

Materialism, Gender, and Family Values in Europe

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ABSTRACT

Ideational change has been posited as one of key factors behind shifting family and fertility behaviors. Values are thought to be driving factors behind subsequent practices. Still, factors that shape those family and parenthood values have received relatively less attention. Moreover, the possibility that these factors vary in type or extent by gender or across socio-cultural context has not been adequately explored. Using the 1999 European Values Survey, this paper aims to contribute to knowledge about family values formation by examining whether the tendency to express traditional views about family is associated with the extent to which a person adheres to “(post-)materialist” values. Additionally, we examine the extent to which geopolitical context is associated with family values. Our results suggest that the relationship between materialism and traditional family values varies by gender and the particular family value in question, and that geopolitical boundaries had a strong association with family values.

INTRODUCTION

Ideational change, along with institutional reforms, economic development, and political culture, has been posited as one of several key factors behind the shifting family and fertility behaviors of the past century (Thornton and Philipov 2009; Lesthaeghe 1983, 1995; Bachrach 2001; Tessler, 2003). Starting in North-Western Europe in 1960s and spreading through Central and Eastern Europe, changing attitudes about women's roles and increased tolerance of non-conventional family forms have accompanied reduced fertility rates and increasing rates of marital dissolution (Van de Kaa 2001; Preston 1986; Cleland 1985; Surkyn and Lesthaeghe 2004). Although the relationship between family values and behaviors is recognized as reciprocal (Thornton, Axinn, and Hill 1992), a main research focus has been on values as driving factors behind fertility and family behaviors, with less attention to identifying macro and micro factors associated with family and parenthood values.

This paper contributes to knowledge about the formation and continuation of family values by investigating whether the tendency to express traditional views about family is associated with individuals' adherence to "materialist" or "post-materialist" views (Inglehart 1971). Specifically we ask whether there is a significant relationship between a person's materialist value and his or her willingness to approve of non-traditional views about family forms. Because we suspect that gendered socialization and social norms influence family values and materialist values, as well as their relationship, we pose our question for separate samples of women and men. We also investigate whether socio-cultural, political-economic, and historical contexts influence family values above and beyond one's materialist values. Results suggest that the relationship between materialism and traditional family values varies by gender and the

particular family value in question, and that geopolitical boundaries have a strong association with family values.

INGLEHART'S THESIS

Inglehart (1971) first famously hypothesized that lack of economic scarcity during childhood encourages formation of post-materialist values, such as the importance of individual rights and freedom, which then promote acceptance of non-traditional family forms and parenthood. In other words, when basic survival is not an ever-present worry during formative years, people turn attention to “higher order” concerns (Maslow 1954) such as personal expression and fulfillment of individual potential. Subsequently, as older cohorts with materialist values (or, primary concerns about economic security) are replaced by younger ones who have grown up in a “post-scarcity society” (Giddens 1996; Bookchin 2004), societal values become less traditional as a whole (Lesthaeghe and Surkyn 1988; Inglehart 1977).

Three distinct components of this theory can therefore be identified. First, socialization is thought to shape the extent to which an individual is concerned about basic survival or “higher order” values as an adult. Second, the extent to which one possesses materialist views is hypothesized to affect one’s values, including the level of tolerance for non-traditional family forms and parenting. Third, as cohorts with post-materialist values replace their older, more conservative counterparts, a society’s values become less traditional as a whole.

Inglehart’s theory of the “silent revolution” of values has received a great amount of attention over the decades. Relatively speaking, there are only a few studies which have set out to empirically test the relationship between (post-) materialism and traditional values, and those studies tend to focus on the first component of the theory – the relationship between economic conditions in childhood and (post-) materialist values (Marsh 1975, 197; Lafferty and Knutson

