

# Who has a traditional view on marriage?

*The effects of educational attainment and religiosity at the individual level and contextual level in 27 countries in the year 2002*

*Tilburg School of Social and Behavioral Sciences*

*Department of Sociology*

*June 2013*

*Author: Gerda Marks*

*ANR: 1242901*

*Supervisor: Dr. I.J.P. Sieben*

*Second supervisor: Dr. W.J.G. Uunk*

**Contents**

Summary	2
Acknowledgements	2
1 Introduction	3
1.1 Relevance	5
1.2 Research question	6
2 Theoretical framework	8
2.1 Exchange Theory	7
2.2 Social Identity Theory	9
2.3 Socialization theory	10
2.4 Cross- level interactions	13
2.5 Conceptual model	16
3 Research design	17
3.1 Operationalization	17
3.1.1 Dependent variable	17
3.1.2 Independent individual variable	20
3.1.3 Independent contextual variable	21
3.1.4 Control variables	22
3.2 Methods of data analysis	24
4 Analysis and findings	26
4.1 Bivariate analysis	26
4.2 Multivariate analysis	29
4.2.1 Categorical variables	35
5 Conclusion and Discussion	36
5.1 Conclusion	36
5.2 Discussion	39
References	42
Appendices	45

## **Summary**

The purpose of this master thesis is to examine the effects of the key characteristics educational attainment and religiosity towards traditional marital perceptions. The research question that this research wants to answer is: *“To which degree is a person’s marital perception influenced by educational attainment and religiosity at the individual and contextual level?”* In order to answer the question four indicators are proposed to measure marital perceptions, namely; *“People who want children ought to get married”* (1), *“It is all right for a couple to live together without intending to get married”*(2), *“It is a good idea for a couple who intend to get married to live together first”* (3), and *“Married people are in generally happier”* (4). The theoretical framework applies to approach traditional marital perceptions with the influence of educational attainment and religiosity at the individual and contextual level. Theoretical arguments are applied on the Exchange Theory, Social Identity Theory and the Socialization Theory to conduct the hypothesis. To test the hypotheses linear multi-level regression analysis is done to analyze the differences in marital perception among 32,425 respondents across 27 countries. The International Social Survey Programme 2002 (ISSP) provided the dataset. Findings show significant relationships between individual educational attainments, religiosity towards traditional marital perceptions. Individual educational attainment and individual religiosity both supports more traditional marital perceptions. At the contextual level, societies with high country educational attainment have more marital perceptions. There are no statistical significant effects found in the relationship between societies with high degree of religiosity and martial perceptions. The conclusion of this research’s findings shows some agreements and disagreements with the general literature and theories.

## **Acknowledgements**

I would hereby like to thank several people for their support during the writing of this master thesis. Many thanks go to my first supervisor Dr. I. Sieben for her solid and thorough comments to make sure that this research always stayed on the right track. I also want to thanks my classmates, friends, and family who could not be mentioned one by one, for always given me motivation, support, and helpful suggestions.

## **1 Introduction**

In the past, it was not socially accepted and approved that unmarried people left the parental home to start an independent life. Therefore, marriage could be viewed as an escape from parental home to become independent and to gain economic security (Manting, 2006). The individual marital perceptions can be more traditional orientated or more modern orientated. This depends on the interpretations of past developments which are reflected in one's orientation.

During times of economic development, increasing rates of female labour participation and secularization, the power of social norms changed that define people's behaviour and ideas around the family life. These social changes affected the meaning of marriage. Individuals could not longer rely on established norms in how they had to act; they had to find new ways (Cherlin, 2004). This created new possibilities for individuals to shape their own lives and a change in family life became visible in societies. For example, non-traditional family structures became more accepted and approved, as well as premarital sex and same-sex relationships (Cherlin, 2004; Stevenson & Wolfers, 2007). Also cohabitation increased and in the 1980s and 1990s this became more appreciated in society (Cherlin, 2004). These changes in family life could be reflected in more modern marital perceptions, for instance the perceptions: "it is al right to have children without being married", "it is social accepted and approved to live together without being married", "marriage does not make you necessarily happier", or "couples are allowed to live together without intending to marry".

However, the change in social norms around family life did not occur in the same degree among all individuals in all societies. The degree of modern marital perceptions differs among individuals in different societies. An explanation for this could be found in the individual level and contextual level differences. The differences in individual perceptions can be influenced by personal characteristics, but also through the context where people live in, since individuals do not life their lives isolated, but are connected with the environment and the members of that society. The context where people live in plays an important role, because individuals are part of a society in which certain ideas, norms and values are common. Through positive or negative (e.g. sanctions) interactions with members of society these ideas, values and norms could influence individuals' ideas and orientations.

The key purpose of this research is to find an explanation for these differences in marital perceptions within and between societies. To find an explanation, the impact of the

key features of educational attainment and religiosity will be examined. Several studies found evidence for these two key characteristics and their major impact on people's orientations and attitudes. In Europe, Kalmijn and Kraaykamp (2007) found that education has a strong effect in predicting one's attitudes, in particular in countries with high level of development. The authors compared the predicting power of education with class characteristics. The effects of class characteristics on attitudes did not change. Also Mincer (1974) found that schooling has a stronger explanatory power compared with the explanatory power of age. For the key feature of religiosity, Filsinger and Wilson (1984) found that religiosity measured by church attendance explained twice as much in relationship with marital adjustment compared with socioeconomic rewards, or family development characteristics towards marital adjustments. At the contextual level, Scheepers, Grotenhuis and Van Der Slik (2002) notify that individual religiosity has a stronger effect on moral attitudes in religious countries compared to individual religiosity on moral attitudes in more secularized countries. Furthermore, religious contexts seem to be more efficient to measure social liberal values than that of economic contexts, e.g. GDP (Yuchtman & Alkalay, 2007).

The major impact of educational attainment and religiosity at the individual level and contextual level are supported by the findings of these previous studies. Therefore, the selected key characteristics in this research can be considered as strong predictors in finding an explanation for the differences in marital perceptions.

To investigate the explanatory power of the two key characteristics on marital perceptions the dataset from the International Social Survey Programme 2002 (ISSP) will be used. The survey has gathered data from 27 countries across the world which will be used for further analysis. The included countries are: Australia, Bulgaria, Chile, Cyprus, Czech Republic, Belgium, France, Finland, Germany, Great Britain, Hungary, Ireland, Israel, Japan, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United States.

These countries have different degrees of educational attainments and a variety of religiosity. For example, the United States, Japan and Israel are among the countries the most religious countries with very high educational attainments. In particular, the population between the ages 25-64 years that attained at least tertiary education in 2007 was in the United States about 40.3%, in Japan 41.0% and Israel 43.6% (OECD, 2011-2012). The countries Chile, Italy and Portugal are also very religious but the educational attainments at the national level are very low compared to the other countries. The tertiary attainments were

in Chile 13.2%, Italy 13.6%, and Portugal 13.7% (OECD, 2011-2012). The variations in educational attainment and religiosity could have different influences in the association with traditional marital perceptions. In the theoretical framework section will be discussed to which extent these variations in the key characteristics could influence traditional marital perceptions.

### **1.1 Relevance**

The concept of marriage is interesting for sociological research in finding explanations for the different perceptions of people and how these affect marriage. Many studies investigated direct and indirect effects on the nature of marriage. Some studies investigated the changed meanings of cohabitation through the effects of age at childbirth, family size, religiosity (past life-course) and educational attainment, enrolment, and labour-force participation (current life-course) determinants, e.g. for the Netherlands (Manting, 2006), and for Sweden (Cherlin, 2004; Stevenson & Wolfers, 2007). Other authors investigated marital perceptions through the transitions in parenthood. They found that during parenthood insecure husbands and wives with insecure husbands have less positive marital perceptions compared to more secure husbands and wives with secure husbands (e.g. Paley et al., 2010; Cox et al., 1999, for the U.S). Thomson and Collela (1992) investigated the relationship between cohabitation and marital stability in the U.S. They found that couples who cohabit before marriage have lower quality of marriage, lower commitment to the institutions of marriage, and have a more individualistic view of marriage.

These studies all contribute in their own way in understanding the concept of marriage and the influences on this concept. In additions, they focussed mostly on either education or religiosity. Nevertheless, to our knowledge, there are no (recent) studies that investigated educational attainment and religiosity towards martial perceptions at the micro-level and macro-level across countries. Therefore, the contribution of this study to the scientific field is the new analysis which may provide important additional clues for the different marital perceptions. This is an important issue, because of the major impact of the two key characteristics on people's orientations and attitudes. Furthermore, few studies compared micro-level effects on different aspects of marriage (e.g. marital adjustments, cohabitation, parenthood, etc.) across countries and how these averages vary across countries. This research examines how internal country differences vary across countries and how this influences the marital orientation of their citizens. In addition, individual persons are

influences by the context to which they belong, and the characteristics of those contexts are in turn influenced by the individuals who make up that context. Therefore, the potential impact of the key characteristics towards traditional marital perceptions is more convincingly because of the analysis of multiple levels within and between countries.

The social relevance of this study is to give an insight in factors that influence marital perceptions. This can be important for policymakers which influence certain social conditions in societies, such as making new rules. The breakdown of old rules and the development of new rules influence the ideas, orientations and values of society and individuals. When policymakers are aware of the public opinion, such as marital perceptions, they can take this in consideration when they are making new rules. Knowledge about the impact of educational attainment and religiosity can be important for successful implementation of (social) policy. Should policymakers emphasize on, for example, cutbacks on the educational system in times of economic recession or should they find other ways to cut? This question is important due of the potential impact of the educational attainment on marital perceptions, which subsequently influence the family structure in society. Educational attainment provides certain resources, such as social, cultural, economic, and cognitive skills (Amato, 1996; Ono, 1998). When people can not follow good education, less people will have these resources. Subsequently, people may reshape their marital perceptions into more traditional ones because of the lack of resources.

## **1.2 Research question**

This research aims to finding explanations for marital perceptions which in previous research remained unanswered. First of all, the interest of research is to determine the degree of traditional marital perceptions among individuals in different contexts. The second is the focus on the influences of educational attainment and religiosity on marital perceptions. To analyse the individual level and contextual level we explore the associations of these two key characteristics towards marital perceptions. This brings us to the formulation of the central question of this research: *To which degree is a person's marital perception influenced by educational attainment and religiosity at the individual and contextual level?*

The structure of this research is as follows. In the next chapter, the theoretical framework will give an explanation in how educational attainment and religiosity may affect marital perceptions. The formulations of the hypotheses at the individual and contextual level are

based on the Exchange Theory, Social Identity Theory and Socialization Theory. Chapter three will be used to discuss the dataset, research method and the operationalization of the variables. The analysis of the results in order to confirm or reject the hypotheses will be presented in chapter four. Finally, in the chapter five, the research question and the evaluation of the theories will be discussed. In this final chapter, the conclusion, discussion and further recommendations towards the research will be given.



## **2 Theoretical framework**

The theoretical framework provides mechanisms that have been put forward to explain the association between educational attainment and religiosity towards marital perceptions. There is a distinction drawn between individual aspects and contextual aspects. The theoretical arguments at the individual level will be discussed in the sections 2.1 and 2.2 based on the Exchange Theory and Social Identity Theory. The theoretical approach at the contextual level will be treated in section 2.3 and is based on the Socialization Theory. In the last section 2.4, cross-level interaction terms will be discussed.

### **2.1 Exchange Theory**

The Exchange Theory approaches social change and stability in people's relationships as a process of negotiated exchanges between parties. This theory can explain, based on the degree of educational attainment, the different rational choices that individuals make based on costs, benefits and rewards. These basic concepts are strongly related with Rational Choice Theory and Structuralism which are also very often used in explaining attitudes (Lyngstad, 2004; Stevenson & Wolfers, 2007; Martin & Parashar, 2006; Harkonen & Dronkers, 2006).

The Exchange Theory implies that people in relationships try to maximize their self interest by exchanging resources. Amato (1996) and Ono (1998) found that the level of education improves resources, such as social, cultural, economic, and cognitive skills. In the line of this theory, marriage can be viewed as getting access and bringing resources of anything of value, such as financial security (e.g. higher wages and lower risk of unemployment), or making children. In the more traditional marriages (e.g. male breadwinner- female homemaker) men contribute their incomes and occupational status, in exchange for women's housekeeping and childcare (Becker, 1981). From this exchange approach, couples who do not follow this gender-based task division would be both at disadvantage in economic and domestic spheres. The resources of lower educated individuals are scarcer compared to the resources of higher educated people, which make the exchange of resources through marriage more important. To protect the benefits of exchanging resources, lower educated individuals will have more traditional orientations about family life. The exchanges of resources of higher educated people are less important (less exchange orientation) because they already possess these resources. Therefore, it is less beneficial for higher educated people to secure valuable resources through marriage. With the result that

individual perceptions on marriage of higher educated people will be more modern compared to lower educated people.

