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Emotion Cultures and Variation in Fertility

*„Seht ihr den Mond dort stehen?
Er ist nur halb zu sehen,
Und ist doch rund und schön!
So sind wohl manche Sachen,
Die wir getrost belachen,
Weil unsre Augen sie nicht sehn.“*

*See the moon in the night sky?
She is only half in sight,
Yet she is round and full!
It's like with many other things,
Which we're not taking seriously
Cause we can't see them with our
eyes.”*

Verse from: „**Der Mond ist aufgegangen**“ (“The moon has risen”), Poem by Matthias Claudius, 1779, literal translation by author

Abstract

Quantitative research on cross-national variation in fertility behavior and fertility decline has considered many explanatory forces, yet, the role of emotion has to date been neglected. This paper develops a line of argumentation on how emotions of individuals may interact with ‘emotion-cultures’ on the societal level in affecting childbearing behavior and producing cross-national/regional variation in fertility behaviors and rates. A variety of macro-level measurements ranging from ‘overall expressivity endorsement’, over the World Giving Survey, to ‘human and child values’ from the European Social Survey and European Value Survey will be used to capture ‘emotion-cultures’. Using GLM and fixed effects model, I then assess whether such ‘emotion-cultures’ may be helpful in understanding cross-national variation in completed cohort fertility rates, and change in total fertility rates over time. First results indeed show a significant positive relationship between overall emotional expressivity endorsement and completed cohort fertility rates across the developed world.

Introduction: Emotions, ‘Emotion-Culture’ and Fertility

Emotions are ever present in the human experience. Be it the emotions of self or of others, experienced by individuals or in groups, felt and expressed in response to internal or external stimuli. Psychology and neuroscience have acknowledged, even if only recently, that emotions are key in human interaction and communication (Ekman 2007) and profoundly guide human decision-making and behavior (Bechara 2004, Huntsinger and Ray 2015), likely rendering the rational-choice approach (and the duality of emotion versus cognition in general) obsolete in its classical form (Pessoa 2008, Phelps 2006, Lerner et al 2015). Moreover, research in anthropology, psychology, and neurobiology suggests that how emotions are perceived, valued, and expressed varies cross-culturally (Markus and Kitayama 1991, Mesquita, Frijda, and Scherer 1997, Barrett, Mesquita and Gendron 2011). How we like to feel and what we do to feel good varies systematically across cultures (Tsai 2016). In other words, emotions not only matter for individuals and their life-choices or social interactions, but psychology and other disciplines argue there exist distinct national/regional or group-specific ‘emotion-cultures’ which lead to systematic variation in how people feel in reaction to life experiences, how they want to feel, and how they behave to achieve or avoid certain emotional states (Tsai Levenson and McCoy 2006, Tsai and Lau 2013). Thus, individuals’ emotions, emotion-cultures, and the interaction between the two, likely are a major component of the social fabric of societies, and a crucial steering force for differing cross-national and cross-cultural behaviors.

Fertility behaviors, along with other demographic outcomes, vary considerably across societies as well. While demographic research on post-STD fertility decline has considered a large array of factors which contribute to differentials in fertility levels and timing, emotion has very rarely been explicitly among them, neither on the individual- nor the cultural or macro level (for a review see Balbo, Billari, and Mills 2013). Unlike, for instance, monetary,

employment-, policy, human capital-, social-background, or partnership-related aspects, emotions are invisible, often transient, internally experienced states and therefore difficult to grasp, measure and to incorporate into quantitative research. Questions capturing individuals' emotional experiences or macro-level 'emotion-cultures' are rarely included in representative surveys. In addition, apart from the second demographic transition theory, quantitative demographic and fertility research has largely been driven by theories borrowed from economics, such as the New Home Economics, stressing rational decision-making as one if not the main mechanism driving childbearing behavior (Sigle 2016). Theoretical approaches and arguments emphasizing the emotional, cultural and normative aspects and motivations for childbearing (or 'value of children') are of course not new (e.g. Friedman et al 1994, Zelitzer 1994). Yet, empirical applications in quantitative demographic fertility research are still scarce, in particular regarding cultural emotion related factors and their potential impact on aggregate fertility rates.

