Restrictive Immigration Policies						
	Model 1: most countries		Model 2: fewer		Model 3: fewest	
	b	z	b	z	b	z
Education	-.0297***	-7.54	-.0250***	-6.44	-.0214***	-4.65
Self-Expression	.0068	.14	-.0016	-.03	.0003	.00
Interaction Term:						
Education x Self-Expression	-.0132**	-3.31	-.0108**	-2.75	-.0115*	-2.57
N (cases)	62,509		54,980		39	
N (countries)	48		46		42,667	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 30: Coefficients from Multilevel Regression of Preferences for Restrictive Immigration Policies on Education and Self-Expression - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Self-Expression Included**

In both tables and all models the coefficients for education are negative and statistically significant. The interaction terms are also negative and statistically significant. The contextual-level variables by themselves (secularity and self-expression) are not significant. The results for the cross-interaction terms suggest that the two values-related variables facilitate the negative influence of education on the preferences for restrictive immigration policies. In other words, higher educated people in countries with higher country-level secularity and self-expression have lower preferences for restrictive immigration policies than higher educated people in countries in which these values have lower levels.

### **Ethnic Homogeneity**

In Table 31, only the coefficients for education are statistically significant, and they are negative. That means education, on average, lowers the preferences for restrictive immigration

policies. However, ethnic homogeneity (or lower ethnic diversity) does not seem to influence the preferences for restrictive immigration policies or to facilitate or inhibit the effects of education. People in more diverse or less diverse countries have statistically indistinguishable preferences for restrictive immigration policies that are not contingent on the effects of education.

<b>Preferences for Restrictive Immigration Policies</b>						
	<b>Model 1: most countries</b>		<b>Model 2: fewer</b>		<b>Model 3: fewest</b>	
	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>	<b>b</b>	<b>z</b>
Education	-.0294***	-7.14	-.0244***	-6.12	-.0212***	-4.54
Ethnic Homog.	-.0861	-.45	-.0733	-.37	-.0579	-.26
Interaction Term: Edu x EthnicH.	-.0321	-1.90	-.0288	-1.80	-.0352	-1.85
N (cases)	63,884		56,311		43,880	
N (countries)	49		47		40	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 31: Coefficients from Multilevel Regression of Preferences for Restrictive Immigration Policies on Education and Ethnic Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Ethnic Homogeneity Included**

### **Language Homogeneity**

Table 32 shows the results of the analyses with linguistic homogeneity as the contextual variable. The results are mixed: the effect of education is negative and statistically significant in all three models, the effect of language homogeneity is not significant, and the results for the interaction term are mixed, but mostly not significant. These results are analogous to the results for the ethnic homogeneity above, except for Model 1 and linguistic homogeneity in which linguistic homogeneity facilitates the negative effect of education on the preferences for restrictive immigration policies meaning that in more linguistically homogenous countries more educated people have lower preferences for restrictive immigration policies than educated people in more diverse countries.



Preferences for Restrictive Immigration Policies						
	Model 1: most countries		Model 2: fewer		Model 3: fewest	
	b	z	b	z	b	z
Education	-.0295***	-7.09	-.0247***	-6.07	-.0224***	-4.76
Lang. Homog.	-.0800	-.048	-.0836	-.49	-.0162	-.09
Interaction Term:						
Education x Lang. Homog.	-.0393**	-2.63	-.0328	-2.27	-.0430	-2.62
N (cases)	61,795		54,405		42,173	
N (countries)	47		45		38	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 32: Coefficients from Multilevel Regression of Preferences for Restrictive Immigration Policies on Education and Language Homogeneity – Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Language Homogeneity Included**

### **Religious Homogeneity**

Religious homogeneity is addressed in Table 33. Again, only the effects of education are statistically significant, but not the aggregate variable or the interaction term.

Preferences for Restrictive Immigration Policies						
	Model 1: most countries		Model 2: fewer		Model 3: fewest	
	b	z	b	z	b	z
Education	-.0305***	-7.13	-.0254***	-6.15	-.0223***	-4.54
Relig. Homog.	-.0970	-.49	-.0773	-.37	-.1495	-.66
Interaction Term:	.0224	1.26		1.06	.0169	.84
Education x Relig. Homog.						
N (cases)	62,864		55,421		43,063	
N (countries)	48		46		39	

\*p< .05    \*\*p< .01    \*\*\*p< .001

**Table 33: Coefficients from Multilevel Regression of Preferences for Restrictive Immigration Policies on Education and Religious Homogeneity - Slopes and Intercepts of Education Vary Randomly Across Countries with Interaction between Education and Religious Homogeneity Included**

The ethnic, linguistic, and religious homogeneity variables are all culture-related variables. The results of the analyses overall indicate that the relationship between education and the preferences for restrictive immigration policies is not contingent on these cultural factors. The effect of education is significant and negative, but it seems to be identical across nations.