In addition to the Exchange Theory there are other arguments which can explain the differences in the relationship between educational attainments and traditional marital perceptions. The most occurring argument in sociological research is the change in perceptions. Many studies argue that schooling transmits liberal values directly to their students, and such values are stimulating often egalitarian or liberal perceptions (Kalmijn & Kraaykamp, 2007; Scheepers, Grotenhuis & Van Der Silk, 2002). In fact, Scheepers, et al. (2002) found that the longer people are exposed by the educational system the more they are inclined to hold liberal attitudes. Through schooling individuals are taught to develop tolerant and liberal attitudes to become good citizens (Sieben & De Graaf, 2004). At school, students learn how to deal with authority others than their parents and peers, not to cheat, how to work together, and other skills and knowledge. This broadens individual's worldview which reduces intolerance (Kalmijn & Kraaykamp, 2007). Therefore, higher educated people are more liberal orientated and are inclined to defend their interest, such as non-conformity and less traditional life-style (Sieben & De Graaf, 2004). These liberal perceptions and the look beyond traditional conventions may affect the marital perceptions into more modern ones.

Above, several arguments are given to underpin the relationship of educational attainments towards marital perceptions. Based on these arguments the following hypothesis at the individual level is proposed:

*Hypothesis 1:*

*Individuals with higher educational attainment have less traditional marital perceptions compared to individuals with lower educational attainment.*

## **2.2 Social Identity Theory**

A theoretical argument for why religiosity may affect marital perceptions is the Social Identity Theory. This theory is selected to explain the intergroup orientations based on perceived group status differences. It discusses the perceived influence and mechanisms of the group towards the individual. This could give a better understanding in how people view moral issues and family life.

The Social Identity Theory assumes that every person wants to belong to a certain social group (Turner, 1999). According to this theory, individuals look to others with the

same attitudes and beliefs. Individuals make distinctions between those who are sharing these perceptions, and those who are different from themselves (Turner, 1999). With the result that one belongs to an in-group and others who are different are the out-group (Turner, 1999). Individuals that associate themselves with the in-group are stimulated to create a positive self-identity. The creation of a positive self-identity is influenced by the shared perceptions and beliefs of the members of the in-group (Turner, 1999), since the sense of belongingness to the in-group stimulates negative attitudes to the out-group and strengthened positive attitudes to the in-group (Turner, 1999). From this point of view, we can assume that religious individuals identify themselves with a religious group and embrace the perceptions and world view of the in-group to create a positive self-identity. Social identification with a religious group may also stimulate the process of self-stereotyping by which the stereotypically positive attributes of the religious group are dominant. This stereotyping may also be incorporated as a part of self-concept or identity of the individual. Religious groups are strongly associated with traditional attitudes (Hansen, 1987), and stimulate their members to maintain the traditional role of marriage. Subsequently, the members of religious groups believe the message of the traditional family life and see marriage as an engagement between man and woman sealed by God and his community. Religious individuals hear the message frequently by their attendance of religious services, and interact with same minded religious people who also attend the services. With the result, those individuals who frequently attend religious services have stronger traditional perceptions about marriage and family life compared to individual who attend religious services less frequently. Non-religious individuals identify themselves less with the salience of certain religious groups, and are therefore less exposed by the traditional message giving by religious services. From this point of view, the second individual level hypothesis can be formulated as:

*Hypothesis 2:*

*Individuals with higher degree of religiosity have more traditional marital perceptions compared to individuals with lower degree of religiosity.*

### **2.3 Socialization Theory**

The process of social interactions is very important in society because it gives an external social pressure which guides our lives. It stimulates individuals to develop characteristics whereby they are able to participate within groups and society. This process strengthened the

influence in shaping one's world view. The Socialization Theory gives a good insight in how individual ideas and views are influenced by their environment. First the general theory will be discussed, followed by emphasizing the explanatory determinants towards traditional marital perceptions.

Socialization is a lifetime process of learning one's culture and how to live in it, and with the associated individual attitudes and beliefs which are necessary for participating in a particular society (Cote, 2002). After all, individuals do not live their lives isolated. The culture and the associated beliefs and attitudes are transmitted by social interactions towards the individual (Cote, 2002). These social interactions can be positive (e.g. having friends) or negative (e.g. sanctions such as being ignored) in order to socialize the individual. In this process individuals shape themselves based on other people's perceptions, with the result that individuals reinforce societal perspectives on themselves (Cote, 2002). Hence, the social interactions with the members of society influence the perceptions and beliefs of an individual (Cote, 2002). The individual views on certain moral issues, such as traditional martial perceptions, are influenced by the view of society. In particular, the view of society on martial perceptions makes it 'normal' and accepts certain attitudes related with this issue. The difference between individual perceptions is due to ineffective or incomplete socialization (Cote, 2002).

How the socialization process exactly works in relationship with martial perceptions will be discussed in more detail in the light of educational attainment, followed by religiosity.

The educational system plays an important role as a socialization agent. Schools are organized networks which prepare individuals to act in society (Meyer, 1977). The official function of the educational system is the transmission of knowledge and cognitive skills (Kalmijn & Kraaikamp, 2007). However, it also promotes certain liberal attitudes (Kalmijn & Kraaikamp, 2007), such as honesty, respect, equality, individualism and norms. These liberal orientations in society stress support for individual liberties and rights, a free market economy which is controlled neither by the state nor by a small oligarchy, fiscal responsibility, equality, separation of church and state, and supporting science and reason (Norris, 2011). In societies with liberal orientations the importance of cultural resources increases, such as cognitive abilities and knowledge. The influence of traditional socializing institutions decreases (Kalmijn & Kraaikamp, 2007). On the basis of this, one would expect that over time egalitarian and liberal orientations will become more dominant than conservative ones in society. In particular, societies with high country educational attainment liberal orientations

are more transmitted towards the members of society. The socialization process goes through social interactions and transmits societal liberal orientations towards the individual despite the individual level of education (Meyer, 1977). These social interactions stimulate the individual autonomy in general and the 'self-chosen' perceptions and attitudes. Likewise, the individual reshapes the (traditional) perceptions of marriage into more modern ones. This leads to the follow contextual hypothesis which can be tested:

*Hypothesis 3:*

*Individuals living in society with high country educational attainment have less traditional marital perceptions compared to individuals living in societies with lower country educational attainment.*

Religiosity as a traditional socialization agent plays an important role in people's morality, ideas of tolerance, beliefs, behaviors, and other issues. Important to note here is that the degree to which religiosity is widespread and socially approved varies among societies which influence the strength of the socialization process. When religiosity is widespread among a society the stronger will be the socialization role of religious organizations. Within societies with high country attendance of religious services, traditional orientations are more dominant than modern ones. Religious services stimulate their members to maintain the traditional family structure and the associated religious perceptions. In a society with high country religiosity these perceptions could be seen as 'normal'. The socialization role of religious organizations is stronger in these societies, and therefore they will transmit more traditional orientations towards the members of society. Through social interaction with members of a religious organization and the message given by religious organizations, these traditional perceptions will be transmitted to all individuals even to non-religious individuals. The socializations process of individuals in these societies internalizes these societal traditional orientations on themselves. Therefore, individuals who are living in more religious contexts will have more traditional marital perceptions compared to individuals living contexts with less religiosity. The follow contextual hypothesis can be formulated:

*Hypothesis 4:*

*Individuals living in a society with high country religiosity have more traditional marital perceptions compared to individuals living in society with lower country religiosity.*

## **2.4 Cross-level interactions**

In societies with high country educational attainment, citizens have an underlying value set which are premised on a broad conception of autonomy and liberal values with cultural resources, such as knowledge. Personal freedom is more important than the adherence of traditional social institutions in these societies (Kalmijn & Kraaikamp, 2007). On the basis of this, one would expect that traditional family perceptions are rather a choice in whether and when to marry and having children than a social norm. Therefore, in these societies traditional marital perceptions could be less dominant in contrast to what the individualistic perception suggests. In this view, higher educated people living in society with high country educational attainment will have less traditional marital perceptions, because modern orientations of higher educated individuals are more in harmony with the social norm compared to lower educated people in that society. Thus, higher country educational attainment in a society strengthens more modern marital perceptions for higher educated people than that of lower educated people. In societies with low country educational attainment the broad conception in society is less based on knowledge and cognitive skills. This means that the societal perceptions in these societies are more based on the view of traditional social institutions (Kalmijn & Kraaikamp, 2007). From this point of view, one can expect that this will decrease the degree modern marital perceptions of higher educated people, since individual modern marital perceptions are less harmonious with the social norm due of the impact of traditional social institutions. The following hypothesis can be formulated:

*Hypothesis 5:*

*The effect of higher country educational attainment will reinforce more the relationship between higher educated individuals and less traditional marital perceptions compared to societies with lower country educational attainment.*

In societies where the adherence of traditional social institutions is still important, it is most likely that citizens have more traditional orientations. The adherence of traditional social

institutions and the associated traditional social norm is more important than personal freedom (Kalmijn & Kraaikamp, 2007). Religious organizations stimulate traditional social views on moral issues (Scheepers et al. (2002), such as traditional marital perceptions. They stimulate this by wide spreading the message through their members into society. Therefore, religious people who attend frequently religious services, and living in religious contexts will have more traditional marital perceptions, since their traditional perceptions are more in harmony with the social norm than the perceptions of less religious individuals in that society. This reinforces the motivation of religious people to live their lives according to the guidelines of their religious organization (Turner, 1999). Thus, higher average religiosity in a society strengthens more the traditional marital perceptions for religious individuals than that of non-religious individuals. The following hypothesis can be derived from the Socialization Theory:

*Hypothesis 6:*

*The effect of higher country religiosity will reinforce more the relationship between higher religious individuals and more traditional marital perceptions compared to societies with lower country religiosity.*

In addition to the cross-level effects mentioned above, there could be another important contextual effect, namely the history of democracy. Important characteristics of democracy are equality, freedom and associated human rights, where citizens are equal for the law and have equal access to legislative processes (Norris, 2011). For example, every vote has equal weight and freedom is secured by rights (Przeworski et al., 2000). Furthermore, democracy allows citizens to express their political choice freely, to have freedom of speech, and freedom of the press.

The degree of democracy is influenced by democratic duration. Societies with a long history of democracy had more time to expand the principles of democracy and widespread social, economic and political equality into society compared to short or interrupted democracies. These democratic principles are in line with the liberal attitudes supported by the educational system. More particular, the democratic culture passes these modern orientations through rights and (social) policy which are in line with higher educational attainments. Assuming when these attitudes are more similar, the more easily they can be transmitted into society. From this point of view, one can expect that societies with a long

history of democracy will strengthen the relationship between higher educated individuals and more modern orientations, such as marital perceptions, because their modern perceptions are in line with the democratic culture.

In societies where democracy is interrupted in time, or has a short history, the liberal attitudes of the educational system differ with the attitudes of the political culture. After all, the integration of the principles of democracy into society is intermittent. Hereby, the liberal attitudes of higher educated are less conformable with the attitudes of the democratic culture than in societies with long history of democracy. Therefore, the modern perceptions of higher educated people will be strengthened less by the democratic culture of short history or interrupted democracies.