The first aim of this paper is to offer a theoretical frame on how emotional needs and their interplay with societal norms on emotion, or 'emotion-cultures', may matter for childbearing behavior, and how they may play a role for systematic regional or cultural differences in fertility, including changes in fertility over time such as during transitions. The second aim is to empirically test the suggested arguments, in a macro level analysis. A variety of data sources will be used to create measures for 'emotion-cultures' on the macro level. They stem from psychological surveys (e.g. DRAI: Display Rule Assessment Inventory), NGO surveys (World Giving Survey/Charities Aid Foundation), and the European Social- and Value Surveys. Some measures are available cross-sectionally only, others have been repeatedly surveyed across time. Linear regressions and fixed effects regressions are employed to test whether measures for 'emotion-culture' predict cross-national variation in completed cohort

fertility (cross-sectional analysis) or changes in total fertility rates over time (fixed-effects models).

Theoretical Frame and Previous Research

Second Demographic Transitions and Emotional Needs

Second demographic transition theory (STD1) argues that ideational factors have played a central role for delayed family formation and fertility declines of the second demographic transition (Lesthaege and van de KAA 1986). In particular, economic development has led to a shift in focus from basic need satisfaction (shelter, food, survival) to higher order needs satisfaction (self-realization, autonomy, recognition), which in turn has led to the postponement of parenthood and marriage and fertility declines. The pursuit of autonomy and self-actualization have thus been accompanied by decreasing prioritization of family formation (Lesthaege 2010).

Second demographic transition theory (STD1) is illuminating for framing and explaining fertility transitions and declines as economic development advances. However, it is less geared toward explaining variation in fertility among societies at similar levels of development. In this paper, I argue that the ideational factors proposed as central by STD1 closely reflect some human psychological needs, namely the need for autonomy and competence/self-actualization. However, other central human needs haven been rather neglected in the theory, namely the psychological needs of relatedness and belonging. I argue that extending STD1 to include all human psychological needs may be key for advancing our understanding of cross-societal variation in childbearing behavior at similar levels of socio-economic development. It may also be helpful for understanding the different pace of fertility transitions as socio-economic development advances observed across advancing societies.

Among psychologists, there is debate on which psychological needs are essential, and how they can be classified (for an overview see Ryan and Deci 2017). Self-determination theory (STD2) is one theory on human psychological needs, and is concerned with “how socio-contextual factors support or thwart people’s thriving through the satisfaction of their basic psychological needs for competence, relatedness, and autonomy” (Ryan and Deci 2017, p.3). While STD1 has highlighted the emotional needs for autonomy and competence, it has neglected the third core need according to STD2 theory, namely the need for belonging and relatedness. This need, however, is core to the human existence and arguably the need that likely motivates and is fulfilled by family formation and reproduction. This STD2 concept and a focus on the need for relatedness is particularly helpful in highlighting the relevance of how social experiences, in particular experiences related to family formation and childrearing, may evoke emotional responses, which then help to fulfill or frustrate the need for relatedness. Specifically, I argue that real or observed and anticipated own experiences with children and/or parenting may act to fulfill or frustrate these needs to different degrees, contingent on cultural or ‘emotion-cultural’ frames.

Previous micro-level research on well-being and fertility shows that emotional experiences with the transition to parenthood indeed appear to affect further childbearing. Drops in subjective well-being around the time of first birth are for instance associated with a decreased second-birth hazard in Germany (Margolis and Myrsyla 2015). Research investigating the well-being or happiness of parents as a dependent process indicates that parental well-being is context- and life-stage-dependent (Margolis and Myrskylä 2011, Myrskylä and Margolis 2014, Assve et al. 2015, Riederer 2018). Not much is known on the relevance of the interaction between individuals’ emotional experiences and the social environment in affecting emotional perceptions and well-being, but these studies suggest such differences exist. Moreover, childless individuals may also experience emotional responses

when observing other with children, making conclusions on how they would emotionally fare as a parent.

Emotion Cultures

Research in anthropology, psychology, and neurobiology suggests that how emotions are perceived, valued, and expressed varies cross-culturally (Markus and Kitayama 1991, Mesquita, Frijda, and Scherer 1997, Barrett, Mesquita and Gendron 2011). How we like to feel and what we do to feel good varies systematically across cultures (Tsai 2016). In other words, emotions not only matter for individuals and their life-choices or social interactions, but there exist distinct national or group-specific ‘emotion-cultures’ which lead to variation in how people feel in reaction to life experiences, how they want to feel, and how they behave to achieve or avoid certain emotional states (Tsai Levenson and McCoy 2006, Tsai and Lau 2013). Thus, individuals’ emotions, emotion-cultures, and the interaction between the two, likely are a major component of the social fabric of societies, and a crucial steering force for differing cross-national and cross-cultural behaviors.

