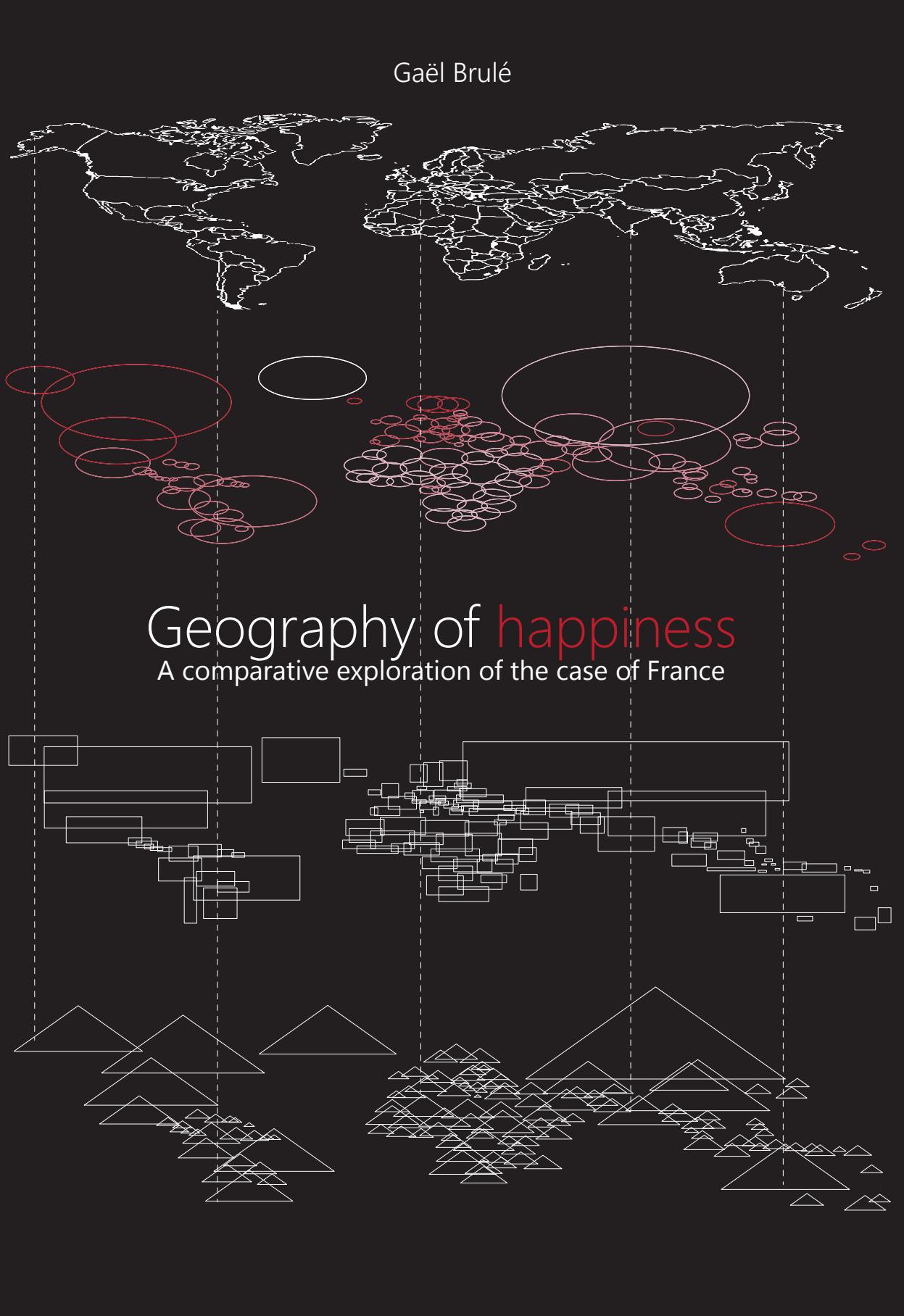


Gaël Brûlé

Geography of happiness

A comparative exploration of the case of France



Geography of Happiness
A comparative exploration of the case of France

De geografie van geluk
Een vergelijkende studie met focus op Frankrijk

DOCTORAL DISSERTATION

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Geography of happiness

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After reading two international surveys in a week, one on the high quality of life in France and the second showing that French people were among the least satisfied with their lives among developed nations, I decided to study this dichotomy academically. This was in 2010. When I made the decision, I was eager to find an environment in which I could start. Willingness and reality can be quite distinct. First, being trained as an engineer, I was an alien in the world of social sciences, even if I was confident that my analytic background would be of great help with researching and that by working hard I could assimilate the wide culture of the social sciences during my PhD. The second obstacle was the academic inertia. This was in September and the best I could do was to apply for a position one year later without any guarantee of even finding a PhD position. Thus, starting a PhD would have been difficult if Ruut Veenhoven had not given me an opportunity to work with him. He is the first person I want to thank here. On top of being a pioneer in the field of happiness studies, his openness, dynamism and coaching made it so easy to implement a work-friendly environment, as well as a friendly work environment, even though we were most of the time in two different countries. I am sure a lot of highly motivated and qualified candidates drop out because they are not given such a chance, which is a pity. When you are given the chance I was given, you naturally want to perform and you will work twice as hard. You never know how far an email to the Netherlands can lead you.