1985). For example, using data from eight Western European from 1973-1984, Duch and Taylor (1993, 1994) fail to find evidence of a relationship between economic security during adolescence and post-materialist values (see Abraham and Inglehart's [1994] response). Sangster and Reynolds (1996) found an association between childhood conditions and materialist, but not post-materialist, values. Using British data, Flouri (2003) found an unexpectedly positive association between *absence* of financial hardship in childhood and materialist values among British men (but not women). Trump's (1991) study found support for a relationship between economic conditions and (post-) materialist values among German, but not US, adolescents. These studies suggest that value orientations are not established by childhood conditions. (Mason et al. 1976; Thornton and Freedman 1979; Clarke and Dutt 1991). Rather, current conditions can shape the extent to which an individual is concerned about basic survival or "higher order" values as an adult, and the extent to which one possesses (post-) materialist views is hypothesized to be associated with a wide range of other value orientations, including the level of tolerance for non-traditional family.

Recent research on Inglehart and his colleagues focus on cultural map of the world based on World Values Survey (Inglehart and Welzel 2005). Based on a factor analysis, they placed nations in two dimensions, (1) traditional/secular-rational and (2) survival/self-expression values. The traditional/secular-rational values dimension is based on the degree of the importance of religion to the society. Inglehart and Welzel (2005) claim that societies near the traditional pole emphasize the importance of absolute standards and traditional family values. By contrast, societies near the secular pole have the opposite preferences on all of these topics. The second dimension is linked with the Inglehart' thesis that as societies move from industrial to post-industrial societies, people's priorities will move from economic security to an increasing

emphasis on “higher order” concerns (Maslow 1954) such as individual freedom and self-expression. The second dimension involves the polarization between Materialist and Postmaterialist values, a cultural shift emerging among younger generations who have grown up without considering survival. Inglehart and Welzel (2005) claims that the shift from survival values to self-expression values includes a shift in child-rearing values, from emphasis on hard work toward emphasis on imagination and tolerance of diversity as important values to teach a child. In exploring the association between one’s (post-) materialist values and views about family, considering where people are located in geopolitical map is necessary to take a macro factor into account.

Although Inglehart proposed his thesis decades ago, its focus remains highly relevant at the turn of the millennium and beyond. Rapid economic development and political change continue in many parts of the world, as do transformations in the family values which are thought to affect fertility and parenting behaviors. The extent to which economic conditions and concerns about survival are linked to beliefs about family therefore holds much relevance for understanding the current and future shifts in family values and associated fertility and family behaviors. Our study’s usefulness lies in its aims to evaluate *empirically* Inglehart’s thesis and to ask whether it may hold to various extents across region and for both women and men.

THE PRESENT STUDY

The goal of this paper pertains to what we have identified as the second component of Inglehart’s theory: the relationship between materialism and the acceptance of non-traditional

family forms and parenting.¹ Specifically, we investigate whether, in the European context, materialism is significantly related to what have been shown to be two distinct dimensions of family values: (1) tolerance for non-conventional family forms and (2) meanings attached to parenthood (Lesthaeghe and Meekers 1986). Although our data set limits us to address the question of how materialist values are acquired, we draw on evidence from prior studies and assume that value orientations are not static or “set” in adolescence (Mason et al. 1976; Thornton and Freedman 1979; Clarke and Dutt 1991). Rather, current conditions can contribute to one’s materialist values hypothesized to be associated with other important value orientations including views about family forms and parenting. We also draw on prior research and expect that the relationship between (post-) materialism and family values may vary be influenced by geopolitical context and may vary by gender. We therefore stratify our sample by sex and pose the following micro and macro level questions to:

(1) Is ones’ (post_) materialist concern and economic conditions significantly associated with one’s likelihood of expressing traditional family values?

(2) Is geopolitical context reflecting the level of nation’s material concern significantly associated with one’s the likelihood of expressing traditional family values?

DATA AND METHODS

We use the 1999 wave of the European Values Surveys (EVS), which provides a major source of information on changing values since 1980 (Surkyn and Lethaghe 2004). This dataset is highly suited to our study insofar as it includes information on a variety of attitudes and values related to marriage, family, and economic conditions, and also covers a fairly large number of

¹ We do not attempt to test whether early-life experiences shape levels of materialism (the first component) nor do we address processes of ideational *change* (the third component).

countries in Europe. A major limitation of this data set is the small national sample size. We attempt to address this limitation by grouping national data into three regions.