The results of the analyses in this chapter are robust and hold for varied sample sizes and varied control variables. The results are double-checked by running the multilevel models with various numbers of cases (casewise) – Model 1 with Model 2's cases and Model 3's cases,

respectively. The results do not change substantively. Neither controlling for more variables nor smaller samples changes the significance of the interaction terms.

### **Missing Values**

There are somewhat higher levels of missing values in my analyses in Chapter V than in Chapter III, but lower than in Chapter IV. The questions on the preferences for restrictive immigration policies were asked in a more limited number of countries in the Fifth Wave of the World Values Survey. Even with these limitations the number of countries is around 40, which is more than sufficient for multilevel analysis, and the countries are diverse enough for a meaningful analysis. Within the number of countries that were surveyed there are not extraordinary amounts of missing data, and running the analyses with lower numbers of countries and cases does not influence the robustness of the results.

### **Discussion**

In this chapter, I examined the influence of education on the preferences for restrictive immigration policies as a concept related to the previously covered topics of national identity that is current, relevant to people's everyday lives, and hugely influential in terms of political ideology and voting patterns. I hypothesized that higher levels of education would lower the preferences for restrictive immigration policies and that on the level of countries higher GDP would increase the preferences for restrictive immigration policies. I further expected that the GDP would facilitate the negative influence of education on the preferences for restrictive immigration policies. Based on the results from my own research in Chapters III and IV I assumed the effects of education on the preferences for restrictive immigration policies would be influenced by other contextual variables. The hypotheses have not been tested before and any similar studies have not been done on the same, worldwide scale.

Hypothesis 1: The microstructural hypothesis. The results of the analyses in this chapter support my hypothesis that education lowers the preferences for restrictive immigration policies. Education has, on average, a negative effect on the preferences for restrictive immigration policies across countries. This finding is in line with existing literature even though many of the studies cited use variables or methods different from mine. Quillian (1995) examines prejudice against immigrants in European countries and reports that prejudice decreases with increased education. It logically follows that people with more prejudice against immigrants would have increased preferences for restrictive immigration policies. One of the results of Kunovich's (2009) study was that more educated people have lower national identity, and that less educated people have higher levels of national identity. Increased national identity is then linked to more restrictive views on immigration. Pehrson, Vignoles, and Brown (2009) state that education has a significantly negative relationship with anti-immigrant prejudice. Thus the results of my analyses confirm the overall viewpoints of the existing literature.

Hypothesis 2: The macro-structural hypothesis. On the macro-structural level my hypotheses are supported for GDP. I expected GDP to affect the preferences for restrictive immigration policies positively and my analyses support this expectation. The results for the rest of the level 2 variables are either mixed (for linguistic homogeneity) or not statistically significant.

In this context, it is appropriate to mention Blumer (1958) who considers prejudice a response to a threat to a dominant racial or national group. Given that the dominant group in society usually sets the political tone of a country (except, perhaps, at times of revolutions), such group might be threatened by immigration, for example, when there is an influx of educated immigrants (as during brain drain) or when cheap immigrant labor increases competition on the

corporate level by pushing profits down. Pehrson and Green's (2010) multilevel European study shows that threat that is perceived by the native population from immigrants is higher in countries with higher GDP. Similarly, Pehrson, Vignoles, and Green (2009) study anti-immigrant prejudice in 31 countries using the International Social Survey Programme and find that in higher GDP countries there is more prejudice based on national identification than in lower-GDP countries. Hjerm (2003) reports stronger xenophobia in Western (more developed) Europe than in Eastern European countries, even though he does not directly analyze any economic factors, but focuses on culture and the content of nationalist sentiments. Quillian (1995) examines prejudice against immigrants in Europe and shows that prejudice varies with perceived threat that he relates on the collective level to economic conditions in a country. In better economic conditions the perceived threat is greater and anti-immigrant prejudice stronger.

In a test run with all level 2 variables included, secularity and linguistic homogeneity show as the only ones that are statistically significant. These are results very similar to the analogous run in Chapter IV. Even though in such analysis there are, obviously, issues with collinearity, one may speculate that in a different research project there can be interesting discoveries made with regard to these variables.

Hypothesis 3: The micro/macro hypothesis. On the micro/macro level the **GDP**, **HDI**, and **democracy** most clearly and consistently facilitate the negative effect of education on the preferences for restrictive immigration policies. The interaction terms are negative and significant in all models for these three variables. More educated people in more developed, richer countries favor less restrictive immigration policies. This result is consistent with Kunovich (2009) and holds up even when rerunning the analyses while controlling for national

pride. Including national pride in the equations for this chapter does not noticeably change the results otherwise.