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Chapter 1: Introduction

Happiness as a subject has received growing attention academically in recent decades, as attested by the numerous studies in the fields of positive psychology, economics and sociology. Different methodologies are used at different levels of analysis. These range from micro-level psychological studies in which the underlying mechanisms of an individual's happiness are studied, to macro studies comparing happiness across regions or countries and/or over time. In this research, such comparative studies play a crucial role.

1.1. Notions of 'happiness'

The word 'happiness' has been used, to denote different meanings. In this dissertation the word happiness is used in one particular sense: the subjective enjoyment of one's life as a whole, as defined by Veenhoven (1984). To grasp this meaning and to situate it among the divergent uses of the word, I will start with a short review of the various meanings of happiness commonly used in philosophy and the social sciences.

1.1.1. Meanings of the word in classical western philosophy

In classical western philosophy, the word happiness is used to express the 'good life'; this conception differs from one school to another, as highlighted by McMahan (2006). One difference is in the value attached to pleasure: some schools, such as the Hedonists and the Epicureans, endorse pleasure, while others, like the Cynics or Stoics, avoid it. This opposition, as we will see, is still somewhat present today. Hedonists are the intellectual descendants of Aristippus of Cyrene and they take pleasure to be a key value for a good life. As materialists, they give little credit to the immaterial world and only consider feelings, such as pleasure or pain. To the Stoics and the Cynics, happiness is not material and has nothing to do with physical pleasure. Human beings should avoid desire, and stay away

from the quest for happiness. The wise must avoid passions and feelings. A good life is a virtuous life, which should lead to a state of *ataraxia*¹.

Aristotle, one of the most influential philosophers in the field of happiness studies, stands in between these currents; he considered pleasure to be a byproduct of reaching higher virtue. Aristotle wrote about *eudemonia*, the ‘good demon’, a principle still considered to be a pillar of the philosophy of happiness. Before Aristotle, beliefs about happiness were strongly related to fortune: *daimonia* means ‘to distribute’ in Greek, hence, happiness was distributed and one may or may not have this fortune, without being able to do much about it. One of the main contributions of Aristotle was to promote the idea that happiness was a changing, movable, interior concept, and that one could have an influence on one’s own happiness. As Bruni (2010) has argued, Aristotle’s fortune can be decorrelated with happiness thanks to virtue. *Eudemonia* also includes, to some extent, pleasure as a *signal* that the pursued action is intrinsically good.

1.1.2 Meanings addressed in modern western philosophy

Following the schools of the ancient philosophers, modern philosophers have contributed to our reflections on the good life while still heavily relying on classic categories. Montaigne, in a hedonic vein, emphasizes the importance of pleasure and writes about the beauty of life. Similarly, Spinoza, another philosopher of joy, states in his *Ethics* (1677) that happiness is to be attained through the intellectual love of God (*amor dei intellectualis*)².

The formation of nation states gradually gave rise to a shift in attention from individual behavior to collective social arrangements, and happiness gained a political dimension. Much of the development in the 17th and 18th centuries was characterized by discerning the political meaning and implications of happiness (cf. Ott 2012). The French *Encyclopédie* states that everyone has a right to be happy. The Scottish philosopher Francis Hutcheson (1729) uses the famous formula ‘the greatest happiness for the greatest number’, a formula further used by

¹ Ataraxia is a Greek term that depicts a state of tranquility

² Ethics, part V, prop.32.

Adam Smith (1776) and reconceptualized by Jeremy Bentham (1789). In the latter part of the 18th century happiness became an official right, when it was incorporated in the American (1776) and the French (1793) Constitution. In the 19th century, John Stuart Mill (1863) further developed this notion by distinguishing happiness from contentment, valuing the former more than the latter³. In an Aristotelian way, Stuart Mill considers happiness to be a by-product of larger pursuit, a phenomenon denoted by Sidgwick (1874) as the ‘Paradox of Hedonism’ the paradox being that pleasures cannot be acquired directly, but only when striving for higher, not immediately pleasurable aims.

1.1.3 Meanings of the word in contemporary social sciences

There are currently two main conceptions of happiness in use: one of which is more *eudaimonic*, the other more *hedonic*. Recent discussions of this difference can be found in Waterman (1993) and Keyes (2002). Proponents of the eudaimonic view use the term ‘happiness’ to denote a set of desirable personality characteristics, such as ‘identity’, ‘autonomy’, ‘self-respect’ and ‘meaningfulness’, which is also referred to as ‘positive mental health’ (Jahoda 1958). Proponents of this view (cf. Huppert 2009) tend to criticize ‘hedonic happiness’ as superficial pleasure seeking. The word ‘hedonic’ is used in different ways. In contrast to ‘eudaimonic’ it means ‘satisfaction’ (right bottom quadrant in Table 1.1) and is sometimes assimilated with ‘pleasure’ (left-top quadrant in Table 1.2). However, this conception of ‘hedonic happiness’ is too restrictive. The subjective enjoyment of one’s life can, and should, also include long-term enjoyment. This broader conception of happiness is the one I have adopted in this dissertation; it will be further elaborated in the section below.

1.1.4 Meaning of happiness addressed in this dissertation

Starting from a philosophical discussion of the good life, Veenhoven (2000) distinguishes four different qualities of life, all of which have sometimes been called ‘happiness’. I will specify the concept of happiness I use in this dissertation by taking us through these distinctions.