*Hypothesis 7:*

*The effect of long history of democracy will reinforce more the relationship between higher educated individuals and less traditional marital perceptions compared to societies with short historical or interrupted democracies.*

The degree of regulation of religious organizations in a democratic system may affect the association between religiosity and individual perceptions. In societies that regulate religious organizations, individuals have less personal freedom in choosing a (minority) religious movement. In contrast of reduced regulation which has the opposite effect, for instance in countries with a long history of democracy, people have more freedom in attending different religious movements. According to Elliott and Hayward (2009), political and civil liberties are strongly related with the degree of religious expression. In long historical democracies the individual freedom in public and private life is strongly present (Elliott & Hayward, 2009). In these contexts, people are free to define their personal religious identity and are able to express themselves in any religion. The free choice in participating religious organization may reduce the positive self-identification of the in-group. Due to the individual freedom, the freedom of the presence of (minority) religious groups in society, the characteristics of the in-group, and the sense of belongingness becomes faded. This reduces the strength of sharing traditional attitudes in a religious organization whereby the positive creation of self-identity minimizes. Hence, in societies with long history of democracy the social pressure to follow the traditional messages given by religious organizations will be less compared to short historical or interrupted democracies. From this point of view, one can expect that religious



individuals living in societies with long history of democracy have less traditional marital perceptions than religious people living in less democratic contexts. In short historical or interrupted democracies, other (minority) religious groups were in one way or another restricted. For instance, in post- communist Eastern Europe the Orthodox churches limited the rights of other religious groups to organize or to hold public meeting (Elliott & Hayward, 2009). Hence, individuals were less free in participating or express themselves in other religious organizations. This stimulates the self categorization and a form of self-identity with the in-group. Therefore, in short democratic contexts, the societal perceptions are more based on traditional values and norms of a religious organization. This leads to the hypothesis that:

*Hypothesis 8:*

*The effect of long history of democracy will weakened more the relationship between high religious individuals and more traditional marital perceptions compared to societies with short historical or interrupted democracies.*

**2.5 Conceptual model**

The conceptual model frames the theories described above. To give an insight in the analytical line of this study, the multi-level structure is emphasized.

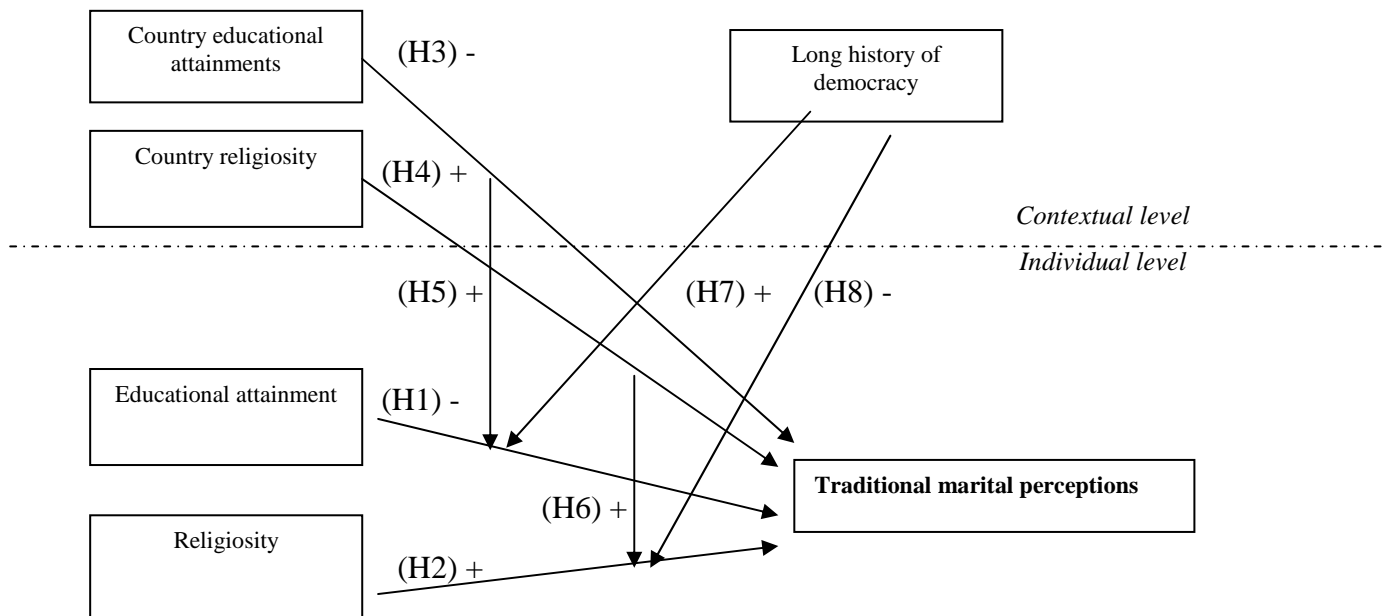


Figure 2.3: Conceptual model derived from the hypotheses.

### **3 Research design**

This study will use a cross-sectional research design to investigate the differences at the individual level and contextual level towards the perceptions of marriage at a single point in time. Cross-sectional design is a type of design that investigates different groups of people who differ in marital perceptions, but share other characteristics such as socioeconomic backgrounds.

The survey was conducted in the year 2002 by the International Social Survey Programme 2002 (ISSP) with the module topic: Family and Changing Gender Roles. The ISSP is a continue programme on surveys covering different topics cross-nationally which are be important for social science research. The survey was fielded in 34 countries across the world. This research retained to 27 countries due of the adequate data which can be used for the analysis. The countries are: Australia, Bulgaria, Chile, Cyprus, Czech Republic, Belgium, France, Finland, Germany, Great Britain, Hungary, Ireland, Israel, Japan, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United States. Within these countries the questionnaire was taken with a face-to-face structured interviews and were selected at random, with the age of 15 years and older. Additionally, the respondents with complete information on all variables were selected for the analyses. After this data manipulation, the number of respondents that are included in the final analyses is performed is 32,425, which is 88.8% of the total in 27 countries.

This section will discuss the operationalization of the variables in section 3.1. Followed by section 3.2 were the treatment of matching files and methods of analysis are discussed.

#### **3.1 Operationalization**

In order to test the hypotheses formulated in chapter 2, it is necessary to make the theoretical concepts measurable. In this section, the operationalization of the dependent, independent and control variables will be discussed. Hereby, each variable will be discussed in how the concept is made measurable.

##### ***3.1.1 Dependent variable***

The dependent variable of this research is traditional marital perceptions. The four items indicating marital perceptions are: *a. People who want children ought to get married. Marriage*

can become a choice when people are more individualistic orientated. For those people marriage is not a necessity to receive companionship, intimacy, and children and therefore will have less traditional marital perceptions *b. It is all right for a couple to live together without intending to get married.* Individuals who agree with cohabitation without intending to marry can define marriage in a more individual than in couple terms (Thomson & Colella, 1992). These individuals can view themselves as two individuals sharing life with the same content as marriage. Therefore, their perceptions about marriage are less traditional orientated within a relationship. They can have less commitment to the institution of marriage or content the quality of marriage lower. In the same line of reasoning is the next item with the exception that the individual can view marriage as more important or in more couple terms *c. It is a good idea for a couple who intend to get married to live together first.* The last items indicates that marriage plays an important role in one's personal happiness, respondents gives a high value and commitment to marriage *d. Married people are generally happier.*

The respondents gave answer to which degree they agreed or disagreed on a one to five point scale. When the respondent answers with 'strongly agree' on question *a* and *d*, and 'strongly disagree' at the questions *b* and *c*, will be considered as having more traditional perceptions on marriage. The distribution of all answer categories are presented in table 3.1. This table shows that respondents (50.2%) think it is better to marry if people want children, these respondents have more traditional martial perceptions. For the items *b* and *c* the majority of the respondents have more modern marital perceptions. The answers of the last item are more equally divided. The majority of the respondents (28.7%) are not sure if marriage makes one happier.

**Table 3.1: Items of traditional marital perceptions of total respondents and percentages in each answer category (N=32,425).**

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
<b>a. People who want children ought to get married</b>	10.9%	22.7%	15.2%	32.1%	18.1%
<b>b. It is all right for a couple to live together without intending to get married</b>	6.2%	14.2%	12.9%	43.4%	22.4%
<b>c. It is a good idea for a couple who intend to get married to live together first</b>	5.5%	12.5%	16.9%	43.3%	21.7%
<b>d. Married people are generally happier</b>	10.2%	22.2%	28.7%	23.6%	10.3%

Source: ISSP 2002

These items were tested to see whether they might share one underlying dimension of marital perceptions with the goal to reduce the number of analyses. The four items of traditional marital perceptions are tested for their reliability as a scale. The scale can be classified as ‘sufficient’ reliable based on the shared correlation (Cronbach’s alpha: .72), and the scale does not improve when one of the four items were removed. The scale also explains more than half of the variance of the sample size (Total Explained Variance 54.96%). This means that the items jointly measure the same dimension and can be used for further analysis. Furthermore, the items are tested by a principal factor analysis for their significantly positively loadings on one factor (Kaiser-Meyer-Olkin Measure: 0.66). KMO measures the sampling adequacy whether the partial correlations among variables are small. The criteria of the KMO index should be at least 0.6 for a satisfactory factor analysis to proceed. Another indicator to examine the strength of the indicators is the Bartlett's test of sphericity. The test is used to indicate the strengths of the correlation. The Bartlett’s test of sphericity was significant which indicates that the null hypothesis can be rejected and the strength among the variables is strong. These tests indicate that it is a good idea to use the traditional marital perceptions scale for further analyses.

This research chooses for the average of three out of four items in order to calculate traditional marital perceptions. If the respondent has one missing answer on one of the four items, than the average value of the remaining three items will be used as an indicator. In this way, there are more respondents (1,359 respondents) with a value on traditional marital perceptions taken into analysis. The respondents that refused to answer or could not choose between the categories were removed from analysis. Table 3.2 gives an overview in the distribution of each answer category of the marital perceptions scale among the respondents that are taken into further analysis.

*Table 3.2: Traditional marital perceptions scale and percentages in each answer category (N=32,425).*

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree or disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>Traditional marital perceptions scale</b>	15.0%	42.7%	30.3%	10.9%	1.1%

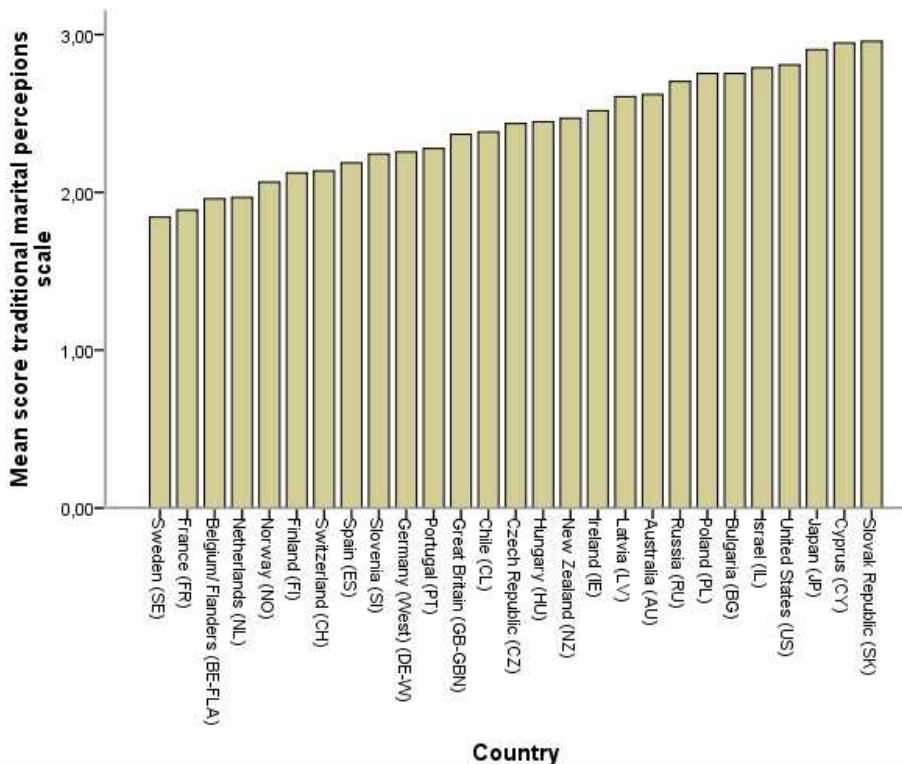
Source: ISSP 2002

The same reliability and principle factor analysis is done for each of the original 34 countries to test whether the marital perceptions scale still measures the same shared dimension. The tests gave for each country quite different outcomes. The factor analysis indicated that five

countries<sup>1</sup> did not meet the criteria of more than .60 score at the KMO index, and the reliability of the scale based on shared correlations (Cronbach's alpha) within these countries was insufficient. Therefore, the decision is made to remove the five countries from analysis. This decision is probably not conflicting in order to answer the research question, since the remaining 27 countries vary enough in characteristics to test the hypotheses. Details of the KMO and Bartlett's test of sphericity of each country are presented in appendix B.

In figure 3.3 the means score on the traditional marital perceptions scale from 1 to 5 for each country is shown. With a closer look to the degree of traditional marital perceptions in each country some differences are visible. The countries Slovak Republic (2.96) and Cyprus (2.95) have the highest scores on traditional marital perceptions scale followed by Japan (2.91), United States (2.81), and Israel (2.79). In these countries most of the people have strong traditional marital perceptions compared to other countries. The lowest scores on the scale are the countries Sweden (1.84) and France (1.89) which have more modern marital perceptions.