I argue that emotional experiences of how it feels to be a parent and handle children, or observed experiences of other children and parents (among the childless), will inform decision-making regarding reproduction. More specifically, whether having children and being a parent fulfills or rather frustrates the need for belonging and relatedness in a given community/society/cultural setting will be crucial for motivating or demotivating having a(nother) baby. Hence, I argue individual emotions in interaction with “emotion-cultures” are crucial for fertility decision-making, and are likely a missing puzzle piece for explaining cross-societal differences in fertility timing and level, in particular in developed countries where childbearing is no longer necessary for economic survival.

Mechanisms and Hypotheses

How are emotional experiences and cultures connected to childbearing behavior?

My core hypotheses are simple. I hypothesize that rearing children (parents) and observing interaction with children of others (childless individuals) evokes a variety of negative and positive emotions in the adults, emotional reactions which are guided by and produced in interaction with the surrounding emotive and normative value structure. If such surrounding emotive and normative value structures emphasize values such as compassion, empathy, open emotional expression and exchange, feelings of excitement, dreaming and imagination etc., childrearing will produce fewer negative or stressful responses in the parent. This is because such ideas are more in alignment with the open emotional expressivity of babies and young children, particular at ages before language is fully developed. I argue that (young) children and their behavior and emotional displays will be responded to more positively by both parents (via internalized emotive values) and the social world (via direct behaviors or emotional interactions between the adults in response to the child's behavior) around them in societies which endorse open emotional expressivity more. Conversely, emotional and value structures which value self-control, keeping emotions to oneself, subordination of emotional needs to rules, and score low on compassion will be less supportive of children's behaviors, and evoke more stressful or negative responses in the adults handling or observing the child. I hypothesize that such positive and negative emotional experiences add up over time and will affect the emotional association with children, childrearing, being a parent etc, which will be key in future fertility related decision-making and behavior

More specifically, childrearing, in particular of babies and preschool-aged children, entails a host of emotional responses and work and triggers many emotional experiences in parents and other adults who handle or observe them. Children's physical and emotional needs need to be attended to relentlessly, often exhausting parents. Moreover, children are not yet capable of

emotional coping. This makes dealing with and the managing of children's emotional displays one core task of parenting. Much of parenting takes place not at home but within the social community, on the way to preschool, in the grocery store, at the playground, in the subway, at the pediatrician's office, at play dates, in the vicinity of neighbors, family members, friends etc. Parenting, and parents' emotional experiences with children, are hence constantly embedded in the greater social fabric.

I assume that children's behavior is often not yet aligned with norms for 'proper' public behavior. Children cry, scream, have tantrums, interrupt and ask questions, are slow, loud, fight with siblings, and make a mess or touch things they are not supposed to touch. I hypothesize that the ease and joy or discomfort on the one side and negative emotions on the other side parents experience in response to dealing with children's needs and behaviors will largely be affected by the surrounding emotions culture as well as norms for proper child behavior. This emotion culture will steer both, the emotional and behavioral responses to children and interactions with children by others/the surrounding social world, as well as the own emotional responses parents have when dealing with their own children. If other individuals react disapprovingly or negatively to children's behavior or emotions, the parent will experience negative emotional responses, through disapproval of and rejection by the social world around her. The opposite will occur in response to positive, compassionate, understanding or accepting responses. If the social world is more accepting and welcoming towards children's natural behaviors, this will evoke positive emotions in the parent and may ultimately create a feeling of belonging and strengthened ties with the community. Also, parents (and other adults) have internalized the emotive value structure of their surrounding community (if it is the one in which they grew up in). Their own emotional responses to their children's emotional expressions will be guided by these internalized emotive values. If emotional expression and compassion score high in such an internalized value system, the

parent will more likely react emotionally positive and experience joy to children's emotional displays than if they their internalized values score high on dimensions such as self-control, keeping emotions to oneself, etc. Of course, there is individual variation in such emotive-landscapes. The greater argument here is about differences in mean values across cultural regions or countries which may be related to cross-regional or national fertility variation, not so much on variance within cultural social groups in emotive-landscapes. Such internalized emotive-cultures or emotive-landscapes could also play a role in differential fertility among first generation- and second generation immigrants.