Outcome Variables

The EVS asks multiple questions about family values. In this study we utilize three items that inquire into views about the desirability of two-parent families, women's need for children, and deliberate single motherhood. We chose these items to reflect attitudes both about family forms and about parenting. Specifically, respondents were asked to respond to the following questions:

- a) If someone says a child needs a home with both a father and a mother to grow up happily, would you tend to agree or disagree? (Answers are dichotomized and coded 1 for agreement and 0 for disagreement.)
- b) Do you think that a woman has to have children in order to be fulfilled or is this not necessary? (Answers are dichotomized and coded 1 for agreement and 0 for disagreement.)
- c) If a woman wants to have a child as a single parent but she does not want to have a stable relationship with a man, do you approve or disapprove? (Answers are dichotomized and coded 1 for approval and conditional approval ("depends") and 0 for disapproval).

Items (a) and (c) are similar to the extent that they ask about the desirability of single- and two-parent homes. However, there are both included for two reasons. First, both items use the positive valence but are opposite in their support of traditional family structure, thus acting as a "check" on one another. In fact, descriptive statistics suggest that (a) is easier for respondents who value traditional family to agree with than to disagree with (c) since agreeing with a statement requires less judgment than does approving it (Table 1). Second, we also suspect that the scenario of *deliberate* single motherhood represents a stronger deviation from traditional family forms than does a scenario focused on the potentially ideal quality of a two-parent home. Notably, although the correlation between statement (a) and (c) is significant, it is small in magnitude (Person's correlation = -.147, $p < .001$). Thus we decided to keep both items.

Explanatory Variables

We used Inglehart's materialism/post-materialism measurement. This measurement contains four goals. Respondents are asked to select top two goals of what they believe their country should be from four alternatives: 1) maintaining order in the nation, 2) giving people more say in government decisions, 3) fighting rising prices, and 4) protecting freedom of speech. Those who answered 1) and 3) are considered "materialist." Those who answered 2) and 4) are considered "postmaterialist." Those who selected other four possible combinations (1-4, 1-2, 2-3, 3-4) are considered "mixed" (Abramson and Inglehart, 1995; Lindström 2007). Others are included as "missing/don't know."

This single measurement received challenges and criticisms, and some concerns the possibility of both sets of values found in one person (Lindström 2007). However, Lindström (2007) claims that this measure just considers priority of values, not mutually exclusive values, given to different values, and Maslov's theory of hierarchy of needs on which Inglehart's materialist/post-materialist arguments are based suggests that people do not give up the more basic needs when they have fulfilled one level in the hierarchy of the needs and move to the next level (Lindström 2007). In this study, materialist is used as a reference category.

To compare family values across different regional residences of Europe, we formed four geographical groups based on Inglehart-Welzel Cultural Map of the World developed based on World Values Survey (Inglehart and Welzel 2005, p.64). Two dimensions, traditional/secular-rational and survival/self-expression values, suggest grouping three types of European nations which share close cultural values and background: (1) Ex-communist countries with high-secular-rational value and high survival values (Russia, Bulgaria, Estonia), (2) Protestant countries with high secular-rational value and high self-expression values (Denmark, Sweden,

and Netherland), and (3) Catholic countries with moderately high secular rational value and moderately high self-expression values (Italy, France, and Belgium). Both ex-Communist group Catholic group and Protestant group have higher secular-rational values than Catholic group. Protestant group has higher self-expression values than Catholic group, and Catholic group has higher self-expression values than ex-Communist group. In other words, based on survival/self-expression dimension, Ex-Communist group is expected to possess higher materialist values than Catholic group, and Catholic group has higher materialist values than Protestant group. In this study, ex-communist group is used as a reference category to compare family values with two other geopolitical regions.