Figure 3.3: Score on traditional perceptions scale for each country (N=27).



Source: ISSP 2002.

<sup>1</sup> The excluded countries are: Philippines, Mexico, Brazil, Taiwan and Denmark. Austria is removed for other reason explained in section 3.1.2.

### ***3.1.2 The independent variables at the individual level***

*Educational attainment* is a continuous variable to measure the exposure to the educational system. The respondents were asked how many years of education they had followed. The respondents with many years of education (e.g. range 25-82 years) are recoded to 25 years of education as a maximum. It is very unlikely that people go to school for more than 25 years, probably the respondents interpret the question more in terms of learning something new (e.g. evening course, home course). This research examines (daily) schooling in classes, because in this way social interaction are possible which stimulates the socialization process and the transmission of liberal orientations towards the individual. Furthermore, the respondents that were still at school are coded to the years of educations matching with their educational attainment. The respondents that has no educational attainment are coded as 1 '1 year or less of schooling' (N=377). The respondents that refused to answer or did not know the answer, have been removed from the dataset. In this way, the influence of schooling on traditional marital perceptions is really an effect of educational attainment itself. Of the total respondents, gave 33,437 respondents a valid answer on the question in years of education. This question is not asked in the country Austria and this country is therefore removed from analysis.

Respondents were also asked about there attendance of religious services to measure the level of *religiosity*. Many studies use this indicator as a predictor for religiosity and therefore this research will follow the line (Filsinger & Wilson, 1984; Hansen, 1987; Scheepers, et al., 2002). The frequencies of attendance were divided into eight categories from 'every day' (8) to 'never' (1). Respondents (9.9%) that answered not to be religious are coded to 1. Respondents without a valid answer were removed from the dataset. The total respondents with a valid answer, is 34,608. See for more details of the independent variables appendix A.

### ***3.1.3 Independent variables at contextual level***

To measure the concept of *country educational attainment* at the contextual level the average of the individual education in years of each country was taken. In this way the aggregated predictor can be used for contextual level analysis (Hox, 2002). For *country religiosity* at the contextual level the same procedure is followed. By calculating the average of individual attendance of religious services of each country the aggregated predictor can be used for contextual analysis.

Finally, the last contextual variable is the *history of democracy*. The countries are divided into three categories according to the length and interruptions of their democratic history. The categories are: Long-standing democracies (3), democracies interrupted by relatively short periods of non-democratic regimes (2), and short-standing democracies (1). Information from the book *Democracy and Development: Political Institutions and Well-being in the World, 1950-1990* (Przeworski, et al., 2000) is used to divide the selected countries into the three categories. See for an overview Appendix C. The authors Przeworski et al. (2000) used three guidelines to classify regimes. The first rule is that the ‘chief executive’ (e.g. prime minister or president) in a country must be elected, directly or indirectly by voters or to a legislature elected by them to be qualified as democratic. The second rule is that the legislature (e.g. congress or parliament) must be elected to be qualified as democratic. The last, third rule is that in a country during the elections an independent list of candidates are presented to voters. For example, when during the elections other political parties are banned, or there is just one party to vote on (one voting list), this will be considered as authoritarian regimes. In cases when there is an electoral defeat or a party having actually been defeated, but they closed the legislature, introduced a state of emergency, and rewrote the rules in their favor. In such cases the regime will be classified as authoritarian during the period or years of doctorial interregnum (Przeworski, et al., 2000). In this research, this last case will be classified as an interrupted democracy. Countries can be classified as ‘short democracy’ when they became later in time democratic. For example, Japan had one- party ruled a long tenure in office, but when they finally lost the elections in 1993 they allowed the opposition to assume office (Przeworski, et al., 2000). The same true is for the countries resulted form the breakup of the Soviet Union in 1991 or became democracies after the late ‘70s. Countries that are classified as long history of democracy are democratic before the late ‘70s.

### **3.1.4 Control variables**

The control variables are selected to prevent possible effects in the relationship between educational attainment, religiosity and martial perceptions. The most important control variables at the individual levels are: income, age, marital status, and gender.

The control variables *income* is taken into account, since education is overall highly correlated with income; therefore this variable is added to prevent disturbance of income on the actual effect of education. Income is indicated by personal monthly net income of 23,432

respondents. A lot of respondents (N=11,943) refused to answer this question therefore, these are replaced to the average income within each country. To conceptualize income in this way could lead to distorted results. Respondents that refused to answer could have extreme low or high income, but by taking the average it could distort the effects on marital perceptions compared to respondents that did answer. To solve the problem a dummy variable is created to control the effect between the answered and refused respondents. Respondents that answered the question are the reference category. Furthermore, to interpret the results easier the income variable is divided by 100.000 prior to analysis.

As for *age*, previous studies showed that older people are more religious and have lower educational attainment compared to younger people (Sieben & De Graaf, 2004). Therefore age is a necessary control variable which is indicated by year of birth of the respondent (N=35,375).

For *gender* applies that women appear to be more religious and have lower educational attainment in comparison with men (Sieben & De Graaf, 2004). Among the respondents 15,550 are men (reference category), and 19,783 are women.

The perceptions on marriage can be different depending on the *marital status* of the respondent. For example, married people can have more traditional marital perceptions than never-married persons because never-married persons can be more individualistic orientated. A dummy variable is created for each status with the reference category of married people. The respondents that are divorced or separated are combined into one dummy. This research view separation as a form of marital disruptions similar to divorce, which is in line to other studies (Amato, 1997; Booth et al., 1991). The other dummies to conceptualize marital status are widow, and single and never married. The total amount of respondents with a valid answer is 35,098.

The control variable for contextual level analysis is *Gross Domestic Product* (GDP) per capita in US dollars. According to the authors Yuchtman-Yaar & Alkalay (2007), the wealth of nations measured by GDP strongly influence the orientations of their citizens, and the greater the wealth the stronger people adopt liberal attitudes on social issues. In this research, GDP is treated as a continuous variable in the analysis. To interpret the effect of GDP in the models easier, this variable is divided by 10.000 dollars to prior analysis.

A list with measurement details of all variables can be found in appendix A. The characteristics details for each country can be found in appendix C.



*Table 3.4: Descriptive statistics of all the variables used in analysis.*

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std.dev</b>
<i>Individual level variables</i>					
<b>Traditional marital perceptions</b>	32425	1	5	2.41	0.91
<b>Educational attainment</b>	32425	1	25	11.63	3.86
<b>Religiosity</b>	32425	1	8	3.20	2.30
<b>Income</b>	32425	1	999996.00	39627.50	85783.35
<b>Dummy income (ref. cat: income)</b>	32425	0	1	.33	
<b>Resp. gave no answer</b>	32425	0	1	.33	
<b>Female</b>	32425	0	1	.56	
<b>Age</b>	32425	15	96	45.98	16.82
<b>Marital status (ref. cat: married)</b>	32425	1	4	3.05	1.27
<b>Single</b>	32425	0	1	.23	
<b>Divorced</b>	32425	0	1	.09	
<b>Widowed</b>	32425	0	1	.08	
<i>Contextual level variables</i>					
<b>Average educational attainment</b>	27	8.14	13.49	11.59	1.18
<b>Average religiosity</b>	27	1	5.66	3.18	.109
<b>GDP per capita</b>	27	7,375.45	37,058.81	23,215.13	8,788.69
<b>Democracy</b>	27	1	3	1.93	.98

Source: ISSP 2002, The World Bank (2002), and Przeworski et al. (2000).

### 3.2 Methods of data analysis

For analyzing the data it is necessary to merge three different data sources into one dataset. The data for democracy for each country (Przeworski, et al., 2000) and GDP per capita (OECD Factbook , 2011-2012) are merged into the ISSP (2002) dataset. The SPSS 17.0 for Windows program is used for analyzing and merging the data.

For analyzing the data first the bivariate analyses will be done. It provides an insight about the strength of the relationship between educational attainment, religiosity with traditional marital perceptions at the individual level and contextual level. Secondly, multivariate analysis will be applied in order to test the hypotheses.

The technique that is used is multi-level regression analysis. Multi-level regression analysis examines the different marital perception across 27 countries at the individual level

and contextual level. Multi-level analysis is also known as hierarchical models which consider the data structure as hierarchical where one level is nested in another (Hox, 2002). More particular, the modeling of the data enables to see how contextual predictors can influence the individuals by grouping. In addition, it measures how individual level predictors can have contextual effects with different implications in different countries. Note here, when statistical interpretation of country characteristics would be seen as an individual characteristic, ecological fallacy can occur (Hox, 2002). The multi-level model prevents this kind of interpretation bias. The multi-level model takes the calculation of standard errors for the individual level and country level together as a total of all the countries (Hox, 2002). As well, the standard errors itself will apply to country level separately. Multi-level analysis provides log likelihood to evaluate the models. By comparing the change in the log likelihood to the change in the degrees of freedom of different models, one can see which of the added variables improves the model fit. The models have an intercept which describe the degree of traditional marital perception across contexts. The hypotheses will be tested by including the variables stepwise into the models. First, the null-model will be conducted without explanatory variables to confirm that marital perceptions indeed vary across countries. Secondly, in model 1, the explanatory variables and control variables at the individual level will be added followed by the inclusion of contextual variables in model 3, to examine the variability between contexts. Next, in model 4 and 5 are the random slopes of educational attainment and religiosity added to investigate if these predictors have larger effects towards marital perceptions in some contexts compared to other contexts. When this is the case the random intercepts does not fit the data well, therefore the random slopes are added to fit better with the data. So, the random slopes allow the explanatory variables to have different effect for each group towards marital perceptions. Finally, the cross-level interaction terms are added to test whether contextual variables can explain the differences of educational attainments and religiosity towards marital perceptions.

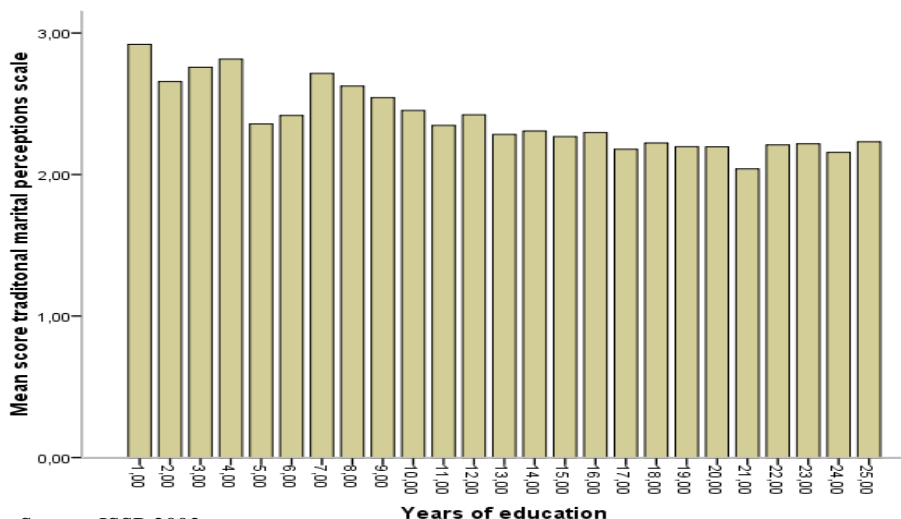
## **4 Analyses and findings**

This section presents the analysis part of the thesis. First, the results of bivariate analysis will be treated in section 4.1. The bivariate analyses will be done to investigate the strength between educational attainment and religiosity towards the dependent variable. The next analysis will be the multi-level regression analysis treated in section 4.2. The results will be described in light of earlier mentioned expectations.

### **4.1 Bivariate analysis**

The first analysis explores the relationship between individual educational attainment and marital perceptions. Figure 4.1 show an overall small declining line in traditional marital perceptions when the year of education increases. The respondents with one year or less education have the highest score on the traditional marital perceptions scale. The lowest score on the scale are the respondents with 21 years of education. As expected, this indicates that the higher educated people have more modern marital perceptions. The degree of modern perceptions seems to be stable after 17 years of education, with the exception of 21 years of education. After 17 years of education, which means at least (post) secondary education, people seem not to shift their modern perceptions into more modern ones. This could mean that the transmission of liberal values through the educational system is limited and not 'endless' which is not fully in line with the expectations. Nevertheless, the investigation of the correlation (-0.139) shows a negative correlation and is significant at the 0.01 level (2-tailed). This implies a very small negative linear correlation which is in line with the expectation.