³ Mill(1863) stated that it was “better to be Socrates dissatisfied than a fool satisfied.”(p 260)

Four qualities of life: qualities of life can refer to a person's outer environment as well as to a person's inner environment, to her or his mental world. Qualities of life can also be distinguished from a *chance* or *result* perspective. This taxonomy results in four qualities of life.

Table 1.1: the four qualities of life

	<i>Outer qualities</i>	<i>Inner qualities</i>
<i>Life-chances</i>	Livability of environment	Life-ability of the person
<i>Life-results</i>	Usefulness of life	Satisfaction with life

Source: Veenhoven 2000

The top-left quadrant of Table 1.1 denotes the presence of favorable external living conditions; a western-centric metaphor could draw a continuum going from 'hell' to 'paradise'. This definition is central in 'objective' conceptions of happiness: that is, in the conceptions in which the conditions that humans will thrive are central. This definition of happiness is the one commonly used by policy makers.

The top-right quadrant of Table 1.1 denotes the inner qualities one requires to cope with environmental conditions. This definition is central in the 'capability approach' and to the related notions of 'eudemonic happiness'. This definition of happiness is favored by educators and therapists.

The bottom-left quadrant of Table 1.1 denotes the effects of one's life on their environment, for instance how helpful one is to one's fellow humans and what one contributes to human culture. This rather intangible characterization of happiness is a favorite among moralists.

All these above definitions of the concept of happiness concern an objective notion, and imply that one can be happy without knowing it, without acknowledging that one is happy. In contrast the fourth happiness definition is essentially subjective. The bottom-right quadrant of the table denotes the quality of life in the eye of the beholder. Happiness in this definition is equaled with 'life satisfaction' or 'subjective well-being'. In this dissertation, I deal with happiness as defined in the bottom-right quadrant of Veenhoven's (2000) 'four qualities of life' diagram.

Four kinds of satisfaction

The bottom-right case can in turn be broken down into four categories. Indeed, we need to define whether we are talking of satisfaction within certain life domains or with life satisfaction as a whole and whether we are talking about passing or enduring feelings of happiness. This gives us four new subcategories of happiness arising from the bottom-right quadrant of Table 1.1, these are shown in Table 1.2. (Veenhoven 2000)

Table 1.2: the four satisfactions of life.

	<i>Passing</i>	<i>Enduring</i>
<i>Part of life</i>	Pleasures	Partial satisfaction
<i>Life as a whole</i>	Peak experience	Satisfaction with life

The top-left quadrant of Table 1.2 includes passing satisfaction with a part of one's life that is often called 'pleasure'. Pleasures can be sensory or mental. The idea that we should pursue such satisfactions is called 'hedonism', or 'Epicureanism' if the pleasures are weighed against the potential pains.

The top-right quadrant of Table 1.2 includes enduring satisfaction with a part of one's life and is referred to as 'partial satisfaction' and is

about satisfaction within specific life domains, such as that of family, leisure or work.

The bottom-left quadrant of Table 1.2 is about passing satisfaction and can be about life as a whole. This kind of satisfaction is usually referred to as 'peak-experience'. When poets write about happiness they usually describe an experience of this kind. Likewise in religious writings, the word happiness is often used in the sense of mystical ecstasy. Another word for this type of satisfaction is 'enlightenment'.

Finally, the bottom-right quadrant of Table 1.2 is about enduring satisfaction with your life as a whole and is called 'life satisfaction', which is commonly referred to as 'happiness'. In this dissertation, I will be discussing happiness in the 'life satisfaction' sense of the term.

Definition of happiness

Several definitions of happiness are concerned with the meaning of the term indicated above (cf. Diener (1984), Michalos (1985) and Veenhoven (1984)). Diener (1984) defines life satisfaction as "a cognitive judgmental process dependent upon a comparison of one's circumstances with what is thought to be an appropriate standard" (p. 71). Michalos (1985) proposes a multiple discrepancy theory (MDT) in which happiness depends on the satisfaction of 5 main aspects and the self-perceived discrepancies between what one has and what one wants⁴. The definitions as operationalized by both Diener (1984) and Michalos (1985) focus on the cognitive evaluation of life, assuming that the affects do not significantly enter in the evaluation of one's life.

Veenhoven (1984) defines overall happiness as "the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In other words, how much the person likes the life he/she leads" (p.22). As compared to Diener (1984) and Michalos (1985), life satisfaction as defined by Veenhoven acknowledges the presence of both affects and thoughts in the evaluation of one's life. In this dissertation I follow the conceptualization of Veenhoven (1984), who distinguishes between

⁴ 1. Basic needs and wants 2. What one was accustomed to having earlier in life 3.What one expects to have later in life 4.What others in society have 5. What one deserves.