**Secularity** and **self-expression** also facilitate the negative influence of education on the preferences for restrictive immigration policies. In more secular countries and countries with higher levels of self-expressions more educated people's the preferences for restrictive immigration policies are lower; in other words, they also favor less restrictive policies. Such countries are often economically developed, and so this result is not surprising, given what the analyses including variables related to development suggest.

**Ethnic Homogeneity, Linguistic Homogeneity, and Religious Homogeneity.** Diversity related variables do not show statistical significance in the interaction term with education except for one model and linguistic homogeneity. This result supports the results of Chapter IV analyses regarding the effects of education on linguistic homogeneity (although in the present chapter the results for ethnic homogeneity are not statistically significant, they point in the same direction). Drawing on Blumer (1958), Bonacich (1972), and Quillian (1995), one might conclude that more educated people as a group have more to lose with increased immigration in more diverse countries because they compete not only with some of the (more educated) immigrants but also with various ethnically and/or linguistically diverse groups in their own country, some of which might be members of the emerging minority elites (Hroch 1993).

The main limitation of the analysis in this Chapter is, similarly to Chapters III and IV the limited number of countries in my sample. The World Values Survey's "preferences for restrictive immigration policies" item was asked in 51 countries in its fifth wave out of approximately 195 countries in the world (Department of State 2011). The number of countries

and cases included in the analyses in this chapter is thus higher than the number of countries included in the analyses in Chapter IV, but lower than in Chapter III.

### ***Conclusions***

The analytical results support my hypotheses: As expected, on the micro-structural level, increased education, on average, decreases the preferences for restrictive immigration policies across countries. On the macro-structural level, GDP increases the preferences for restrictive immigration policies. On the micro/macro level, greater economic development and some other contextual variables facilitate the negative influence of education on the preferences for restrictive immigration policies. Consequently, the influence of this group of variables (GDP, HDI, democracy, secularity, and self-expression) on the relationship between education and restrictive immigration policies can be predicted across nations. The analyses included in this chapter support my theory and the results of related empirical studies. Moreover, I have shown that results of research based on largely abstract theoretical principles can be acutely relevant to people's everyday lives.

## **CHAPTER VI – CONCLUSION**

### **Overview**

In my dissertation I set out to examine the relationship between education and national identity in varied economic and societal context across the countries of the world. Although existing literature overwhelmingly assumes that higher levels of education in individuals lower national identity, this is not true everywhere. Prior theoretical framework points out that education can either decrease or increase national identity. A prominent example of the latter situation would include nationalist movements of the past led by educated individuals and groups of people; in a more contemporary setting a telling illustration may be the emergence of the Arab Spring in which the movements referred to national quests for greater freedom as their main foci and were led by young, educated people with little hope for the future under conditions prevailing at the time.

I worked with theoretical perspectives on the micro- and macro-levels, and I added an integrated micro/macro theory on how the relationship between education and national identity is contingent on various country-level variables. I focused on contextual variables related to economic development, social development, and democracy, and also included values-related and culture-related variables that could influence national identity independently of the economic conditions.

I employed a multilevel approach that deepened and more accurately explained the dynamics of the relationships between education and national identity, and the societal-level factors that influence it across the countries of the world. My goal was to not only investigate the important topic of how education influences national identity across different countries and come up with new theoretical concepts that were then supported by my analytical results, but also to

bring attention to the possibilities of practical applications of the results to people's everyday lives – their preferences for immigration policies that can affect ideology, politics, and voting behavior.

Based on the above outlined theoretical perspectives and practical goals I designed my study to include analyses with several different dependent variables. I divided the analyses into three analytical chapters: Chapter III describes the results of the examination of the effects of education on national identity expressed as national pride, Chapter IV focuses on the different dimensions of the content of national identity, and Chapter V considers the related topic of the preferences for restrictive immigration policies as one of the more practical applications of the abstract analytical examinations of the relationship between education and national identity in varied national contexts. I used multilevel modeling and the fifth wave of the World Values Survey (2005-2008) to test my hypotheses. There have not been any studies to date on the same or similar topics that would have used a dataset of this size and with as many diverse countries on different stages of development and/or used multilevel modeling for the investigation of the relationship between education and national identity across the world.