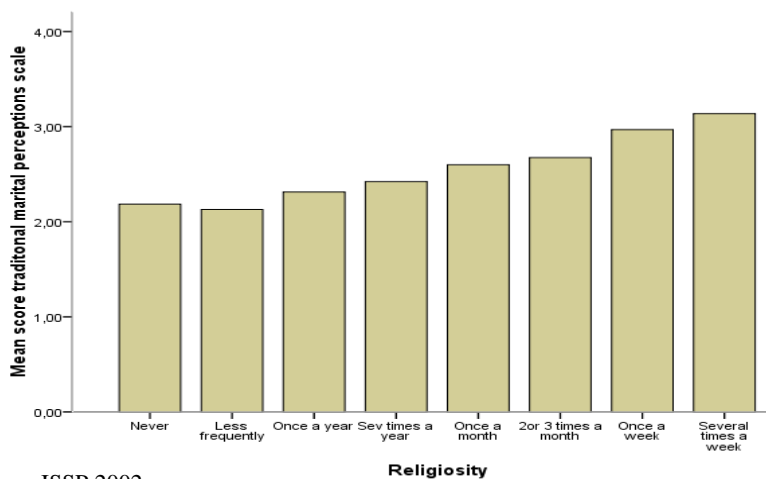
**Figure 4.1: Traditional marital perceptions score (1-5) for individual educational attainment (N=32,425).**



Source: ISSP 2002.

In the next figure 4.2 the degree of religiosity towards marital perceptions is shown. The figure shows a rising line in traditional marital perceptions when church attendances increases. People who are not religious or attend less frequently a religious organization have the lowest score on the marital perceptions scale. The highest score on the scale are the respondents with high level of religiosity. The investigation of the correlation (0.327) indicates a significant positive linear connection at the 0.01 level (2-tailed) between religiosity and traditional marital perceptions. As expected, this suggests that religious people have a stronger traditional family view compared to individuals who are less religious.

**Figure 4.2: Traditional marital perceptions score (1-5) for individual religiosity (N=32,425).**

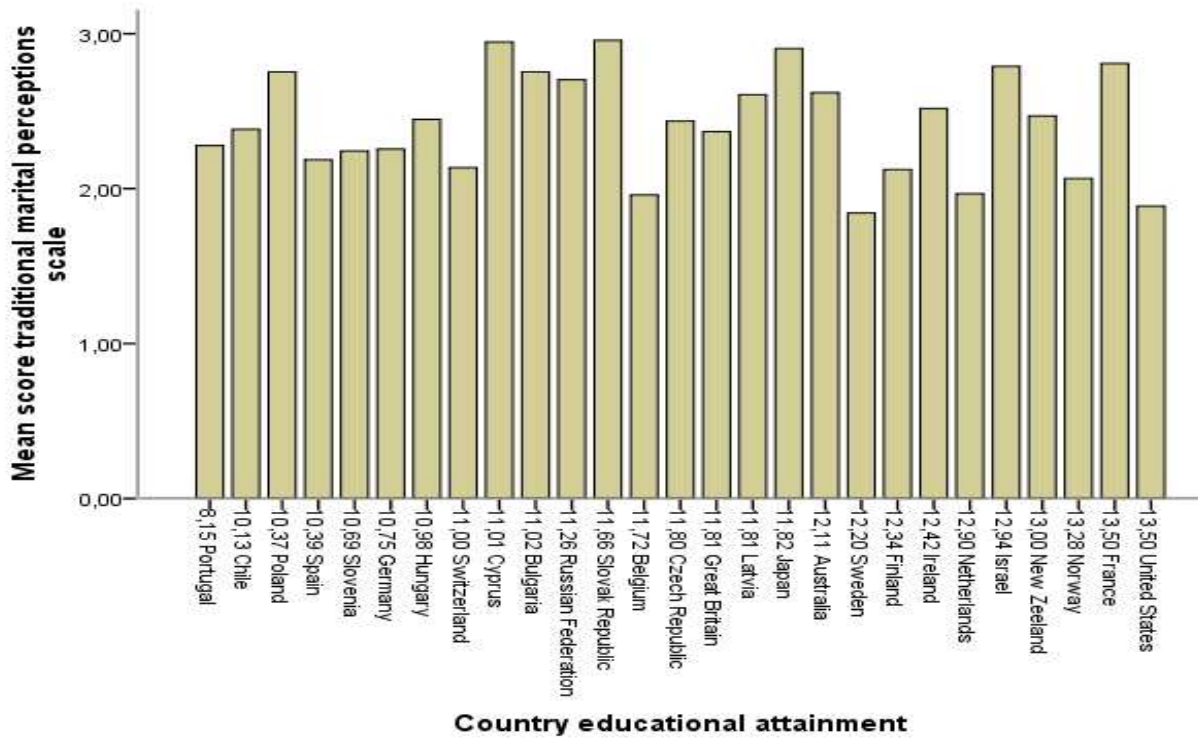


Source: ISSP 2002.

Investigation of educational attainment at the contextual level is showed in figure 4.3. There is no clear linear association visible between country educational and the degree of traditional marital perceptions. There seems to be a small concentration of low scores on traditional marital perceptions scale in countries with higher educational attainment. For instance, Belgium (11.72 years), Sweden (12.20 years), the Netherlands (12.90), and the France (13.50 years) have high country educational attainment and the lowest scores on the traditional marital perceptions scale. These low scores are not visible in the lower parts of country educational attainment. Furthermore, United States (13.50 years), and Israel (12.94 years) which have very high score in country educational attainment and score very high on the perceptions scale. Also, the (ex) communist countries score all high on the traditional marital perceptions scale despite of the country educational level. An explanation for this cannot be derived from this analysis; perhaps multivariate analysis can provide more information. Lastly, the negative correlation (-.034) is significant at 0.01 level (2-tailed) which indicates a

small linear relationship with high country educational attainment and a decreasing effect on traditional marital perceptions.

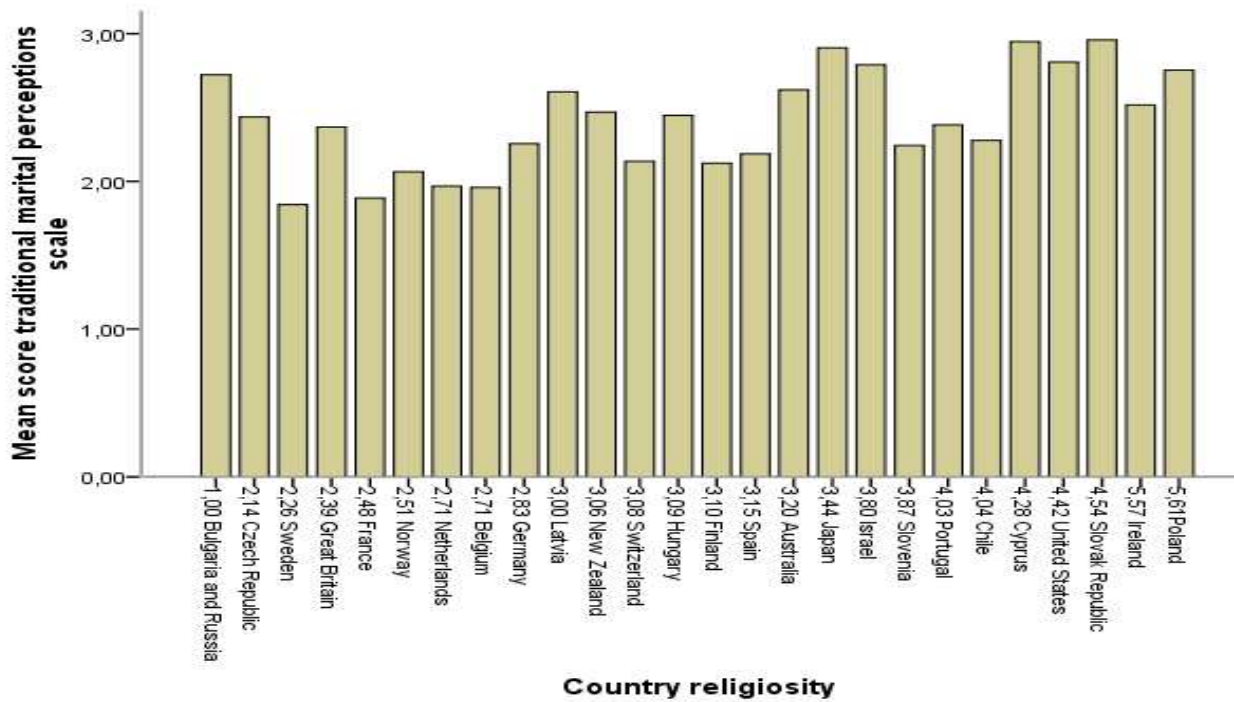
Figure 4.3: Traditional marital perceptions score (1-5) for country educational attainment (N=27).



Source: ISSP 2002.

The country religiosity showed in figure 4.4 seems to have a small increasing line between country religiosity and traditional marital perceptions. The countries Cyprus, Slovak Republic, and Japan have the highest scores on traditional marital perceptions scale compared to other countries but are not the most religious countries. Furthermore, Czech Republic is less religious (2.14) but has a high score on traditional marital perceptions scale. Noteworthy, the countries Bulgaria and Russia which gave both the answer to be not religious and scores high on the perception scale. The positive correlation (.109) is significant at 0.01 level (2-tailed) indicating that there is a small linear association between country religiosity and more traditional marital perceptions.

Figure 4.4: Traditional marital perceptions for country religiosity at the contextual level (N=27).



Source: ISSP 2002.

#### 4.2 Multivariate analysis

This section shows to what extent the explanatory variables affect traditional marital perceptions after controlling for other variables. Furthermore, the hypotheses will be tested derived from several models.

The null or empty model (Table 4.2) presents only the effect of the intercept to investigate the model without other explanatory variables. The null-model shows that 13.7% of the individual variance can be explained by country clustering. In other words, approximately 14% of the variation of traditional marital perceptions is caused by the fact that people live in a particular country. This finding gives sense to test the hypotheses stepwise by multi-level analysis to examine these variations. The next models will be compared with this null-model to see if the explained variance increases.

Model 1 (table 4.2) show that every year of education the traditional marital perceptions decrease with .014. For instance, 12 years of education leads to a decrease of .17 on traditional marital perceptions scale (1-5), which is a very small effect. The parameters estimates show a highly statistical significant ( $p < .001$ ) association between higher educational attainment and more modern marital perceptions. These findings support the first hypothesis

that higher educated people have less traditional marital perceptions compared to lower educated people.

To test the second hypothesis, the parameter estimates of religiosity will be inspected. Religiosity has a positive effect on traditional marital perceptions. The more a person attends religious services with each unit the more traditional perceptions (.114) a person has. For instance, attendance of religious services several times a year (4) leads to an increase of .46 more traditional marital perceptions, which is a very small effect. Also, this parameter estimates is highly significant ( $p < .001$ ). This finding supports the second hypothesis, which predicted that religious individuals have more traditional marital perceptions than less religious people. This model shows also that the null-hypothesis of no relationship between educational attainment, religiosity and traditional marital perceptions can be rejected.

Investigation of the control variables shows that age (.015) is positively related with more traditional marital perceptions. This suggests that older people have more traditional marital perceptions than younger people. There are also differences between men and women, women seem to have more modern marital perceptions (.124) compared with men. The marital status also influences one's perceptions. People who are divorced (.318) have the most modern perceptions compared with married people, followed by single people (.191), and finally people who are widowed (.019) but this last parameter estimate is non-significant which means that this finding is not representative for the entire population. Finally, the control variable income has a non-significant effect on marital perceptions. However the dummy variable shows a strong significant positive effect. This means that people who did not answer the income question have more traditional marital perceptions (.055) compared to people who did answer the question. Furthermore, the model explains at the individual level approximately 25%<sup>2</sup>, and 7% at the contextual level. This means that of the individual characteristics 25% explains traditional marital perceptions. At the contextual level, this means that 7% of the association between individual characteristics and marital perceptions can be explained by the context individuals live in. In particular, people living in the same country share the same characteristics more compared to other countries, the so called composition-effect. For instance, some countries have more religious people or higher educated people than in other countries which explain the differences between contexts. In the next models we see if these statistically significant effects hold stand when contextual variables are added.

---

<sup>2</sup> Given by:  $(.720 - .541) / .720 = 0.249$ , and  $(.114 - .106) / .114 = 0.070$ .