Control Variables

Control variables include age, education level, sex, marital status, and presence of children, and income. Age and education level are included as they may demonstrate the extent of respondent's exposure towards new political-cultural regimes. In this study, *age* is measured as a continuous variable. *Education* is an ordinal variable based on respondents answer to the question: "What is the highest level you have reached in your education?" We grouped responses into the following four categories: 1) Less than primary education, 2) primary education, 3) vocational or secondary school qualification, and 4) higher education. Marital status and presence of children were included since being a spouse and a parent can either influence family values through actual experience. Both variables were measured as dichotomous variables, coded 1 for married at the time of the survey and 0 for others (reference group), and 1 for having children and 0 for others (reference group). Finally, self-rated household income level was measured as follows. Respondents were shown a card that depicted

a scale of incomes. They were asked to rank their household on this scale, counting all wages, salaries, pensions and other incomes that come in after taxes and other deductions. The distributions have been adapted to the ten categories of the Master Questionnaire, ranging from ten percent lowest to ten percent highest income categories.

Analytic Strategy

We generate a series of logistic regression models to investigate the effects of materialist values and regional residences on family values controlling for demographic and socioeconomic variables. Because the association between materialism and family values may differ by gender as socialization process cannot escape from gender (Inglehart and Baker 2000), we perform separate analyses for men and women.

RESULTS

Table 1 shows descriptive statistics for our study variables, stratified by region and sex. The portion of “materialist” respondents is greatest in the Region 1 (Ex-Communist) and least among Region 2 (Protestant Europe) residents. This descriptive finding is not surprising considering political-economic backgrounds in Eastern and Central Europe and the social upheaval occurring during the 1990s. In other words, we expect that person’s materialist values are shaped by (childhood and adult) experiences within a particular political and economic context.

Compared to their counterparts in Regions 2 and 3, a greater portion of respondents in Region 1 express traditional views in response to questions about a two-parent home and women’s need for children, with respondents in Region 2 demonstrating lower levels of traditionalism. However, clear boundary could be seen in one’s disapproval for single across

regions. A slightly greater portion of men support the need for a two-parent home and disapprove of deliberate single motherhood compared to women. Views about women's need for children are similar by gender. Having noted some descriptive differences by regional residence and gender, we now turn to a multivariate analysis of the relationship between materialism and family values across our three geopolitical regions.

(Table 1 about here)

First, we examine the relationship between materialist values and geopolitical residence on agreement with that the view that "Children need a home with both a father and a mother to grow up happily" (Table 2). For both men and women, compared with people who hold post-materialist values, those who hold materialist values are more likely to agree with the statement (OR= .626, OR=.756). The association between materialism and family values remains significant controlling for geopolitical regions. Compared with Region 1 (Ex-Communist), both Region 2 (Protestant Europe) and Region 3 (Catholic Europe) had significantly lower odds of supporting the statement net of other factors, suggesting the importance of political-cultural background for family values. Results therefore lend general support for Inglehart's hypothesis that one's (post_) materialist values are associated with his or her traditional family values.

(Table 2 about here)

As expected, being older, having less education and being married increased the odds of supporting the traditional family value for both men and women. Being a parent, having at least one child, reduced the odds of supporting the statement for women. Table 1 shows a greater proportion of those who have at least one child than that of those who are currently married across three geopolitical regions, and the discrepancy is greater for women than men. Increasing

divorce rates and increasing single mothers in Europe may have contributed to lower the odds of supporting the statement.

Next, we examine the relationship between materialist values and geopolitical residence on agreement with Value 2 that “Women need to have children to be fulfilled” (Table 3). There is a significant association between materialism and this family value for men, not for women. Compared with men who hold post-materialist values, men who hold materialist values are more likely to support the statement (OR = .706). For women, whether they hold materialist or post-materialist values does not seem to matter on this family value.

Compared with those living in Region 1, the odds of holding the view that “women need children in order to be fulfilled” are lower among those living in Region 2 and Region 3. Phrased differently, geopolitical boundary is an important macro factor, significantly associated with agreement with Value 2 as well as Value 1 for both men and women.

(Table 3 about here)

Again as expected, having less education increased the odds of both women and men supporting the view that women need children in order to be fulfilled. Being a parent increased the odds for both men and women. Especially, being a mother has about 2.5 times the odds of supporting the statement than women who do not have any children.