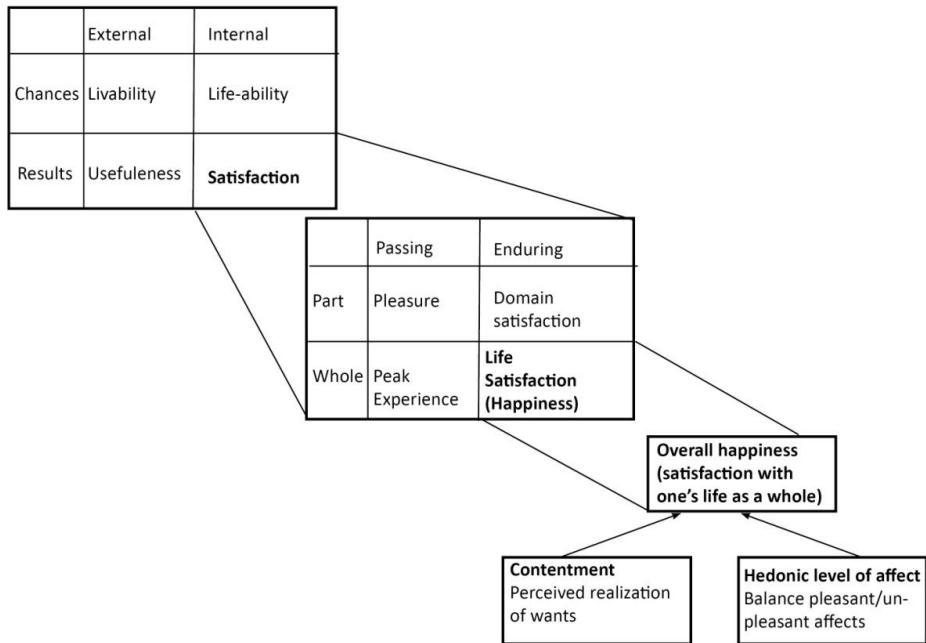
‘overall happiness’ and two ‘components’(cognitive, hedonic) which I develop below (see section 1.1.5 for motivation).

Components of happiness

When appraising how much we enjoy our lives, we use two sources of information: our affects, and our thoughts. In this research, I refer to these two sources respectively as *hedonic level of affect* and *contentment*. *Hedonic level of affect* is how well one feels most of the time, which Veenhoven (1984) calls the ‘affective’ component of happiness. *Contentment* is the degree to which one perceives one gets what one wants from life. Veenhoven (1984) calls this the ‘cognitive’ component of happiness.

Although these components tend to go together, they are not the same. One can feel good most of the time, but still have many wants unmet, or vice versa, one can have many wants met but still not feel good most of the time. I summarize the refining of my definition of happiness in Figure 1.1 below.

Figure 1.1: Definition of 'happiness' as used in the frame of this dissertation



1.1.5 Why focus on happiness in this sense?

I will focus on happiness in the sense of life satisfaction, which some call ‘hedonic happiness’ as we have seen above. The first reason for this is theoretical. Life satisfaction (hedonic happiness) is a much clearer concept than ‘eudaimonic’ happiness; hedonic happiness is how much one likes the life one lives, whereas notions of eudaimonic happiness are more variable and cover much more. Eudaimonic happiness depicts not only other states of mind, as in a sense of ‘meaning’, but also personality traits such as ‘wisdom’, and behaviors such as ‘social involvement’, which are better analyzed as conditions for happiness than as parts of it. The second reason for preferring a hedonic notion of happiness is that this is better measurable than eudaimonic happiness. The factors used in the measurement of the livability of a given environment or the life-ability of a certain person can be numerous, and their relative importance varies from one actor to another. The last reason for preferring happiness in the sense of life satisfaction is ideological. I follow Bentham’s utilitarianism in which happiness is defined in this way. As a consequentialist philosophy, it prevents philosophical speculation, or worse, paternalism. If one is to measure the livability of the environment or the life-ability of a certain person to increase the satisfaction of the actors, one might as well ask them directly what they think, unless one considers that he or she knows better what is good for them.

1.2. Measurements of happiness

Since I define happiness as something that people have in their minds, one way to measure it is by using questionnaires. Direct questioning is the most commonly used method to determine a person’s state of happiness. Respondents are asked to judge their life in general and not a particular moment. Indirect techniques, such as analysis of diaries are also occasionally used to measure levels of happiness. (Veenhoven 2006)

1.2.1 Measures of overall happiness

As a combination of a hedonic and cognitive component, life satisfaction questionnaires mainly includes mono-item questions. A number of different

scales exist, i.e. 3-step, 4-step, 5-step, 10-step and 11-step, but the questions used show little change: ‘Taken altogether, how satisfied are you with your life as a whole these days?’ The most common question asked to probe people’s impression of their life satisfaction is: ‘In general, on a scale from 0 (or 1) to 10, how satisfied are you with your life as a whole?’ Unless otherwise mentioned, all the data used in this thesis was collected based on the above type of questioning.

1.2.2 Measures of the affective component

There are several ways to ask people to assess how well they feel in general. One way is to invite the respondent to offer a general estimate, for instance with the question: ‘How often have you felt happy during the past 6 weeks?’ A second method used to assess happiness is multi-moment assessment, and this involves answering a series of repeated questions such as: ‘How happy do you feel right now?’ A third approach to assessing hedonic level is to ask first about various specific affects experienced in the recent past, both positive affects such as ‘joy’ and negative affects such as ‘anger’, and then computing an ‘affect balance score’ by subtracting reported negative affects from reported positive affects.

General estimates

Respondents are asked a single question on how they feel at the moment of the question on a scale from 0 to 100 for instance, or how they have felt in the past: i.e. the day, the week, the month or the year before.