---

<b>H1:</b> Individuals with higher educational attainment have less traditional marital perceptions compared to individuals with lower educational attainment.	<i>Confirmed</i>
<b>H2:</b> Individuals with higher degree of religiosity have more traditional marital perceptions compared to individuals with lower degree of religiosity.	<i>Confirmed</i>

---

The inclusion of contextual variables in Model 2 (table 4.2) shows for the parameters estimates of GDP (-.089) is non- significant. The parameter estimates of democracy (-.230) is significant which indicates that in countries with long history of democracy people have more modern perceptions. Country educational attainment (.160) is statistical significant and has a positive effect with traditional marital perceptions. Meaning, that societies with high average of educational attainment have more traditional marital perceptions compared to societies with low average of educational attainment, which is not in line with the expectations. A reason could be that the contextual variables influence each other. To examine these possible influences the contextual variables are taken separately from each other into analysis. The contextual variables are added one by one similar to model 2 into analysis (appendix D). The first parameter estimate of country educational attainment is small and insignificant. When other variables (country religiosity, GDP, and democracy) are added stepwise into the model the parameter estimate of country educational attainment (.156,  $p < .01$ ) became positive and highly significant. On the other hand, country educational attainment also reinforced the parameter estimates of democracy from -.175 ( $p < .01$ ) to -.295 ( $p < .001$ ). Also, country educational attainment reinforces the parameter estimates of GDP from -.183 ( $p < .01$ ) to -.267 ( $p < .001$ ). Nevertheless, country educational attainment remains positive in the relationship with traditional marital perceptions. Meaning that country religiosity, GDP, and democracy does not influence country educational attainment in the opposite direction towards marital perceptions. Furthermore, the differences in the duration of the history of democracy was examined to see if this could influence the relationship of country educational attainment towards marital perceptions but this was not the case. Concluding, countries with higher educational attainment have more traditional marital perceptions. This finding will reject the third hypothesis.

---

<b>H3:</b> Individuals living in society with high country educational attainment have less traditional marital perceptions compared to individuals living in societies with lower country educational attainment	<i>Rejected</i>
---	-----------------

---



**Table 4.2: Parameters Estimates from linear multi-level regression analysis. Intercept is traditional marital perceptions N=32,425(1-level), N= 27 countries (2-level).**

Independent variables	Null Model	Model 1	Model 2	Model 3 (slope edu)	Model 4 (slope relig)	Model 5	Model 6	Model 7	Model 8
Intercept	2.421***	1.654***	.447	.297	.414	.994	.416	.489	.508
<i>Individual level</i>									
Education level		<b>-.014***</b>	-.014***	-.014***	-.014***	-.055	-.014***	-.024***	-.014***
Religiosity		<b>.114***</b>	.114***	.114***	.118***	.114***	.139**	.114***	.066**
Age		.015***	.015***	.015***	.015***	.015***	.015***	.015***	.015***
Female		-.124***	-.124***	-.127***	-.118***	-.127***	-.118***	-.127***	-.117***
Marital status (ref. married)		Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Single		-.191***	-.191***	-.193***	-.191***	-.193***	-.191***	-.193***	-.191***
Divorced		-.318***	-.318***	-.315***	-.318***	-.315***	-.318***	-.315***	-.318***
Widowed		-.019	-.019	-.019	-.017	-.019	-.017	-.020	-.017
Income		-.008	-.008	-.015*	-.006	-.015*	-.006	-.015*	-.006
Dummy income		.055***	.055***	.056***	.049***	.057***	.049***	.057***	.049***
<i>Contextual level</i>									
Country Education l			<b>.160**</b>	<b>.167**</b>	.158**	.106	.155**	.166**	.161**
Country Religiosity			<b>-.006</b>	.008	<b>.005</b>	.007	.019	.007	.012
GDP per capita			-.089	-.098	-.092	-.098	-.097	-.098	-.084
Democracy			-.230*	-.200*	-.212*	-.200*	-.212*	-.295**	-.300**
<i>Cross- level interaction</i>									
Educ attain*						<b>.004</b>			
Country educ attain									
Religiosity*							<b>-.006</b>		
Country religiosity									
Educ attain*								<b>.006*</b>	
Democracy									
Religion*									
Democracy									<b>.026**</b>
“-2 Log Likelihood	81529.986	72302.320	72299.016	72218.386	71912.240	72226.383	71919.144	72224.352	71912.878

Source: ISSP 2002, The World Bank (2002), and Przeworski et al. (2000). Own calculations.

P-values: \*\*\* p&lt;0.001, \*\*=p&lt;0.01, \*=p&lt;0.05.

To test the fourth hypothesis we will investigate the contextual parameter estimates country religiosity (-.006) which is negative but non-significant (Table 4.2). Indicating the degree of religiosity in a society and the relationship with traditional marital perceptions is based on coincidence. This finding rejects also the fourth hypothesis. Furthermore, model 2 explains approximately 47% of country level variance. In other words, the differences in individual traditional marital perceptions can be explained for 47% by country characteristics. The individual level variance of the model remained unchanged (25%).

**H4:** Individuals living in a society with high country religiosity have more traditional marital perceptions compared to individuals living in society with lower country religiosity.

*Rejected*

Model 3 includes the random slopes for individual educational attainment which means that the individual educational attainment is allowed to vary across countries. In this way we can determine whether different educational attainments has a different effect on marital perceptions (e.g. intercept) across countries. The inspection of the covariance parameters indicates how much the intercept and random slope vary across countries (table 4.3). The random slope (.0002) is significant indicating that the effect of educational attainment on marital perceptions varies across countries. In other words, in some countries with higher educated individuals have less traditional marital perceptions than those living in other countries but this variation is very small.

*Table 4.3: Variance partitioning coefficients with the random slopes educational attainment and religiosity.*

	<b>Model 3</b> (education)	<b>Model 4</b> (religiosity)	<b>Model 5</b> (Edu* country)	<b>Model 6</b> (Relig*country)	<b>Model 7</b> (edu*demo)	<b>Model 8</b> (relig*demo)
<b>Residual variance</b>	.5386***	.5330***	.5386***	.5331***	.5386***	.5331***
<b>Intercept</b>	.1100***	.0799**	.1074***	.0786**	.1033***	.0758***
<b>Covariance</b>	-.0033**	-.0085*	-.0032**	-.0080	-.0029**	-.0074*
<b>Slope</b>	.0002**	.0026***	.0002**	.0026**	.0002**	.0021**

Source: ISSP 2002, The World Bank (2002), and Przeworski et al. (2000). Own calculations.

P-values: \*\*\* P<0.001 \*\*=p<0.01, \*=p<0.05.

In model 4 the random slope of religiosity is added. In this way we can determine whether individual religiosity has different effects on traditional marital perceptions across countries. Table 4.3 show that the random slope of religiosity (.0026) is highly significant indicating that individual religiosity on marital perceptions varies across countries. This means that in some countries with more religious individuals have less traditional marital perceptions than those living in other countries but this variation is very small. In order to find an explanation for these differences cross-level interactions terms will be added into the models. In this way, we can examine which contextual variable strengthened or weakened the relationship between the individual key characteristics and marital perceptions.

Model 5 (table 4.2) includes the interaction term individual educational attainment with country educational attainment. The interaction term suggest that country's educational level strengthened the relationship between higher educated people and less traditional marital perceptions. The parameters estimate of the interaction term (.004) is positive and non-significant. The random slope (table 4.3) remains unchanged compared with model 3 of this

table. This finding implies that country educational level does not significantly affect the relationship between individual educational attainment and traditional marital perceptions. Therefore, hypothesis five is rejected.

---

<b>H5:</b> The effect of higher country educational attainment will reinforce more the relationship between higher educated individuals and less traditional marital perceptions compared to societies with lower country educational attainment.	<b><i>Rejected</i></b>
---	------------------------

---

In model 6 the interaction term individual religiosity with country religiosity is included. The interaction term suggest that the degree of contextual religiosity affects the relationship between individual religiosity and traditional marital perceptions. Investigation of the parameters estimates (table 4.2) shows that the interaction term (-.006) is negative and non-significant. The covariance estimates (table 4.3) of the random slope (.0026) remains unchanged compared with model 4. This finding implies that in some countries with more religious people have less traditional martial perceptions than in other countries, but this can not be explained by country religiosity. Therefore, the sixth hypothesis is rejected.

---

<b>H6:</b> The effect of higher country religiosity will reinforce more the relationship between higher religious individuals and more traditional marital perceptions compared to societies with lower country religiosity.	<b><i>Rejected</i></b>
--	------------------------

---

In model 7 the interaction term country democracy with individual educational attainment is included. The interaction term suggests that the history of democracy influences the effect between individual educational attainment and traditional marital perceptions. Investigating the parameter estimate (table 4.2) shows that the interaction term is positive (.006,  $p < 0.05$ ) and significant. The effect of educational attainment towards traditional martial perceptions will be strengthened by the history of democracy. This means for contexts with short history of democracy, the effect of individual educational attainment decreases with  $-.018^3$  on traditional marital perceptions scale. In interrupted democracies individual educational attainment effect  $-.012$  traditional marital perceptions, and in long history of democracy educational attainment affects  $-.006$  on traditional marital perceptions. Meaning, the effects of higher educated people towards less traditional marital perceptions is larger in short democratic countries and less strong in countries with long history of democracy. Thus,

---

<sup>3</sup>  $(.006) + -.024 = -.018$ , and  $(.006 * 2) + -.024 = -.012$ , and  $(.006 * 3) + -.024 = -.006$ .

higher educated people living in countries with long history of democracy have more traditional marital perceptions compared to other democracies. This is in contradiction with the hypothesis. Furthermore, the covariance parameters (table 4.3) of the random slope (.0002) remain unchanged compared with model 3. Meaning that the interaction term does not explain the variance in individual educational attainment towards traditional marital perceptions across countries. This finding leads to rejecting the hypothesis.

---

**H7:** The effect of long history of democracy will reinforce more the relationship between higher educated individuals and less traditional marital perceptions compared to societies with short historical or interrupted democracies. **Rejected**

---

Model 8 the interaction term country democracy with individual religiosity is introduced (table 4.2). The parameter estimate of the democracy is very significant (.026,  $p < 0.01$ ) and positive. Meaning, contexts with short history of democracy the effect of religiosity is .092<sup>4</sup> on traditional marital perceptions, in interrupted democracies individual religiosity has .118 higher effects on traditional marital perceptions, and long history of democracy religiosity has .144 effects on traditional marital perceptions. This suggests that the history of a country indeed influence the relationship of individual religiosity and traditional perceptions. In particular, countries with long history of democracy reinforce religious people to have more traditional marital perceptions compared to other countries. This is not in line with the expectations. Furthermore, the covariance parameter estimate (table 4.3) of the random slope (.0021) shows a very small change compared with model 4 when the interaction term is included. This means that the interaction term explains a very small variance in the relationship between individual religiosity and traditional marital perceptions. This will reject the last hypothesis.

---

**H8:** The effect of long history of democracy will weakened more the relationship between high religious individuals and more traditional marital perceptions compared to societies with short historical or interrupted democracies. **Rejected**

---

#### **4.2.1 Categorical variables**

As given before in bivariate analysis, the correlation between educational attainment and traditional marital perceptions was small and non-linear (-0.139). This could imply that not all

---

<sup>4</sup> (.026) + .066 = 0.092, (.026\*2) + .066 = .118, and (.026\*3) + .066 = .144

years of education decrease traditional marital perceptions in the same degree. It could be the case that some years of education have a stronger influence in reducing traditional perceptions compared to other years of educations. Therefore, the same analysis with the same variables (table 4.2, model 2) has been done with educational attainment given in four categories. Each category refers to the degree of educational level to investigate the linear relationship with marital perceptions. The selections for the categories are based on the general duration of each educational level in years, the categories are: 0-5 years (primary education), 6-11 years (secondary education), 12-17 years (compulsory education), and more that 18 years (tertiary and further education) as the reference category. Table 4.4 shows a linear relationship between educational attainments and martial perceptions. Each unit of educational attainment decreases the traditional martial perceptions of individuals.

**Table 4.4: Parameters estimates of the independent variables in categories towards traditional marital perceptions. Controlled for the same variables as in model 2.**

<i>Individual level</i>	
<b>Education level</b> (ref. <18 years)	
0-5 years	.189***
6-11 years	.102***
12-17 years	.031

Source: ISSP 2002, Own calculations.

P-values: \*\*\* P<0.001 \*\*=p<0.01, \*=p<0.05.