On the micro- , individual, level, I engaged an approach that suggested an inverse relationship existed, on average, between education and national identity (see Deutsch 1944, Bonacich 1972, Inglehart 1970, 1977, 1990, and 2008, and Bollen and Medrano 1998). My results support the framework of these theorists. On the individual level more educated people have, on average, lower levels of national identity. This result is consistent with prior studies (Bonacich 1972, Bollen and Medrano 1998, Smith and Kim 2006, and Inglehart 2008), and is also supported in Chapter IV in which I examined the influence of education separately on the ethnic dimension of national identity, its civic dimension, and on national identity as a combined



variable. My results follow Kunovich (2009) who finds that the negative effect of education is stronger for the ethnic component of national identity than for the civic component; in other words, more educated people favor the civic form of national identity. In my interpretation of the results, I draw mainly on Kunovich (2009), Jones and Smith (2001), Hjerm (1998, 2003) and Bollen and Medrano (1998). I speculate that education has a weaker effect on the civic form of national identity because the civic component is considered voluntaristic, non-exclusionary, and achievable. Following the cognitive skills theory and related viewpoints (Bonacich 1972, Bollen and Medrano 1998, and Inglehart 1970, 1977, 1990, and 2008) I reason that more educated people have higher cognitive skills and are also more aware that people (immigrants and members of in-country minority groups alike) capable of gaining skills related to the civic form of national identity might pose higher threat to the educated people on the labor market.

While conceptualizing the other theoretical direction of the influence of education on national identity where education has a positive effect I drew on the work of Michael Hechter (1987) and Miroslav Hroch (1993) whose theoretical arguments posit that education increases national identity. These arguments are not directly supported by my analytical results when averaged across all countries, but it is possible that since both Hechter and Hroch address mainly earlier developmental stages of nationalism, the tests need to focus on countries at lower levels of social and economic development. The theories may thus receive support when properly specifying their domain.

On the *macro*, country level, I considered two groups of theories, as well. One group, represented by Anderson (1983), Gellner (1983), Smith (1991, 1992), and Hroch (1993) states that economic development increases national identity. The second group of theories argues that development decreases national identity (Inglehart 1970, 1977, 1990, 2008, Inglehart and

Baker 2000, Jones and Smith 2001, and Kunovich 2009). My results support the second theoretical framework – people living in countries on higher level of economic development (and also those with greater human development and democracy) tend to have lower levels of national identity. Economic development, human development, and democracy exhibit the clearest and most consistent results overall. The results for the values-related scales (secularity and self-expression) and for the ethnic, linguistic, and religious homogeneity, although often theoretically explainable, at times display mixed results. It is clear that the effects of these contextual variables on national identity are more nuanced than the effects of the development-related level 2 variables. This finding is not unexpected given the diversity of the countries in the sample and it would be more surprising to see uniform results. Generally, my hypotheses are supported for the national identity dependent variables with some exceptions for the civic dimension of national identity.

On the *micro/macro* level of the analysis of the relationships between education and national identity, the existing research and theoretical base to draw on was scarce (excluding theories and empirical studies that contributed only partially to possible explanations; for example, Bollen and Medrano 1998, Inglehart 2008, and Kunovich 2009), and I drew out arguments that integrated both the micro- and the macro- level theoretical findings and the results of existing empirical studies. I hypothesized that economic development, democratic political institutions, and cultural homogeneity would shift the influence of education on national identity toward the negative. My hypotheses and my theory are supported by the analytical results of my research. On the integrated micro/macro level GDP facilitates the negative effect of education on national identity. This means that more educated people in richer, typically more developed countries have lower national identity than more educated people in poorer countries.

The results are most consistent for the national identity expressed as national pride variable and for level 2 variables related to economic development, human development, and democracy. Clearly the level of development and associated characteristics constitute decisive forces in shaping how people's individual characteristics influence national identity. Secularity and self-expression show mixed results overall but the results are theoretically and empirically justifiable. Both variables are scales reflecting the divisions between traditional and non-traditional values (Inglehart 1997, Inglehart and Baker 2000). However, the secularity scale likely does not capture the complexity of religiosity and its relationships to national identity, nor does religious homogeneity. As Kunovich (2006, 2009) notes there are many more factors that the examination of the influence of religion would need to include, for example types and relative sizes of different religions or religious denominations (depending on country). The role of religion in national identification is extremely important but not fully approachable within the scope of my dissertation.

Educated people in countries with higher levels of self-expression tend to have lower levels of national identity. Although self-expression is also a values-related scale, it is easier to see the link to national identity as a concept more closely aligned with less traditional values than the secularity scale.

Ethnic and linguistic homogeneity exhibit consistent, although not identical, results. In ethnically more homogenous countries higher educated people have lower levels of national identity than in more diverse countries where competition increases group identification and cohesion. Analogously, the negative effect of education is also stronger in linguistically homogenous countries, supporting the work of Bonacich (1972), and Jones and Smith (2001). Thus educational differences in national identity are largest in homogenous countries.

These findings support my hypotheses. The significance and theoretical contribution of the results lies in the fact that so far literature on nationalism and national identity has not presented a coherent theoretical framework that would explain the effects of education on national identity in varied national contexts. My study explores the dynamics of the effects of education on national identity in greater depth and shows that the effects can be predicted cross-nationally. The results are robust and hold for different sample sizes and for models with differing sets of variables.