Finally, we examine the relationship between materialism and regional residence on approval for deliberate single motherhood (that is, approval of a woman having a child as a single parent when she does not “have a stable relationship with a man”) (Table 4). Significant relationship between materialism and Value 3 was observed for both men or women (OR = 1.700, OR= 1.344). Compared with those who hold post-materialist values, those who hold materialist

values are less likely to approve the statement. This finding is supportive of Inglehart's general suggestion that materialism correlates with traditional family values.

Regional difference has a significant association with the value 3. Region 2 and Region 3 respondents are significantly less likely than Region 1 respondents in to approve of deliberate single motherhood for both men and women (Table 4). Compared with people living in Catholic and Protestant European nations, those living in ex-Communist Europe in this study hold their distinctive traditional family values that support raising children in a stable union and having a child for the sake of women's happiness, but they are also more likely to be supportive women having a child without a stable relationship. It is likely that differences in political-economic contexts, such as the presence of policies and programs that support single mothers may contribute to social acceptance of women having a child without a stable relationship. Moreover, materialism itself may have a very different meaning in a political-historical context of East European post-communism.

(Table 4 about here)

As expected, being younger, having more education, and being un-married increased the likelihood of supporting deliberate single motherhood.

DISCUSSION AND CONCLUSION

In this paper, we investigate whether materialism is significantly related to two distinct dimensions of family values: (1) tolerance for non-conventional family forms and (2) meanings attached to parenthood. We also investigate the extent to which geopolitical boundaries relate to family values. Our results suggest that the association between materialism and family values varies both by gender and by the particular value in question. For men, but not for women,

materialism was significantly associated with the statement that “women need to have children to be fulfilled.” Materialism was not a significant factor related to the idea that “women need to have children to be fulfilled” for women. These findings suggest that in our study context, materialism may associate with some, but not all, family values, and not always in the same way for both men and women.

Our findings confirm the importance of geopolitical boundaries in shaping one’s views on family and suggest the role of cultural, historical, and political factors in influencing family values. Notably, ex-Communist nations in this study expressed the most traditional views about the ideal of a two-parent home and fulfillment via motherhood, but they were also more likely than counterparts to accept deliberate single motherhood. These findings suggest the complexity of macro and micro relationships between materialist values and family values in European nations.

Our study is limited by the possibility of measurement error, particularly to the extent that our measures of “materialism” may not accurately reflect these concepts as intended. Where possible, future studies should address our research questions using data that include additional and alternative measures of materialism and post-materialism. Additionally, our use of cross sectional data prevents us from examining the possibly dynamic characteristic of the relationships between materialism and family values. We also recognize that the categorization of European nations into three regional groups is quite crude and obscures a great amount of cultural, political, and historical diversity between (not to mention within) countries. Future studies might explore alternative ways of examining the role of culture, politics, and national identity and find data that allow for specific hypotheses about the pathways through which

cultural, political, economic, and historic factors influence family values and their relation to other values such as materialism.

Our study also suggests the need for further empirical studies that investigate when, where, and for whom materialist values and family are significantly associated. Because family roles are highly gendered, it makes sense that materialism may associate differently or to different extents for women and men. That is, both “lived experience” and gender socialization is likely to influence one’s values and the way in which they associate. Moreover, because values are likely shaped by childhood and adult experiences within a particular political-economic and cultural background, it makes sense that people accept materialist views for a variety of reasons which may themselves correlate differently with family values.