Multiple moment assessment

Different methods can be used to measure or probe happiness on a multiple moment assessment (Sirgy 2012). These methods are mostly used to measure affects.

Kahneman (1999) defines happiness as, essentially, momentary experiences of pleasures. To measure it, Kahneman uses the Experience Sampling Method (ESM) whereby subjects are beeped and asked at random moments during the day how much pain or pleasure they are experiencing. When completed, such a study gives a level of a subject’s happiness as an

integration, in the mathematical sense, of their pleasures over the time of the study.

Recently, the Day Reconstruction Method (DRM) has been developed to tackle the shortcomings of ESM, such as the costs of the studies and the inconvenience of a study for respondents (Sirgy 2012). In a DRM, time-use survey questions about the previous day are used (Kahneman et al. 2004). Respondents are asked to remember the previous day, divide it into episodes and describe each episode in combination with time use survey data. The DRM is in some senses more complete than the ESM, as an attempt is made to get full coverage of the respondent's day, whereas the ESM only samples several moments during a respondent's day (Kahneman and Krueger 2006).

Affect balance scores

Affect balance scores are a sum of pleasures and pains; pleasures typically receive a 'plus' and pains a 'minus'. These scores for pain or pleasure are added and averaged and then the average score of pains is subtracted from the average score for pleasures. Regarding pleasure and pain, they can either be rated on a scale, i.e. from 0 to 10, or most commonly by response using a binary yes or no.

1.2.3 Measures of the cognitive component

Contentment can be measured in various ways. One way to measure it is to use a general question, such as: 'How successful are you in getting what you want from life?'

A more refined method to assess happiness involves three steps. First, respondents are asked to enumerate the aspects they want from life. Second, respondents rate how successful they are in reaching each of these aspects. Finally the investigator computes the respondents' average success in meeting their wants, eventually weighed by importance.

A variant of the above approach does not ask respondents for personal 'wants', but rather refers to notions of the good life. The first step is to ask people what they think of as the 'best possible life' and next what constitutes the 'worst possible life'. After priming the respondents with these open questions, the respondents are presented with a ladder and asked

to imagine that the top of the ladder represents the best possible life they have just described and that the bottom of the ladder represents their concept of the worst possible life. As a last step, respondents are asked to rate their present life on the ladder. In some variations of this approach, this is done after respondents have been asked to rate their lives 5 years before the survey date and how they envisage their lives might be 5 years from now. This method is known as Cantril's (1965) 'ladder of life scale'.

1.2.4 Key terms used in survey questions on happiness

The word happiness can refer both to a concept and to terms which are used to measure happiness. The meaning of the word can differ depending on the context; for instance, 'how happy are you with your life' denotes 'overall happiness', whereas 'how happy do you feel today' is related to the affective component of happiness. In Table 1.3 below, I explain which terms correspond to which concept in this dissertation.

Table 1.3: concept and terms used in happiness-related questions

Concept	Terms
Overall happiness	Life satisfaction General satisfaction Happiness
Affective component	Mood Affect balance Happiness
Cognitive component	Best-worst life Realization of one's wants

One can see that 'happiness' appears as a general 'concept' as well as twice in the 'terms' column. This is because the surveys using the term happiness are numerous and varied. In the frame of this dissertation, I consistently refer to happiness as a concept in the sense of life satisfaction. When I use happiness in another sense, e.g. in its affective dimension, I explicitly state it.

1.3. Development of research on ‘hedonic’ happiness

1.3.1 Rising interest

After the Second World War, and in particular in the late 1960s with the falling influences of the Church, nationalism and traditional family ties, rising individualism and the possibility, or even an obligation, to identify with self and less with a community or several communities, happiness gradually became a more prominent life goal and a social norm to strive for in modern societies (Pawin, 2013).

The scientific world has followed this societal trend, and in turn, has reinforced it. A new strand of research has arisen within psychology, *positive psychology*, the focus of which is less on ailments and psychological issues and more on what is going right for the client and how things might go better. Different items, different questions and different measures have been developed to ensure the validity and reliability of this field. Psychologists have largely created these tools, and the sciences of happiness have thus contributed to the scientific consecration of individualistic aspirations.

As the amount of literature dedicated to positive psychology has increased, so have the number of related questions. In 1960, Gurin, Veroff and Feld worked on a measure of happiness that could be used to replace traditional mental health indicators. This measure was used in a large-scale study by Bradburn and Caplovitz in 1965, and this paved the way to extensive cross-regional and cross-national comparisons of happiness. In 1972, the following question was asked in the United States General Social Survey (GSS): ‘Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?’ To answer this question, Cantril (1965) developed a self-anchoring scale where the respondent chooses the lowest point and the highest point in terms of quality of life and ranks his/her life on a self-defined scale.