Although Ronald Inglehart (2008) does not use multilevel modeling to support his theoretical assumptions, my results fit well within his general theoretical framework. National pride and national identity as materialist values are assumed to be lower in societies on higher levels of economic development. Since, according to Inglehart, rising development causes value shifts in societies from traditional, materialist values to less traditional, post-materialist values, and similar process applies when individuals gain greater levels of education, the additive effect of higher development facilitates the lower levels of national identity for people with higher education in more developed countries. Corresponding results are shown when the ethnic and the civic dimensions of national identity are examined separately. More educated people have lower national identity overall in more developed countries. The effects are the clearest and strongest for the ethnic component of national identity and for national identity as a combined variable.

After examining the effects of education on national identity using several dependent variables within different analytical models and having my hypotheses confirmed I expanded the testing of my theory to include characteristics that can be more directly applicable to people's everyday lives and perhaps more approachable than abstract theoretical conclusions in and of themselves. Attitudes toward immigration are an important facet of current political landscape all

over the world, and they directly and indirectly relate to national identity. Thus I chose the preferences for restrictive immigration policies as a dependent variable for the closing chapter which enabled me to examine the influence of education on immigration policies while keeping the same expected direction of the relationship as in the earlier chapters. I speculated that people with more pronounced sense of national identity would have higher preferences for restrictive immigration policies (which signified leaning more toward traditional values than preferences for unrestricted immigration). The micro, macro, and micro-macro hypotheses should thus extend to immigration outcomes as they did for national pride and national identity outcomes.

The findings from analyses related to the restrictive immigration policies are interesting. On the micro-structural level, education, on average, lowers the preferences for restrictive immigration policies. On the macro-level education actually increases preferences for restrictive immigration policies overall. This result, although somewhat counterintuitive, is in line with existing research (Quillian 1995, Hjerm 2003, Pehrson, Vignoles, and Brown 2009, Pehrson and Green 2010, and Kunovich 2009); however, the existing literature does not convincingly interpret this finding and in many cases the authors only comment on the surprising nature of it. Drawing on my own research and theoretical knowledge I suggest that the preferences for restrictive immigration policies are higher in more developed countries because groups (nations) with greater advantages and privileges feel more threatened by what they perceive as a possible loss of these advantages by increased immigration. This concept can be found, for example, in Blumer (1958) and in Bonacich (1972), even though Bonacich refers predominantly to ethnic and racial minority groups rather than nations and Blumer talks about groups in general.

On the micro/macro level, GDP and other development and values-related variables facilitate the negative influence of education on the preferences for restrictive immigration

policies. The testing of the hypotheses on this level is particularly stringent because of the unusual effect of the GDP on the preferences for restrictive immigration policies on the macro level as noted in the preceding paragraph. On the micro/macro level the statistically significant facilitating effect of GDP on the negative effects of education on the preferences for restrictive immigration policies is well supported. More educated people in more economically developed countries favor less restrictive immigration policies. The results also hold for more educated people in more secular countries and in countries with higher levels of self-expression.

Overall the examination of the preferences for restrictive immigration policies as related to education and contextual variables on the country-level extends my research of national identity into a new theoretical and empirical territory and illustrates one of the possibilities for a more pragmatic, yet highly systematic and methodical, approach to the issues of national identity and nationalism. Together with the analyses of my central hypotheses on the influence of education on national identity under varied national contexts it represents an original, integrated theoretical and methodological framework that expands current knowledge in the field substantially and sets a new foundation to build on for years to come.

### ***Limitations***

The main limitation of my study is the fact that not all countries of the world participate in the World Values Surveys, and for those who do, not every question is asked in every country which limits the number of countries available for analysis. Thus out of the 195 independent states in the world (Department of State 2011) the data for my analysis was available for 57 countries. The countries are not randomly selected. Detailed examination of the World Values Survey's website and the Survey's history reveals that most of the countries that have been participating in the survey have been self-selected and have financed their own research under

the guidance of the World Values Survey's Executive Committee in return for getting data on the rest of the countries in the Survey (World Values Survey 2012). From time to time the Executive Committee decides that countries with certain characteristics need to be added to the Survey, for example Islamic countries, in which case the Committee subsidizes some or all of the cost for the desired countries to participate. Nevertheless, the sample of countries available for my research is large, diverse, and includes varied regions of the world.

Although the majority of the samples in the World Values Survey are representative on basic variables (and the official brochure on the main website for the World Values Survey says they are all representative,) the World Values Survey allows quota sampling when full probability samples would be too expensive to obtain (World Values Survey 2011a). However, there is no comprehensive list of countries and waves in which quota sampling was used. There is not a prohibitive amount of missing data in my sample and my research design allowed for several redundancies in the way the analyses were run.