REFERENCES

- Bachrach, Christine. (2001). "Comment: The Puzzling Persistence of Postmodern Fertility Preferences." *Population and Development Review* 27(supp):332-338.
- Bookchin, Murray. (2004). *Post-Scarcity Anarchism*. Oakland: AK Press.
- Caldwell, John C. and Thomas Schindlmayr. (2003). "Explanations of the Fertility Crisis in Modern Societies: A Search for Commonalities." *Population Studies* 57 (3): 241-263.
- Clarke, Harold D. Nitish Dutt. (1991). "Measuring Value Change in Western Industrialized Societies: The Impact of Unemployment." *The American Political Science Review* 85:905-920.
- Cleland, J. (1985). "Marital Fertility Decline in Developing Countries: Theories and the Evidence." Pp. 223-52 in *Reproductive Change in Developing Countries: Insights from the World Fertility Survey*, edited by J. Cleland and J. Hobcraft. Oxford, England: Oxford University Press.
- Duch, Raymond M. and Michael A. Taylor. (1993). "Postmaterialism and the Economic Condition." *American Journal of Political Science* 37:747-779
- Easterlin, Richard A. (1973). "Relative Economic Status and the American Fertility Swing." In *Family Economic Behavior: Problems and Prospects*, edited by Eleanor Sheldon, Philadelphia: J.P Lippencott Company.
- Flouri, Eirini. (2003). "Parental Socialization in Childhood and Offspring Materialist and Postmaterialist Values in Adult Life." *Journal of Applied Social Psychology* 33: 2106 – 2122.
- Giddens, Anthony. (1996). "Affluence, Poverty and the Idea of a Post-Scarcity Society." *Development and Change* 27:365-377.
- Inglehart, Ronald. (1971). "The Silent Revolution in Europe: Intergenerational Change in Post-industrial Societies." *The American Political Science Review* 65:991-1017.
- Inglehart, Ronald. (1981). "Post-Materialism in an Environment of Insecurity." *The American Political Science Review* 75:880-900.
- Inglehart, Ronald and Paul R. Abramson. (1994). "Economic Security and Value Change." *The American Political Science Review* 88:336-354.
- Inglehart Ronald, Norris, Pippa, and Christian Welzel. (2003). "Gender Equality and Democracy" Pp 91-115 *Human Values and Social Change*, edited by Richard Inglehart. Brill: Boston.
- Inglehart Ronald and Christian Welzel, (2005). *Modernization, Cultural Change and Democracy*. New York, Cambridge University Press.
- Lafferty, William M., and Oddbjorn Knutsen. (1985). "Postmaterialism in a Social Democratic State: An Analysis of the Distinctness and Congruity of the Inglehart Value Syndrome in Norway." *Comparative Political Studies* 17:411-31.
- Lesthaeghe, Ron. (1983). "A Century of Demographic and Cultural Change in Western Europe: An Exploration of Underlying Dimensions." *Population and Development Review* 9(3):411-435.
- Lesthaeghe, Ron and Dominique Meekers. (1987). "Value Changes and the Dimensions of Familism in the European Community." *European Journal of Population/Revue Europeenne De Demographie* 2(3 -- 4):225-268
- Lesthaeghe, Ron and Johan Surkyn. (1988). "Cultural Dynamics and Economic Theories of Fertility Change." *Population and Development Review* 14(1):1-45