While most of these hypothesized mechanisms affect parents in particular, I hypothesize that childless individuals are also affected via social observation.

How may this emotional experience nexus be relevant for understanding fertility decline in post STD societies?

Motivations for childbearing and the 'value of children' has been theorized to shift over time, and over developmental societal stages. Children's economic value to a family's survival and procreation are thought to be significant in pre-industrialized societies (Nag et al 1978), while intrinsic emotional or cultural values counterbalance 'children's negative instrumental net value' in advanced industrialized societies (Friedman et al 1994, Zelitzer 1994).

Accordingly, emotional aspects and emotional meaning of childbearing- and rearing may have become more decisive in post STD-societies. Having children is now 'optional', and positive or negative emotional impressions connected to childrearing may weigh more heavily in fertility behavior. Moreover, the division of home- and workplace in post-industrialized societies combined with the heavy influx of women into the labor market has increased the (time- and emotional) burden of dealing with the 'second shift (Hochschild 1997) and

‘competing devotions’ (Blair-Loy 2009) for both men and women. Additionally, childrearing takes place more often in the public social realm, as children usually go to daycares and schools, and parents navigate communal social places with them likely more often than in pre-industrialized societies, meaning social-interactions may be more dominant in creating emotional responses to childrearing than previously.

Survival and procreation possibilities are usually secured in industrialized societies, so that higher order human needs and their fulfillment, not only autonomy and competence, but also social-belonging and relatedness come to the fore as behavior-motivating in advanced societies. I argue that if rearing children is connected to the emotional experience of rejection and disconnection within the community, frustrating the need for social belonging to the community, it makes sense that childbearing will be reduced to enhance one’s sense of belonging. Conversely, if emotional experiences connected to children and childrearing increases one’s emotional sense of belonging and fulfillment within the community, fertility should be higher or increase.

How may emotional experiences and ‘emotion-cultures’ mediate the pace of fertility transitions?

I argue that in advanced nations, after the fertility transition to a below-replacement fertility regime has taken place, a positive relationship between emotional expressivity or empathy emerges. This is because childrearing and parenting may be emotionally more rewarding in emotionally more expressive and empathic communities, satisfying the need of relatedness and belonging instead of frustrating it when dealing with children.

Before societies transition to below fertility regimes as socio-economic development increases and fertility is still high, I conversely suggest that higher levels of emotional

expression and empathy will lead to faster fertility declines. Societies scoring low on empathy, emotional openness etc. will have slower transition times into low fertility behavior. Making the shift to relying on communal social systems for economic safety and security, for instance in old age, away from relying on a higher quantity of own offspring to secure survival, requires trust in the community, and communal systems and cultures which feature empathy and open emotional exchanges between ‘strangers’ (not only within families). Hence, societies with more emotional expressivity, empathy etc should see faster transitions into new family systems and fertility decline. Once they reach near or below replacement fertility, they will, however, not see further declines into very low fertility.

Data and Analyses

Emotion Culture Measurements

The data for the analyses come from a variety of sources. Measures on emotion cultures are taken from four data sources. One measure on overall endorsement of emotional expressivity is taken from the DRAI: Display Rule Assessment Inventory, a psychological survey. The World Giving Survey, a survey conducted in many countries by the Charities Aid Foundation, is used for a measure on the percentage of people, who say they have helped a stranger in the last 4 weeks. This measure is used as an indicator for empathy in the society. First results are based on these two measures.

Other predictors to capture ‘emotion-cultures’ and changes therein over time will be gathered from rounds 1-8 of the European Social Survey, possibly complemented by measures from the European Value Survey. Region-specific averages will be computed, permitting case numbers. The European Social Survey is a bi-annual cross sectional times series, which has gathered data on ‘human values’ in each round from 2002 (round 1) to 2016 (round8). 24

countries have participated in the last round, but not all countries are represented in earlier waves.

The following set of items will be used:

“Important to do what is told and follow rules”, “Important to be humble and modest, not draw attention”, “Important to behave properly”, “Important to get respect from others”, “Important to follow traditions and customs”. Higher scores on these items are expected to correlate with lower fertility.