The statistical package that I used, STATA 11, has been very recently replaced with a new version, STATA 12. STATA 12 now allows to run the `xtmixed` command for the multilevel analysis with the probability weights included which I could not do at the time, but I did rerun the majority of the analyses as multiple regressions with weights and the results were virtually identical. I also made casewise runs to ascertain that the results were robust enough and did not vary with different numbers of countries and cases or with adding or removing variables or groups thereof.

The measures I used in my research are not unusual or exceptional methodologically and have been used routinely in prior studies. The measure of education as the main independent individual-level variable has nine ordered categories and although educational systems are

different in different countries and the meaning of levels of education can also differ I have not detected any criticism of it in the vast existing literature utilizing the World Values Survey. In my own personal and empirical experience the categories express the levels of education available around the world as accurately as possible considering the variety of countries included.

I used several measures for national identity. A detailed overview is in the Methods chapter of this dissertation (Chapter II). Several of my scales contain only two or three items and that can be an issue regarding reliability. However, Cronbach's Alphas for the scales were moderate to high which indicated the reliability was not low. DeCoster (2005) reports that when a less-reliable scale produces statistically significant results it attests to even stronger effects in the analysis. All level 2 variables have been used extensively in prior research. I do not see any major issues with any of the measures I used throughout.

While quantitative data analysis is more explicit than qualitative methods, it does have limitations, the main one being the loss of richness in meaning, the "whys" and "how" of people's behavior. There would be no feasible way to examine the concepts that I covered in my dissertation on the same scale using qualitative analysis, but it would be possible to follow up on some of my discoveries using different methods. I outline some of my ideas for future research next.

### ***Recommendations for Future Research***

The results of my analyses focusing on the influence of education on national identity in varied national contexts are robust and my hypotheses are supported. Analyses using several differently operationalized measures of national identity confirm my central hypothesis that the negative influence of education on national identity is facilitated by greater economic



development, i.e. more educated people in more developed, typically richer countries have lower national identity than more educated people in poorer countries. The relationship between education and national identity is also contingent on other country-level variables, and although theoretically explainable, more multilevel research is definitely needed to tease out the nuances related to variables representing cultural differences like ethnic, linguistic, or religious homogeneity/diversity. Even though some comparative studies exist, world-scale multilevel research has yet to be done. Kunovich (2006) initiated such research on a smaller scale in Europe with his study on the connections between Christianity and other religions as related to national identity, but even he did not get definitive answers on all issues. Multi-regional study would be even more complicated and time-consuming. However, combining my and Kunovich's results and research design could streamline the process and provide a framework of methods and ideas for future discovery. One of the most interesting points to address in such process would be to determine why the influence of religion on national identity is different on the micro- and the macro- levels and how to conceptualize level 2 variables for countries with different religions so that they would be methodologically approachable using multilevel modeling.

A related topic that was not possible to address within the scope of this dissertation, would be the relationship between gender, education, and national identity in various national contexts with special attention to religion (per above paragraph) and nationalist movements. Males seem to have higher levels of national identity overall in my study, and, according to, for example Fagerlind and Saha (1989), higher levels of education and leadership roles in most national movements, as well. On the other hand, gender egalitarianism is spreading throughout the world and can over time influence the issues covered in my dissertation. Additional research could examine the structuralist-leaning theories of Chafetz (1990) and Collins et al. (1993) that,

although dealing at the most with national-level concepts, would not be difficult to extend and adjust to global levels of inquiry.

In addition to expanding and continuing multilevel analysis on the national identity-related topics I would also recommend using historical-comparative perspectives and in-depth analyses on issues that the multilevel models could not approach in sufficient detail, for example how sizes and types and characteristics of immigrant groups influence national identity on regional levels (for groups of countries).

One of the main concepts in the literature of nationalism and national identity that I drew on during the course of this dissertation is that nationalistic feelings are connected to the rise of the modern nation-state and that education in various forms (mass, public, accessible to non-dominant ethnic groups, supported by print, and others) is one of the most important conditions in that process. Education also influences national identification after the nation-state is created and developed. Further, one of the premises of my central argument was that in countries on different levels of development (economic, political, and cultural) education influences national identity in different ways that are contingent on country-level (macro-structural) characteristics. The quantitative analyses performed on two levels of data support my argument. However, as with any research project, there is always more information to gain. The results, although overall supportive of my new theory, do show irregularities. Future research could concentrate on clarifying what the outliers are for different societal contexts and countries and attempt to explain the reasons for the (possible) exceptions. A prime example would be to expand on the studies of the concept of the American exceptionalism (Inglehart and Baker 2000) while drawing on my new theoretical insights and empirical results. I would also recommend to revisit Inglehart's (1970, 1977, 1990, 1997, and 2008), Inglehart and Baker's (2000) and Norris and

Inglehart's (2009) studies on societal values and cultural development and compare, in depth, the U.S. to other countries in depth with regard to education, national identity, and societal contexts.