- Lesthaeghe, Ron (1995). "The Second Demographic Transition in Western Countries: An Interpretation." Pp. 17-62 in *Gender and Family Change in Industrialized Countries*, edited by Karen Oppenheim Mason and An-Magritt Jensen.
- Marsh, Alan. (1975). "The 'Silent Revolution,' Value Priorities, and the Quality of Life in Britain." *The American Political Science Review* 69: 21-30.
- Marsh, Alan. (1977). *Protest and Political Consciousness*. Beverly Hills, Calif.: Sage Publications.
- Maslow, Abraham H. (1954). *Motivation and Personality*. New York: Harper & Row.
- Mason, Karen Oppenheim John L. Czajka, Sara Arber. (1976). "Change in U.S. Women's Sex-Role Attitudes, 1964-1974." *American Sociological Review* 41:573-596.
- Montero, Jose Ramon and Mariano Torcal. (1994). "Value Change, Generational Replacement, and Politics in Spain." *Working Paper Working Paper* 1994/56. Madrid: Instituto Juan March de Estudios e Investigaciones.
- Philipov, Dimiter. (2003). "Major Trends Affecting Families in Central and Eastern Europe. Major trends affecting families: A background document. New York, NY: United Nations Programme on the Family.
<http://www.un.org/esa/socdev/family/Publications/mtphilipov.pdf>
- Preston, Samuel H. (1986). "Changing Values and Falling Birth Rates." *Population and Development Review* 12(supp): 176-195.
- Rycharikova, Jitka and Jaroslav Kraus. (2001). "Fertility and Family Surveys in the ECE Region Standard Country Report, Czech Republic." *Economic Studies* 10. Geneva: United Nations Economic Commission for Europe.
- Sabotka, par Tomás (2003). "Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of the Communist Regimes." *Institute National d'Etudes Démographiques* 58:451-586.
- Sangster, Roberta L. and Robert W. Reynolds. (1996). A Test of Inglehart's Socialization Hypothesis for the Acquisition of Materialist/Postmaterialist Values: The Influence of Childhood Poverty on Adult Values *Political Psychology* 17:253-269.
- Stark David and Laslo Bruszt. (1998). *Postsocialist Pathways: Transforming Politics and Property in East Central Europe*. New York: Cambridge University Press.
- Surkyn Johan and Ron Lesthaeghe. (2004). "Value Orientations and the Second Demographic Transition (SDT) in Northern, Western and Southern Europe: An Update." *Demographic Research* (Special Collection) 3:45-86.
- Thornton, Arland and Dimiter Philipov. (2009). "Sweeping Changes in Marriage, Cohabitation and Childbearing in Central and Eastern Europe: New Insights from the Developmental Idealism Framework." *European Journal of Population/Revue Europeenne De Demographie* 25(2):123-156.
- Thornton, Arland. (1985a). "Changing Attitudes toward Separation and Divorce: Causes and Consequences." *American Journal of Sociology* 90: 856-872.
- Thornton, Arland. (1985b). "Reciprocal Influences on Family and Religion in a Changing world." *Journal of Marriage and the Family* 47 (2): 381-394.
- Thornton, Arland, and Deborah S. Freedman. (1979). Changes in the Sex Role Attitudes of Women, 1962-1977: Evidence from a Panel Study." *American Sociological Review* 44:831-842.
- Thornton, Arland, and Deborah S. Freedman. (1982). "Changing Attitudes toward Marriage and Single Life." *Family Planning Perspectives* 14: 297-303.

- Thornton, Arland, Duane F. Alwin, and Donald Camburn. (1983). "Sex-Role Attitudes and Attitude Change." *American Sociological Review* 48: 211-227.
- Thornton, Arland, William Axinn, and Daniel H. Hill. (1992). "Reciprocal Effects of Religiosity, Cohabitation, and Marriage." *American Journal of Sociology*, 98(3): 628-65.
- Trump, Thomas. (1991). "Value Formation and Postmaterialism: Inglehart's Theory of Value Change Reconsidered." *Comparative Political Studies* 24:365-390.
- Van de Kaa, Dirk J. (2001). "Postmodern Fertility Preferences: From Changing Value Orientation to New Behavior." *Population and Development Review* 27(supp):290-331.

Table 1. Descriptive Statistics: Region 1 (Ex-Communist), Region 2 (Protestant), and Region 3 (Catholic)

	Men			Women		
	Region 1	Region 2	Region 3	Region 1	Region 2	Region 3
Materialism						
% Materialist	40.7	8.0	17.3	50.6	9.0	23.1
% Postmaterialist	2.8	19.1	23.9	1.5	19.7	19.3
% Others	50.8	69.1	54.9	41.9	66.7	52.6
% Missing	5.7	3.8	4.0	6.1	4.6	5.1
Traditional Family Values						
<i>Value 1: % Agree: "Children need a home with both a father to grow up happily"</i>	96.1	74.0	88.4	95.1	55.1	84.9
<i>Value 2: % Agree: "Women need to have children to be fulfilled"</i>	77.2	41.5	52.0	82.0	40.4	50.8
<i>Value 3: % Disapprove: "Woman wants to have a child as a single mother but does not want a stable relationship with a man."</i>	28.6	38.9	36.6	25.6	31.4	34.0
Mean Self-Rated Household Income (Scale: 1-10, highest = 10)	5.6 (2.9)	6.0 (2.5)	5.2 (2.7)	5.0 (2.9)	5.6 (2.6)	4.6 (2.6)
Mean Age	43.7 (17.0)	44.8 (16.5)	45.6 (17.3)	47.0 (17.7)	45.8 (17.3)	46.5 (17.5)
Education						
% Less than primary education	3.3	0.3	7.8	5.9	0.9	9.7
% Primary education	7.7	15.0	12.5	8.3	15.2	15.8
% Vocational or secondary school qualification	67.8	55.8	56.1	66.7	52.5	53.0
% Any university	21.2	28.9	23.6	19.2	31.4	21.6
% Married	62.7	51.2	58.3	47.9	48.8	53.1
% Having at least one child	75.1	63.9	65.6	82.0	71.7	73.5
N	2076	1497	2659	2429	1540	2868