## **5 Conclusion and discussion**

In this final chapter of this research will be returned to the research questions that in the beginning of this research are made. This chapter will assess the theoretical answers to these questions which are found in the multilevel analysis, and the implications of the findings from these analyzes to the theory. Finally, there will be discussion points with directions and improvements of research on traditional marital perceptions.

### **5.1 Conclusion**

The main question asked in this research is: *“To which degree is a person’s marital perception influenced by educational attainment and religiosity at the individual and contextual level?”* To frame this research the following three theories are used: The Exchange Theory, Social Identity Theory, and the Socialization Theory.

According to the Exchange theory individuals try to maximize their self-interest in relationships by exchanging resources. The resources of lower educated individuals are scarcer compared to the resources of higher educated people, which make the exchange of resources through marriage more important. To protect the benefits of exchanging resources, lower educated individuals will have more traditional orientations about family life. The exchanges of resources of higher educated people are less important (less exchange orientation) because they already possess these resources. Therefore, it is less beneficial for higher educated people to secure valuable resources through marriage. The difference in importance of exchanging resources between higher educated people and lower educated people should be found in the results. The results of the multilevel analysis in 27 countries (Data: ISSP, 2002) shows that higher educated people indeed have less traditional martial perceptions ( $-.014, p < .001$ ) compared with lower educated people, which confirms the hypothesis. Thus, Exchange Theory seems to be supported by the findings of this research.

The second theory is the Social Identity Theory. This theory suggests that every person wants to belong to a certain social group (Turner, 1999). According to this theory, individuals look to others with the same values and norms. Individuals make a distinction between those who share the same values and norms and those who are different from themselves. Religious individuals can identify themselves with a religious group and embrace the world view and perceptions of the religious group to create a positive self-identity. These world view and perceptions are strongly associated with traditional attitudes and traditional

gender roles. Religious organizations stimulate their members to maintain the traditional role of marriage through wide spreading the message. On the base of this theory the hypothesis is derived that more religious individuals have more traditional marital perceptions. The results of the analysis show that religious individuals indeed have more traditional marital perceptions (.114,  $p < .001$ ) compared to less religious individuals, which confirms the hypothesis. Concluding, the Social Identity Theory is a good theory to explain the impact of individual religiosity on marital perceptions.

Next, to which extent are the differences in marital perceptions explainable by country educational attainment and country religiosity as socialization agents? To answer this question several hypotheses are formulated based on the Socialization Theory. By aggregating individuals' characteristics to the contextual level the effects of socialization towards traditional marital perceptions are examined.

With regards to contextual differences in country educational attainment, the Socialization Theory assumes that in societies with higher country educational attainment modern perceptions are more dominant. The educational system transmits besides knowledge and cognitive skills, also certain liberal attitudes, such as respect, equality, and individualism. The socialization process of the educational system goes through social interaction and transmits liberal orientations into society. In a society with high country educational attainment the majority of the citizens are socialized by the educational system. In addition, more modern perceptions are dominant in society. These citizens transmit liberal orientations through social interactions with the individual. These social interactions lead to a stimulation of the individual autonomy in general and 'self-chosen' perceptions and attitudes. Based on this theory the hypothesis is derived that societies with high country educational attainment have less traditional marital perceptions compared with societies with low country educational attainment. The results show a significant effect in the opposite direction of the expectations. Societies with high country educational attainment have more traditional marital perceptions (.160,  $p < 0.01$ ) compared to societies with low country educational attainment, which rejects the hypothesis. Furthermore, a cross-level interaction hypothesis is formulated to examine whether country educational attainment strengthened the effect between individual educational attainment and traditional marital perceptions. The argumentation is that in societies with high country educational attainment, citizens have an underlying value set which are premised on a broad conception of autonomy and liberal values with cultural resources, such as knowledge. This value set is in line with liberal orientations supported by

the educational system. In addition, personal freedom is more important than the adherence of traditional social institutions in these societies (Kalmijn & Kraaikamp, 2007). Therefore, traditional marital perceptions could be less dominant in contrast to what the individualistic perception suggests. In societies with high country educational attainment, modern orientations of higher educated individuals are more in harmony with the social norm which could strengthen the effect with more modern marital perceptions. The results do not support this interaction hypothesis. In fact, there is no significant effect found of country educational attainment in relationship between individual educational attainment and marital perceptions. In other words, country educational attainment does not explain the differences between individual educational attainments and traditional marital perceptions across countries.

The Socialization Theory also approaches the effects of religious organizations as a socialization agent. In societies with high country religiosity, people attend more religious services compared to more secularized societies. The social norm will be more traditional focused, since religious organizations stimulate more traditional orientations through social interactions with individuals. Therefore, in these societies the socialization role of religious organizations will be stronger. Subsequently, the members of religious societies socialize individuals to internalize the societal traditional perceptions on themselves. The finding of this research does not support this line of theoretical argumentation. More clearly, there is no significant effect found in the relationship with religious societies and marital perceptions. Furthermore, a cross-level interactions term is added into analysis. The interaction hypothesis implies that religious societies strengthened the relationship between individual religiosity and more traditional marital perceptions. Societies with high country religiosity, traditional perceptions are more in harmony with the social norm than the perceptions of religious individuals living in more secularized societies. This could reinforce the motivation of religious people living in religious societies to live their lives according to the guidelines of their religious organization. The differences in traditional marital perceptions in relationship with individual religiosity could not be explained by the findings of this research. In addition, the results show a non-significant effect.

Concluding, the approach of the Socialization Theory is not supported by the findings of this research. It seems that the theory does not explain the differences in traditional marital perceptions across countries with the socialization role of the educational system and religious organizations.



Finally, this research examines the impact of democratic history by adding the interaction term educational attainment and religiosity with the history of democracy. Societies with a long history of democracy had more time to expand the principles of democracy and widespread social, economic and political equality into society compared to short or interrupted democracies. These democratic principles are in line with the liberal attitudes supported by the educational system. Assuming that these attitudes are more similar, the more easily they can be transmitted into society. Subsequently, the effect of long history of democracy will strengthened the relationship between individual educational attainments and less traditional marital perceptions. Results show that in societies with short democratic history, the effect of educational attainment (-.018) is stronger in relationship with less traditional marital perceptions than in other democracies. In societies with long history of democracy, the effect of educational attainment (-.006) is weaker in relationship with traditional marital perceptions.

The cross-level interaction term of individual religiosity with history of democracy implies that in societies with long history of democracy, the individual freedom in public and private life is strongly present. In these contexts people are free to define their personal religious identity and are able to express themselves in any religion. This freedom can reduce the strengths to hold on traditional attitudes promoted by religious organizations. Results show that contexts with short history of democracy reinforce the effect of religiosity (.092) on more traditional marital perceptions. In contexts with long history of democracy, religiosity has (.144) the strongest effect on more traditional marital perceptions. These findings are not in line with the expectations. In the following section possible explanations for these findings will be given.

## **5.2 Discussion**

The aim of this research was to investigate the explanatory power of educational attainment and religiosity towards marital perceptions. Previous studies focused on the investigation of one of the two key characteristics, or investigated the prediction power at one-level within or between countries. This research has shown that the differences in marital perceptions can be determined by the individual educational attainment and the individual degree of religiosity. The differences in marital perceptions determined by contextual effects could only be explained by country educational attainment and not by country religiosity. Against the expectation, higher country educational attainment increases more traditional marital

perceptions. One of the causes could lie in the choice of theory. The Socialization Theory claims that individuals learn certain values, norms, and attitudes through social interaction with the environment. Therefore, the role of the educational system as a socialization agent can be limited at the contextual level because people go to school up a certain age. After their years of schooling the liberal orientations given by the educational can fade away due of life-events (e.g. marriage, having children, war). Thus, the socializations power of the educational system can decrease over elapsed years. In particular, societies may have less liberal orientations because age is involved. The average age of respondents in this research is 46 years which could explain the more traditional orientations. The finding of this study, and that or many studies confirms that older people have more traditional perceptions (Sieben & De Graaf, 2004). Another argument could be that higher educated people interact socially less with lower educated people. This could lead to a gap between social networks of higher educated people and lower educated people, which stagnates the transmission of liberal orientations to all citizens in societies with higher country educational attainment. In these societies, the social network gap between higher and lower educated people could be larger than in societies with lower country educational attainment. In societies with lower country educational attainment, less people are higher educated whereby higher educated people interact more socially with lower educated people. The final argumentation in this aspect is the claim of the Socialization Theory that individuals internalize certain norms through social interactions which can be to harmonious. Individuals can have inner conflicts during the socialization process and may have not the necessarily aim to maximize their conformity to their environment. In more individualized societies people could shape their perception more from their own point of view and conceptions rather than that of the environment or social norm. From this point of view, the socialization role of the educational system is not the same or generalizable for all the people across societies.

An important discussion point, which is not discussed earlier in this research are the differences between the religions. This research only determined the degree of religiosity despite of religious denominations. Yuchtman and Alkalay (2007) found different effects of Catholic, Protestant and Islamic countries towards liberal political values and social liberal values. According to these findings one could expect differences in martial perceptions between religions. Investigation of the differences between religious denominations could improve the mutual comparison between religiosity and the effects on martial perceptions.

The last constrain of this research is the fact that the questions are based on self-reported answers. The validity of the measurement across cultures may be challenged based of variations between cultures in the perceived meanings of particular words and questions. Also social desirability can lead to a bias in the sources, this need to be treated carefully in translation and design, which has been done by researchers of the ISSP. Nevertheless, the possibility of social desirability and interpretations biases could lead to less reliable findings.

However, despite these limitations, this research forms an addition to previous research in the concept of marriage; in particular to the investigation of the key characteristics educational attainment and religiosity and their explanatory power towards marital perceptions. It proves several interesting and important findings, and thereby it can contribute to further research. The framework of this research explained at the individual level approximately 25%, and at the contextual level approximately 47%, still there is lot of variance left to explain. Other studies could increase the explained variance at the individual level by investigating cohort differences. In addition, age plays an important role in the relationship with marital perceptions whereby cohorts could give a better insight in the differences of martial perceptions, since during time perceptions and conventions changes. Furthermore, longitudinal cross-level research could give more insight in the shift of marital perceptions during time. Some societies change faster in moral issues than other societies, for instance former communist countries can change there martial perceptions stronger over time compared to other countries, which could explain the differences between marital perceptions across countries.

## References

- Amato, P. (1996). Explaining the Intergenerational Transmission of Divorce. *Journal of Marriage and Family* 58 (3), 628–640.
- Amato, P. R., & Rogers, S. J. (1997). A Longitudinal Study of Marital Problems and Subsequent Divorce. *Journal of Marriage and Family*, 59 (3), 612-624.
- Becker, S. G. (1981). *A Treatise on the Family*. Cambridge. Harvard University Press.
- Booth, A., Edwards, N. J., & Johnson, R.D. (1991). Social Integration and Divorce. *Social Forces*, 70 (1), 207-224.
- Cherlin, J. A. (2004). The Deinstitutionalization of American Marriage. *Journal of Marriage and Family*, 66 (11), 848-861.
- Cote, S. (2002). *Criminological Theories: Bridging the Past to the Future*. California. Sage Publications.
- Cox, J. M., Paley, B., Burchinal, M., & Payne, C. C. (1999). Marital Perceptions and Interactions Across the Transition to Parenthood. *Journal of Marriage and Family*, 61 (3), 611-625.
- De Graaf, M. P., & Kalmijn, M. (2006). Divorce Motives in a Period of Rising Divorces: Evidence from a Dutch Life- History Survey. *Journal of Family Issues*, 27 (4), 483-505.
- Elliott, M., & Hayward. R. D. (2009). Religion and Life Satisfaction Worldwide: The Role of Government Regulation. *Sociology of Religion*, 70 (3), 285-310.
- EVS. (2011): European Values Study Longitudinal Data File 1981-2008 (EVS 1981-2008). GESIS Data Archive, Cologne. ZA4804 Data file Version 2.0.0, doi:10.4232/1.11005.
- Filsinger, E. E., & Wilson. M. R. (1984). Religiosity, Socioeconomic Rewards, and Family Development: Predictors of Marital Adjustment. *Journal of Marriage and Family*, 46 (3), 663-670.
- Hansen, L. G. (1987). The Effect of Religiosity on Factors Predicting Marital Adjustment. *Social Psychology Quarterly*, 50 (3), 264-269.
- Harkonen, J., & Dronkers, J. (2006). Stability and Change in the Educational Gradient of Divorce. A Comparison of Seventeen Countries. *European Sociological Review*, 22 (5), 501-517.
- Hechter, M., & Opp, K. D. (2001). *Social Norms*. Russell Sage Foundation Publications.
- Hox, J. (2002). *Multilevel Analysis: Techniques and Applications*. New Jersey. Lawrence Erlbaum Associations, Publishers.