I hope to become a part of such effort.

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**APPENDIX A. SAMPLING PROCEDURES OF THE WORLD  
VALUES SURVEY – RULES FOR PRINCIPAL INVESTIGATORS**

Dear Colleagues,

As researchers within the WVS network, we all would like to know that the data we use and we disseminate to the academic community meet the commonly accepted methodological standards. Additionally, it is important for us comparative researchers that the data we obtain from different countries are collected using standardized and therefore comparable techniques. In order to provide you with the highest quality comparative data possible, we are asking all of our PIs to observe the common principles listed below. Following these rules will ensure all of us of the reliability of our data.

I. THE QUESTIONNAIRE

A. THE COMMON QUESTIONNAIRE

1. WVS requires the implementation of a common questionnaire fully and faithfully.
2. The common questionnaire is drafted by the EC in consultation with members of the Scientific Advisory Board, PIs, and experts in the field.
3. Although each wave has its own questionnaire, keeping previously asked questions to the extent possible is a major concern so as to make longitudinal analysis possible.
4. The master questionnaire is drafted in English.

B. TRANSLATION

1. PIs are responsible for the translation of the questionnaire into their local language(s).
2. In any given country, the questionnaire must be translated into all languages spoken by at least 15 percent of the population.

3. Translated questionnaires must be back-translated into English by someone other than the person who did the original translation from English into the local language.
4. The translated version, the back-translation and the names of the persons who did the translations must be sent to the EC for approval before the fieldwork can start.
5. Whenever a question has been used in previous surveys, the same translation should be preserved to the extent possible in order to allow over time comparisons. However, obvious and serious errors in translation should be corrected and the EC should be warned about these changes.

#### C. DEVIATIONS FROM THE ORIGINAL QUESTIONNAIRE

1. In principle, every question in the original English questionnaire sent by the EC must be asked in every survey. In exceptional cases, where a PI feels a question is irrelevant or inappropriate for her/his country, s/he may ask the EC for permission not to ask that particular question. However, it must be noted that:
  - a. The PI willing to omit a question should inform the EC ahead of time and explain the reasons for the omission.
  - b. No question may be omitted without EC's written approval.
  - c. EC is not allowed to approve the omission of more than a maximum of 12 questions in any given country.
2. PIs may add to the questionnaire questions that they think are relevant to their country or certain questions may be added at the request of the funding agency. However, these country-specific questions must be placed at the end of the questionnaire but before the demographics. (The master questionnaire will indicate the exact location.) An exception to this rule is granted if the additional question(s) is (are) directly

related to a set of questions or battery in the master questionnaire (e.g. additional group(s) for the “neighbors battery” or additional institution(s) for the “confidence in institutions battery.”)

## II. THE SAMPLE

WVS requires a complete explanation of proposed sampling procedures BEFORE the start of the fieldwork. The sampling plan must be approved by the EC in writing.

### A. METHOD OF SAMPLING

The preferred method of sampling for WVS surveys is the full probability sample.

However, recognizing that the very high cost -in terms of finances, manpower and time- of full probability samples may prove to be prohibitive in some cases, WVS allows quota sampling provided that the following principles are strictly adhered to:

1. Selection of PSUs must be probabilistic (and preferably PPS).
2. Selection of first stage clusters within PSUs must be probabilistic (and preferably PPS).
3. Quota sampling should be used only within reasonably small sized clusters that have been selected probabilistically.

Whether the sampling method is full probability or a combination of probability and quota, the minimum number of PSUs is 30. A design with less than 30 PSUs is not permissible.

### B. SAMPLE SIZE

The minimum sample size (i.e. the number of completed interviews) is 1,000. However, given the fact that in most designs the “effective sample size” (sample size net of design

effects) is lower than the actual sample size, larger sample sizes are strongly recommended if at all possible.

#### C. NON-RESPONSE

Non-response is an issue of increasing concern in sample surveys. Investigators are expected to make every reasonable effort to minimize non-response. More specifically,

1. In countries using a full probability design, no replacements are allowed. PIs should plan on as many call-backs as the funding will allow.
2. In countries using some form of quota sampling, every effort should be made to interview the first contact. In any case, and as indicated below, a full report on non-responses is required.

#### D. COVERAGE

WVS surveys are required to cover all residents (not only citizens) between the ages of 18 and 85, inclusive. PI's can lower the minimum age limit as long as the minimum required sample size for the 18+ population is achieved.

### III. INTERVIEWING

The mode of data collection for WVS surveys is face-to-face interviewing. Other modes (e.g. telephone, mail, internet) are not acceptable except under very exceptional circumstances and only on an experimental basis. In any case, EC approval in writing is necessary for modes of data collection other than face-to-face interviewing.