“Important to seek fun and things that give pleasure”, “Important to have a good time”, “Important to think new ideas and being creative”, “Important to understand different people”. Higher scores on these items are expected to correlate with higher fertility.

These items may be complemented with measures on desirable child qualities from the European Values Surveys from 1990, 1999, and 2008. Items measure the perceived importance of the following qualities in children: good manners, politeness and neatness, independence, hard work, patience, imagination, tolerance and respect for others, self-control, obedience, loyalty, and more.

Dependent Process: Fertility Data

The data for the dependent process (fertility) in the analysis come from the European Fertility Data Sheet Eurostat (Sobotka et al 2015) and from Eurostat. For the cross-sectional models, completed cohort fertility measures for birth cohorts 1969-1976 (dependent on availability) will be used. Longitudinal models will use TFR and age specific-fertility rates measures on the country or regional level for 24 EU member states. Regional level-control variables on economic and social regional aspects shown to affect fertility rates, such as the unemployment rate, regional GDP etc. will be gathered from Eurostat and added to the models. I will use

yearly data on the TFR and other macro-level factors from 2002-2016, because the main predictors of interests are available in this time frame for the longitudinal models.

Methods

I will estimate two types of models. First, I will estimate cross sectional general linear models, regression the CFR on ‘emotion-culture’ indicators.. Emotive-cultures may well vary across regions, not only countries. Therefore, the regional level will be used as the unit of analysis whenever case numbers permit.

Second, I will estimate cross-country-by year fixed effects models. These will estimate the effect of changes in emotion cultures on changes in the regional TFR or age specific fertility, purging out the effect of all other potentially unmeasured factors on the regional level which may lead to biased estimates.

First Findings

Figure 1 depicts the macro level association between a measure for overall emotional expressivity endorsement measured in 2007 and the completed cohort fertility of the 1976 birth cohort in a set of advanced societies (country choice based on availability of the expressivity measure). No other factors are being controlled for yet. A positive and significant relationship emerges. The more emotional expressivity is endorsed in a country, the higher the CCF. This first correlation descriptively supports the hypothesis that cultures with greater emotional expressivity may be more conducive to childrearing. Of course, reversed explanations may also play a role, a larger presence of children in a society may have an affect of cultural ideas toward emotions, and lead to a greater endorsement of open emotion expression.

Figure 2 shows the association between a measure for empathy in the community (percentage of those who have helped a stranger in the last 4 weeks) and the CCF in South American countries, which are currently transitioning from higher to lower fertility regimes. As hypothesized, a negative relationship emerges between the completed cohort fertility and the measure for empathy. The more empathic a society, the 'faster' the transition into a lower fertility regime, potentially due to greater trust into dependency on the community and others/strangers.

Conclusions and Outlook

This paper attempts to identify 'emotion-cultures' and test their association with fertility behavior across European regions and time. I hypothesized to find a significant association between the measurements attempting to capture 'emotion-cultures' and the CCF and TFR, potentially extending demographic theories on fertility and providing new empirical insights.

First findings indeed confirm my hypotheses. Advanced countries post second demographic transition display higher completed cohort fertility rates when emotional expressivity endorsement is high, potentially signaling greater emotional rewards of childrearing and parenting in such communities. In transitioning countries in South America, higher levels of empathy are, conversely, linked with lower completed cohort fertility rates. This is a first confirmation for the hypothesis that higher empathy in the community will enable faster transitioning away from relying on own offspring for economic security, as trust in the support of the community may be larger.

However, the suggested research design and expected findings are subjected to several limitations. First, there is no clear notion of 'emotion-cultures' yet, theoretically and empirically, even though the concept is well accepted in psychology. Whether the suggested

measurements can capture such a concept is unclear, and there won't be (an easy) way to gain insight into their validity. Second, individuals' emotions, which I hypothesize to be central to the suggested mechanisms, will remain unmeasured and unaccounted for in these analyses. Representative data on them simply does not exist, let alone data which would be available for so many regions which would allow testing of whether emotions indeed might be helpful in unraveling the still partly unsolved puzzle of fertility decline and fertility variation across post-STD countries. Also, endogeneity is an issue, as such emotive values/emotion-cultures may be jointly produced with fertility behavior by other forces. Potential effects could even run the other way (from fertility to values/culture). The next version of the paper will partly address these issues by using fixed-effects models and measurements over time.

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FIGURES