- International Monetary Fund (2011). *World Economic Outlook*. Retrieved from:  
[http://www.indexmundi.com/bulgaria/gdp\\_\(purchasing\\_power\\_parity\).html](http://www.indexmundi.com/bulgaria/gdp_(purchasing_power_parity).html).
- Lyngstad, T. H. (2004). The Impact of Parents' and Spouses' Education on Divorce Rates in Norway. *Demographic research* 10 (5), 121-142.
- Kalmijn, M., & Kraaykamp, G. (2007). Social Stratification and Attitudes: A Comparative Analysis of the Effects of Class and Education in Europe. *The British Journal of Sociology*, 58 (4), 547-576.
- Manting, D. (2006). The Changing Meaning of Cohabitation and Marriage. *European Sociological Review*, 12 (1), 53-65.
- Martin, S. P., & Parashar, S. (2006). Women's Changing Attitudes towards Divorce, 1974-2002: Evidence for an Educational Crossover. *Journal of Marriage and Family*, 68 (2), 29-40.
- Meyer, W. J. (1977). The Effects of Education as an Institution. *American Journal of Sociology*, 83 (1), 55-77.
- Mincer, J. (1974). *Schooling, Experience, and Earnings*. Human Behaviour & Social Institutions No. 2. New York, National Bureau of Economic Research.
- Norris, P. (2011) *Democratic Deficit: Critical citizens Revisited*. Cambridge. Cambridge University Press.
- OECD Factbook (2011-2012). *Economic, Environmental and Social Statistics*. Retrieved from: <http://www.oecd-ilibrary.org/sites/factbook-2011-en/10/01/05/index.html?contentType=&itemId=/content/chapter/factbook-2011-85-en&containerItemId=/content/serial/18147364&accessItemIds=&mimeType=text/h>.
- Ono, H. (1998). Husbands' and Wives' Resources and Marital Dissolution. *Journal of Marriage and Family*, 60 (3), 674-689.
- Paley, B., Cox, J. M., Harter, S. M. K., & Margand, A. N. (2010). Adults Attachment Stance and Spouses' Marital Perceptions during the Transition to Parenthood. *Attachment & Human development*, 4 (3), 340-360.
- Przeworski, A., Alvarez, E. M., Cheibub, A. J., Limongi, F. (2000). *Democracy and Development: Political Institutions and Well-being in the World, 1950-1990*. Cambridge. Cambridge University Press.
- Thomson, E., & Colella, U. (1992). Cohabitation and Marital Stability: Quality or Commitment? *Journal of Marriage and Family*, 54 (2), 259-267.

- The World Bank. (2002). GDP per capita, PPP (current international \$). Retrieved from:  
<http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD>
- Sieben, I., & De Graaf, M. P. (2004). Schooling or Social Origin? The Bias in the Effect of Educational Attainment on Social Orientations. *European Sociological Review*, 20 (2), 107-122.
- Stevenson, B., & Wolfers, J. (2007). Marriage and Divorce: Changes and their driving forces. *Journal of Economic Perspectives, American Economic Association* 21 (2), 27-52.
- Yuchtman-Yaar, E., & Alkalay, Y. (2007). Religious Zones, Economic Development and Modern Value Orientations: Individual versus Contextual Effects. *Social Science Research*, 36 (9), 789–807.

**Appendices****Appendix A: Topic list of the questionnaire and coding from the original dataset.**

	Valid N	Questions
Marital perceptions (Y) variables	35,375	Do you agree or disagree ...? 1. People who want children ought to get married. 2. It is all right for a couple to live together without intending to get married. 3. It is a good idea for a couple who intend to get married to live together first. 4. Married people are in general happier.
		The five answer categories are: 'strongly agree'(5), 'agree'(4), 'neither agree nor disagree'(3), 'disagree'(2), and 'strongly disagree'(1). Items are recoded in the right direction towards traditional marital perceptions. Respondents had the answer at least 3 of the 4 questions. Other respondents were removed from dataset (N= 1260).
Individual level variables	33,437	<i>Educational attainment</i> is indicated by the straightforward question: 'How many years of education did you followed?' The range in years of education through 25 years and above is limited to 25 years. Student who are still at school are recoded to years of education fitting with their educational attainment. Respondents that give the answer 'had no school' (N=377) were coded as 1. The respondents which gave an answer: don't know, refused, or did not answer were removed from dataset (N=1948).
	34,608	<i>Religiosity</i> is indicated by: How often do you attend religious services? Answer categories are: 'several times a week, every day'(8), 'once a week'(7), '2 or 3 times a month'(6), 'once a month'(5), 'several times a year'(4), 'once a year'(3), 'less frequently'(2), 'never'(1). Respondents that give the answer 'no religion' (N=3472) is coded to 1 'never'. Other respondents that gave the answer "refused" (N=74), no answer (N=355) or varies too much (N=338) were removed from dataset.
Contextual level variables	27	The average score of each country of the highest level of education.
	27	The average score of each country in how often attend religious services.
	27	<i>Democracy</i> is codes as interrupted (1), short democracy (2), long democracy (3)
Control variables	35,277	<i>Age</i> indicated by birth year of the respondent (range=15-96). 98 respondents did not answer are removed from the dataset.
	35,375	<i>Income</i> is indicated by personal monthly net income. Respondents without a valid answer were replaced by the mean income of each country. Furthermore, a dummy has been made for the missing answers with the value of 1 (N=11,943). The references category is the respondents who gave an answer.
	35,375	<i>Gender</i> , men (N=15550) are the reference category, women (N=19783) is coded as 1.
	35,098	Current legal <i>marital status</i> respondent as a dummy variable. Married respondents (N=20,828) is the reference category. 2,882 respondents are widow, 3,185 divorced or separated, and 8,203 respondents are single and never been married. Respondents that did not answered (N=277) are removed from dataset.
	27	GDP per capita in US dollars

Source:ISSP 2002, The World Bank (2002), and Przeworski et al. (2000). Own calculations.

**Appendix B: Principle factor analysis results for each country. Counties in bold are removed from analysis.**

Country Name	C ALPHA	Variance %	KMO	N
Australia	0,715	55,06	0,656	1318
Belgium/ Flanders	0,662	50,94	0,661	1151
Bulgaria	0,707	53,9	0,64	806
Chile	0,662	50,45	0,62	1444
Cyprus	0,801	62,79	0,72	877
Czech Republic	0,635	48,84	0,59	1135
Finland	0,732	55,97	0,619	1059
France	0,735	56,4	0,706	1726
Germany	0,623	47,97	0,622	1146
Hungary	0,665	50,69	0,643	945
Ireland	0,685	55,7	0,656	1947
Israel	0,707	53,54	0,619	1142
Japan	0,573	44,07	0,561	990
Latvia	0,67	50,85	0,661	927
Netherlands	0,595	47,41	0,565	1085
New Zealand	0,756	58,02	0,705	940
Norway	0,746	57,53	0,677	1306
Poland	0,658	50,73	0,597	976
Portugal	0,704	53,36	0,671	1039
Russian Federation	0,62	47,79	0,589	1608
Slovak Republic	0,662	51	0,603	1056
Slovenia	0,613	46,96	0,591	1037
Spain	0,764	59,68	0,698	2173
Sweden	0,708	54,25	0,678	891
Switzerland	0,612	47,78	0,619	801
United Kingdom	0,73	55,79	0,682	1763
United States	0,739	56,49	0,688	1095
<b>Austria</b>	<b>0,669</b>	<b>50,99</b>	<b>0,634</b>	<b>1633</b>
<b>Brazil</b>	<b>0,529</b>	<b>42,64</b>	<b>0,549</b>	<b>1963</b>
<b>Denmark</b>	<b>0,543</b>	<b>44,46</b>	<b>0,543</b>	<b>1334</b>
<b>Mexico</b>	<b>0,525</b>	<b>42,37</b>	<b>0,541</b>	<b>1478</b>
<b>Philippines</b>	<b>0,391</b>	<b>37,77</b>	<b>0,503</b>	<b>1197</b>
<b>Taiwan</b>	<b>0,531</b>	<b>42,84</b>	<b>0,55</b>	<b>1733</b>

Source: ISSP 2002.



**Appendix C: Country characteristics of 27 countries in 2002. Mean scores and standard deviation in parentheses.**

Country	Type of Democracy	GDP per capita	Educational attainment	Religiosity	Traditional marital perceptions
Australia	Long	28744,706	12.11 (3.00)	3.20 (2.29)	2.62 (.85)
Belgium/ Flanders	Long	30046,382	11.72 (3.63)	2.71 (2.13)	1.96 (.75)
Bulgaria	Short	7375,447	11.02 (4.02)	1.00 (.00)	2.75 (.90)
Chile	Short	10435,952	10.13 (4.47)	4.04 (2.37)	2.38 (.80)
Cyprus	Short	21375,485	11.01 (4.09)	4.28 (1.44)	2.95 (.80)
Czech Republic	Short	17571,131	11.80 (2.52)	2.14 (1.75)	2.44 (.84)
Finland	Long	27531,353	12.34 (4.29)	3.10 (1.47)	2.12 (.90)
France	Long	27586,795	13.50 (3.06)	2.48 (2.09)	1.89 (.91)
Germany	Interrupted	27443,661	10.75 (3.63)	2.83 (2.04)	2.26 (.83)
Hungary	Short	14669,370	10.98 (2.81)	3.09 (2.02)	2.45 (.87)
Ireland	Long	33272,659	12.42 (3.42)	5.57 (2.55)	2.52 (.87)
Israel	Interrupted	23527,696	12.94 (2.49)	3.80 (2.49)	2.79 (1.00)
Japan	Short	27241,103	11.82 (3.18)	3.44 (1.60)	2.91 (1.03)
Latvia	Short	9867,406	11.81 (3.55)	3.00 (1.62)	2.61 (.80)
Netherlands	Long	31939,682	12.90 (4.45)	2.71 (2.10)	1.97 (.71)
New Zealand	Long	22899,193	13.00 (2.65)	3.06 (2.20)	2.47 (.86)
Norway	Long	37058,814	13.28 (3.05)	2.51 (1.57)	2.07 (.80)
Poland	Short	11563,119	10.37 (3.33)	5.61 (1.88)	2.75 (.83)
Portugal	Short	19146,018	8.15 (5.10)	4.03 (2.49)	2.28 (.90)
Russian Federation	Short	8029,474	11.26 (3.50)	1.00 (.00)	2.70 (.82)
Slovak Republic	Short	12964,905	11.66 (3.27)	4.54 (2.49)	2.96 (.96)
Slovenia	Short	19763,488	10.69 (3.72)	3.87 (2.11)	2.24 (.75)
Spain	Short	24068,232	10.39 (5.29)	3.15 (2.28)	2.19 (.82)
Sweden	Long	29277,911	12.20 (3.69)	2.26 (1.47)	1.84 (.77)
Switzerland	Long	34628,752	11.00 (3.69)	3.08 (1.98)	2.14 (.77)
Great Britain	Long	28699,160	11.81 (2.91)	2.39 (2.15)	2.37(.83)
United States	Long	36819,445	13.50 (2.77)	4.42 (2.40)	2.81 (1.00)

Source: ISSP 2002, OECD 2011-2012, Przeworski, et al., 2000

## Appendix D: Parameters Estimates of contextual variables added separately into model

### 2. Controlled with the same variables used in model 2.

Independent variables	Model 2a	Model 2b	Model 2c	Model 2d	Model 2e	Model 2
Intercept	1.530*	1.706***	2.074***	1.989***	.459	.842
<i>Contextual level</i>						
Education average	.011				.156**	.116*
Religiosity average		-.016			-.019	.023
GDP per capita			-.183**			-.265***
Democracy				-.175**	-.292***	
“-2 Log Likelihood	72306.286	72306.091	72293.498	72297.612	72297.277	72302.204
<i>Variance components</i>						
Residual	.541***	.541***	.541***	.541***	.541***	.541***
Intercept	.111***	.110***	.083***	.079***	.060***	.075***

Source: ISSP 2002, The World Bank (2002), and Przeworski et al. (2000). Own calculations.

P-values: \*\*\* P<0.001 \*\*=p<0.01, \*p<0.05.