Veenhoven (2000) has described a double movement that has gradually begun to operate in the field of happiness studies in the last decades with: 1) a shift from *chances* to *results* and 2) a move from *objective* to *subjective* measures, i.e. a move from top left to bottom right in Figure 1.1. The first movement was the shift from looking at opportunities

in a given environment (Veenhoven's *assumed quality of life* as in the Human Development Index (HDI)) toward an emphasis on actual results (which Veenhoven calls *apparent quality of life*). The emphasis used to be on the environment, *assuming that* livability of an environment more or less directly resulted in livable conditions for the people concerned. As a result of this first move, what matters most is not so much what happens in someone's life, but more how that person feels about it. Not that the environment no longer matters, it does, but to the extent to which the respondent expresses that it matters. The second move is a swing from experts' views to respondents' opinions. There used to be a clear distinction between the *knowing* and the *unknowing*, historically analogous to the classical sacred/profane dialectic. Gradual democratization has resulted in a blurring of this frontier and in increasing trust in the opinion of actors. This leads to a shift from *a priori* considerations about a given situation and its effects to assessments of the actors themselves.

This shift is related to deeper waves of societal changes toward more democratic appraisals, carried by the actors themselves, which has left less room for philosophical speculation and expert opinion. Once psychologists began to ask questions about reported well-being and happiness, economists and sociologists, political scientists and politicians began to wonder whether subjective indicators such as happiness ratings could be used as realistic and objective indicators for public policy. Recently, the government of Bhutan has decided to care more about the quality of life of its people and to work on gross national happiness, rather than increasing gross domestic product (GDP). The term gross national happiness was coined by Bhutan's fourth Dragon King, Jigme Singye Wangchuck, and is used in order to evaluate how Bhutanese policies increase happiness, as measured by the Gross National Happiness (GNH) indicator, which is then converted into the Bhutan GNH Index. The GNH Index provides an overview of performance across 9 domains of GNH in Bhutan. These include psychological well-being, time use, community vitality, ecological resilience, cultural diversity, health, living standards, education and good governance. This example of the use of indicators has paved the way for other indicators to be used worldwide by researchers trying to understand how people experience their lives. Since the 1970s the

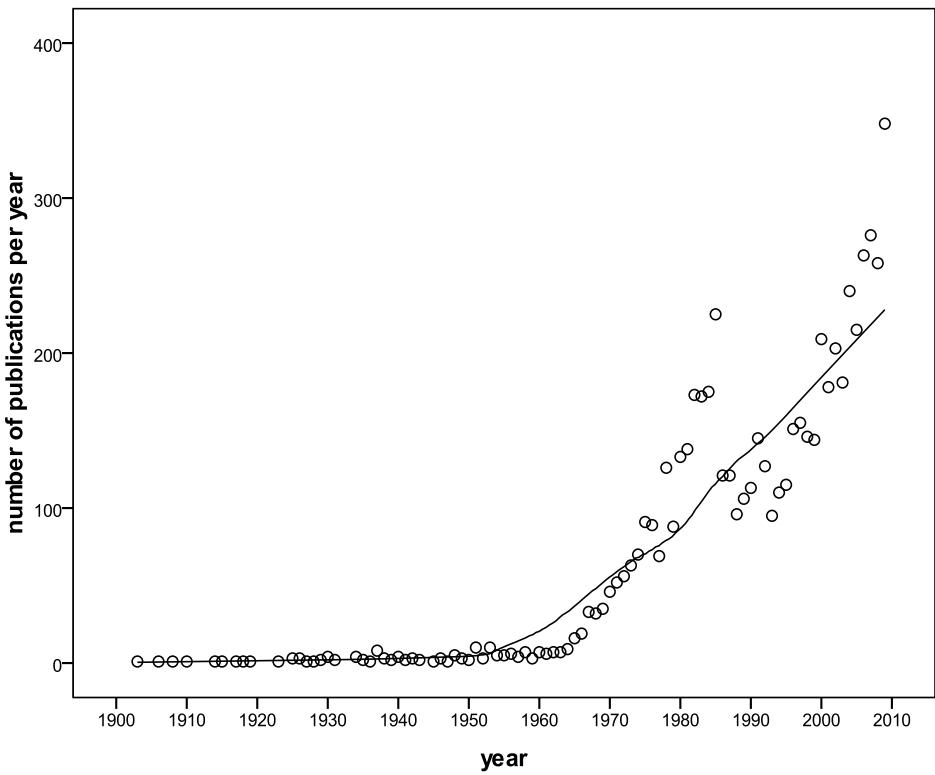
Organization for Economic Co-operation and Development (OECD) has carried out one indicator program and has only recently, in 2011, incorporated a subjective question in its Better Life Index. While not being able to predict the future, it seems highly plausible that subjective indicators such as the ones developed by the OECD will gain importance in the years to come, as indicators such as national GDP fail to capture what matters in post-materialistic societies⁵.

1.3.2 Growing output

The evolution of happiness research has resulted in a wide number of publications, findings, infrastructure, journals, etc., and the number of publications has increased dramatically in the last years as can be seen in Figure 1.2, in which the growth in numbers of publications on happiness-related topics over the last century is shown. The publications covering happiness defined in the sense of satisfaction with one's life as a whole only represent a small proportion of the total publications on the theme of happiness. To date (March 2015), there are 1.26 million publications containing the word 'happiness' in the title, abstract or text to be found on Google Scholar.

Figure 1.2: Yearly number of scientific publications on happiness in the sense of subjective enjoyment of one's life as a whole (Source: Bibliography of Happiness)

⁵ As most citizens in developed societies have reached high materialistic standards, aspirations have shifted to non-material values such as self-development, a phenomenon described by Inglehart (1971) as post-materialism.