*figures in parentheses are standard deviations

Table 2

Summary of logistic regression looking at respondents' approval of the statement, "Children need a home with both a father and a mother to grow up happily" (1= approve)

Variables	Men	Women
Materialist/Post-materialist Value ²		
Post-Materialist	.626 (.160)**	.756 (.138)*
Others	.927 (.139)	.894 (.112)
Missing/Don't Know	.780 (.257)	1.113 (.230)
Regional residences ³		
Region 2 (Protestant)	.133 (.144)***	.059 (.125)***
Region 3 (Catholic)	.333 (.146)***	.256 (.125)***
Age	1.019 (.003)***	1.030 (.003)***
Married	1.916 (.116)***	2.067 (.093)***
Have at least one child	.919 (.128)	.550 (.109)***
Education	.766 (.072)***	.731 (.061)***
Income	.995 (.018)	1.000 (.017)
Chi-square	509.324***	1154.285***
Degree of Freedom	10	10
N	5067	5724

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

² Reference category is Materialist

³ Reference category is Region 1 (Ex-Communist)

Table 3

Summary of logistic regression looking at respondents' approval for the statement, "Women need to have children to be fulfilled" (1= approve)

Variables	Men	Women
Materialist/Post-materialist Value ⁴		
Post-Materialist	.706 (.115)**	.985(.115)
Others	.882 (.085)	.941 (.079)
Missing/Don't Know	.811(.179)	1.034 (.170)
Regional residences ⁵		
Region 2(Protestant)	.205 (.099)***	.150 (.098)***
Region 3 (Catholic)	.301 (.081)***	.205 (.080)***
Age	1.014 (.002)***	1.002 (.002)
Married	1.087(.087)	1.055 (.074)
Have at least one child	1.264 (.098)*	2.466 (.090)***
Education	.856 (.049) **	.747 (.047) ***
Income	.962 (.013)**	.944 (.014)***
Chi-square	600.937***	1008.688***
Degree of Freedom	10	10
N	4330	5172

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

⁴ Reference category is Materialist

⁵ Reference category is Region 1 (Ex-Communist)

Table 4

Summary of logistic regression looking at respondents' opinion about the statement "woman wants to have a child as a single parent but she does not want to have a stable relationship with a man" (1=approve, conditionally approve)

Variables	Men	Women
Materialist/Post-materialist Value ⁶		
Post-Materialist	1.700 (.108)***	1.344 (.111)**
Others	1.306 (.077)***	1.162 (.073)*
Missing/Don't Know	1.078 (.160)	.969 (.148)
Regional residences ⁷		
Region 2(Protestant)	.533 (.083)***	.680 (.086)***
Region 3 (Catholic)	.673 (.075)***	.637 (.074)***
Age	.992 (.002)***	.979 (.002)***
Married	.835 (.078)*	.791 (.068)**
Have at least one child	1.113 (.090)	1.176 (.086)
Education	1.188 (.044)***	1.212 (.042)***
Income	1.029 (.012)*	1.025 (.013)
Chi-square	159.460***	312.610***
Degree of Freedom	10	10
N	5013	5745

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

⁶ Reference category is Materialist

⁷ Reference category is Region 1 (Ex-Communist)