### IV. PERIOD OF DATA COLLECTION

Data collection period for the Fifth Wave of WVS is April 1, 2005 through December 31, 2006. Fieldwork in a given country may begin as soon as the translated questionnaire and the sampling procedures of that country are approved by the EC. However, fieldwork in a given country may

not extend beyond 14 consecutive weeks. Surveys with a fieldwork completion date of later than December 31, 2006 cannot be included in the Fifth Wave.

#### V. SUBMISSION OF DATA AND THE FINAL REPORT

- A. After the completion of the survey, PIs are responsible for turning in a cleaned and complete data set to ASEP-JDS as soon as feasible. PIs also agree to answer inquiries by ASEP-JDS regarding their data set without undue delay.
- B. Data set must be accompanied by the completed methodological questionnaire (attached) and a report of country-specific relevant information (e.g. important political events prior to or during the fieldwork, problems particular to that country, and other necessary information).

#### VI. ACCEPTANCE AND SHARING OF DATA SETS

No survey that does not fully and completely adhere to the rules described above will be accepted. Once a country's survey is accepted, its PI and her/his colleagues will have full and immediate access to all surveys completed as of that date as well as to those that will be submitted later. EC is responsible for keeping all PIs informed about the status of all surveys (funding, starting date, completion date, acceptance, etc.).

**APPENDIX B. LIST OF COUNTRIES INCLUDED IN THE WORLD  
VALUES SURVEY, FIFTH WAVE 2005-2008**

<b>Country</b>	<b>Nat'l Pride Mean</b>	<b>GDP</b>	<b>HDI</b>	<b>Dem</b>
<b>Sub-Saharan Africa</b>				
1. Burkina	3.8057	1382	367	4
2. Ethiopia	3.6477	1110	872	3
3. Ghana	3.9204	1652	512	6.5
4. Mali	3.8840	1273	361	6
5. Rwanda	3.7748	1135	449	2.5
6. South Africa	3.7304	10484	678	6.5
7. Zambia	3.4928	1978	466	4
<b>Asia</b>				
8. China	2.9371	8511	756	1.5
9. Hong Kong	2.6232	38156	939	-
10. India	3.6772	3579	596	5.5
11. Indonesia	3.3773	5036	723	5.5
12. Japan	2.7951	29780	956	6.5
13. South Korea	3.0483	22048	927	6.5
14. Malaysia	3.6363	17140	821	4
15. Taiwan	2.6376	25640	-	7
16. Thailand	3.8392	9406	777	5
17. Vietnam	3.7985	3477	715	2
<b>Eastern Europe</b>				
18. Bulgaria	3.1982	9149	829	6.5
19. Georgia	3.7327	8880	765	5
20. Moldova	2.7887	3488	712	4.5
21. Poland	3.5777	12666	871	7
22. Romania	3.2032	8211	824	6
23. Russia	3.2546	1241	804	2.5
24. Serbia	3.3283	7244	817	5.5
25. Slovenia	3.4593	22856	918	7
26. Ukraine	2.9584	9195	783	5.5
<b>Middle East and North Africa</b>				
27. Egypt	3.7142	5708	696	2.5
28. Jordan	3.7002	5165	764	3.5
29. Morocco	3.4846	5420	640	3.5
30. Iran	3.5244	10414	773	2
31. Iraq	3.7902	4897	-	2.5
32. Turkey	3.7665	7738	796	5
<b>South America</b>				
33. Argentina	3.5388	14496	855	6
34. Brazil	3.1705	9280	805	6
35. Colombia	3.8843	7127	795	5
36. Chile	3.5061	16966	872	7
37. Guatemala	3.8265	5711	691	4
38. Mexico	3.7736	10546	844	6
39. Peru	-	6401	791	5.5
40. Uruguay	3.7028	12923	855	7
41. Trinidad	3.8884	24150	825	5.5
<b>Western Europe and the West</b>				
42. Andorra	3.2555	35017	930	7
43. Australia	3.6295	34323	967	7
44. Canada	3.6637	35332	963	7
45. Cyprus	3.4413	24075	908	7
46. France	3.1406	29238	956	7
47. Finland	3.4900	29761	952	7
48. Germany	2.8583	30496	942	7
49. Great Britain	3.4425	31142	947	7
50. Italy	3.3026	27795	947	7
51. Netherlands	3.0664	33390	958	7
52. New Zealand	3.6727	24079	930	7
53. Norway	3.4172	48393	968	7
54. Spain	3.5295	31446	949	7
55. Sweden	3.2923	31979	960	7
56. Switzerland	3.1996	37302	957	7
57. United States	3.5810	42683	955	7