The major source of data for my dissertation, and the sciences of happiness in general, is the World Database of Happiness, first set up in the 1980s by Veenhoven and updated and expanded continuously since that time.

World Database of Happiness

Most of the empirical findings on happiness in the sense of subjective enjoyment of one's life as a whole have been collected and placed in the World Database of Happiness (Veenhoven 2015). This database 'findings archive', to date (March 2015), consists of 30,000 'pages' in which a large number of varied research findings are described in a uniform way. The World Database of Happiness consists of quantitative data, mainly stemming from surveys of national populations, but also from a few experiments with particular groups such as students or medical staff, plus data from psychological follow-ups. The quantitative data of the WDH can be split into two kinds of research findings: *distributional findings* and *correlational findings*. The *distributional findings* provide information on

how happy people are in particular populations, using data such as means and standard deviations that can be calculated for countries, regions or age groups. The *correlational findings* provide data on things that have been found to go together with more or less happiness in populations, such as the statistically valid association of income with education.

The World Database of Happiness is built on a bibliography of happiness that covers as many research publications as could be found, in which happiness is defined as satisfaction with one's life as a whole.

Number of research findings

To date (March 2015), the World Database of Happiness contains some 25,000 research findings divided into the *distributional* and *correlational*. These findings are further classified into either a micro-level, i.e. defined groups or organizations, or a macro-level, i.e. nations. Crossing the two criteria produces 4 categories, which are shown in Table 1.4. While this may not be exhaustive, Table 1.4 classifies most of the existing correlational findings and the vast majority of distributional findings and provides an overview of the number of publications per category. In this dissertation, I mostly use findings on the macro-level that are taken from the bottom two categories; macro distributional and correlation findings.

Table 1.4: Findings on happiness

	Distributional findings	Correlational findings
Micro	1,908	12,684
Macro	9,103	1,099

1.4. Findings on happiness

1.4.1 Distributional findings

Distributional findings about how happy people are in a given population are typically summarized in a mean and standard deviation. Distributions can be observed at a *macro* or a *micro*-level⁶.

⁶ Meso level is not considered in this dissertation as the studies at the meso level of organizations is scarce as for now (Veenhoven 2015)

Micro-level

Within a general population, studies can be done to look at specific subpopulations, leading to distributional findings within an organization, a family or a given group of individuals. There is a mosaic of happiness, i.e. micro-level data that add up to a total score for a nation.

Macro-level

Distributional findings at the macro-level deal with the level of happiness in a (multi)national sample, as well as with the inequalities of happiness or other distributional characteristics across different countries.

1.4.2 Correlational findings

Correlational findings are findings about factors that are statistically associated with happiness and that are typically summarized in correlation coefficients. Happiness research makes the distinction between *intrinsic* and *extrinsic* factors. A brief summary of some of the current research literature in terms of internal and external determinants at the macro and micro-level is given below.

Micro-level

Intrinsic determinants of happiness are typically personality characteristics. For instance, when studying women in Germany looking for a job, Muffels and Kempermann (2011) found a significant positive contribution on happiness for extraversion and a negative influence for neuroticism. Studying a particular organization, Headay et al (1993) found a positive link between empathic feeling and happiness.

Extrinsic determinants of happiness are related to environmental characteristics. External determinants at the micro-level include the effects of urban settings, organizational environments, and local, socio-economic or cultural influences. The influences on happiness of characteristics of districts and cities have been studied, for example, by considering the impact of local safety and the quality of environment (Shields et al, 2009);

the quality of natural environment (Andrews and Whitey, 1976) and the impact of city size (Jiang et al, 2012). When studying organizations, Sirota (2005) underlines equality in treatment, equality in organizational success and a friendly ambience as three factors improving happiness. Ventegodt (1995) studied the happiness of middle managers in large and small companies, and found higher happiness among the former group. In longitudinal studies of managers at AT&T, including issues of career improvement, Bray and Howard (1983) found small positive contributions of career boosts on happiness.

Macro-level

Intrinsic determinants of happiness: among the different inner determinants of happiness, there are average psychological or personality traits at a national level. This represents *life-ability* as depicted in Table 1.1 (top right quadrant). This strand of research presents happiness first and foremost as an internal value, and what matters is not so much what happens in one's environment but how one perceives and values what happens. On top of the diverse philosophical and religious beliefs, psychologists have looked into the 5 big traits as defined by Costa and McCrae (1992); neuroticism, extraversion, openness, conscientiousness and agreeableness which have received considerable attention as noted by Francis (1999). These articles tend to show that happiness is often positively correlated to extraversion and negatively to neuroticism, as for instance in Lynn and Steel (2006) who showed these trends in a cross-national comparison.

Extrinsic determinants of happiness: external determinants depict the *livability* of an environment as in Table 1.1 (top left quadrant). This includes ecological, as well as societal, organizational and familial conditions. In particular, reasons for differences in average happiness across nations have been sought by looking at various factors, such as climate (e.g. Barrington-Leigh, 2008), economic development (e.g. Schyns (1998), Frey & Stutzer (2002), Layard (2005), Bjornskov (2007), Stanca (2010)) and institutional quality (e.g. Ott (2010)). The underlying hypothesis of most of these studies is that happiness is mostly derived from

external factors. Diener and Suh (2000) set a major landmark in the strand of research linking happiness and cultures. Their important findings are that people use different proxies when evaluating their life satisfaction, whether they come from individualistic nations where self-esteem is of major importance or if they come from collectivistic nations, where social equilibrium seems to be prime (Sirgy, 2012). Inglehart et al. (2008) define cultural areas from a macro-perspective. I used Inglehart's pioneering work to compare the geographic distribution of the cognitive/hedonic components of happiness as reported for this dissertation in Chapter 2. I summarize these findings in Table 1.5 below.

Table 1.5: Type of correlational findings per category

	Micro	Macro
Internal (Life ability)	Personality trait in a given group	Average personality traits
External (Livability)	Effect of urban setting Effect of an organizational environment Quality of the environment Impact of city size	Climate Economic development Government effectiveness Cultures at the national level

1.5. Happiness in France

The World Database of Happiness list of average happiness in 149 nations shows France ranking 48th, with an average 6.6 on a ten-scale between the extremes Togo (2.6) and Costa-Rica (8.5). If the ranking is to be interpreted with care, the relatively low position of France is not what one would expect it to be when looking at indicators such as economic prosperity, social security and inequalities.

There have been several studies on satisfaction in various domains in France, such as those of Buchanan and Cantril (1953), Fisher (1973) and Clément (1980), but research into the happiness of French people in general is much more recent and largely the work of economists. To Algan and

Cahuc (2007), this relatively low level of happiness might be due to high state intervention and the low trust that French people have of their institutions, justice, trade unions and people in general. Clark and Senik (2011) first worked on the relatively low levels of satisfaction in Germany and France. Later, Senik (2014) worked further on the French example, discussing ‘the French unhappiness puzzle’, i.e. the divergence between the objective quality of living conditions in France, material affluence and cultural sophistication, and the French people’s subjective satisfaction with life. Looking at the integration of migrants and French living abroad, Senik (2014) concludes that French unhappiness is largely embedded in *mentality*, which she describes as “the set of specific intrinsic attitudes, beliefs, ideals and ways of apprehending reality that individuals engrain during their infancy and teenage, via education and socialization instances such as school, firms and organizations” (p.3). Senik (2014) concludes that intrinsic factors, rather than extrinsic factors, are primarily responsible for the low level of happiness of the French people. Senik (2014) also discusses possible conflict between egalitarian and aristocratic values exacerbated by the highly elitist French school system (d’Iribarne, 1989). I will attempt to shed a new light on these findings in Part II.

Oswald (1997) studied France and Italy as cases of nations with low levels of happiness in comparison with countries with similar purchasing powers such as Belgium or Denmark. The economists Proto and Oswald (2014) state that the French, as well as Italians, British and Americans, are born miserable and that an explanation for this resides in the genetic makeup of the populations.

1.6. This dissertation

The initial question of this PhD dissertation was: *Why are the French not as happy as citizens in other apparently comparable nations?* My main goal was to try and gain an understanding of the factors behind this phenomenon; however, academic work is rarely linear. Academics start with an initial, driving question, and collect material along the way that challenges their view and forces them to enlarge, change or modify the initial scope of their research. In my case, I did not change my initial

question, and inquiring into the relative unhappiness of French people remained a driving force behind my work. However, analyzing the data caused me to add two additional questions to my main query. First, in the attempt to situate France on the world map on the hedonic and cognitive components, I found some geographical patterns. So a first additional question became: *Can we identify clusters of countries in terms of happiness and, if so, can we make sense of them?* Second, looking beyond the average values of national data, and analyzing the various distributions, I observed major differences in the shape of distributions and was forced to raise the issue of cultural influences on the surveys themselves. Hence, an additional question became: *Can we identify cultural variation in responses to happiness questions, and, if so, can we make sense of them?*

1.6.1 Subject and title

The title of this dissertation is '*Geography of happiness: a comparative exploration of the case of France*'. I use the word 'geography' in this title for several reasons. Since I largely focused on cross-national and cross-regional comparison, the first thing I did was look at the world as a geographer, studying happiness in nations and regions, trying to understand the dynamic of geographical areas through the lens of happiness. However, entering happiness research through these geographical borders had in some cases a limited impact and, to gain more understanding, I had to go beyond state borders and consider the social, economic, and cultural dimensions of nations. In doing so, I had to look at characteristics of societies, i.e. GDP, inequality, level of education, culture, etc., and characteristics of inhabitants, i.e. personalities as levels of happiness in countries' and cultures' populations float between these two interconnected layers.

1.6.2 Why France?

France is often portrayed in the popular imagination as a land where happiness is easily reachable. In some Germanic languages, for instance in German or in Dutch, to live an idle, carefree life is referred as 'to live like God in France'. When one combines this representation with social and economic data, such as economic development and social security, one would assume that its inhabitants are satisfied with the lives they lead. The

non-validity of this hypothesis strikes the eye of the researcher in happiness studies. French people actually report to be significantly less happy than people in many other nations comparable in terms of economic development as I will show in Chapter 4. This begs the question of whether the French are really less happy, and if so, why.

The first reason to focus on France is the surprisingly low level of happiness found in this country, as I will show in Part II. Yet, France is not the only possible case in this respect. Other interesting cases would be those of Germany, Italy or Japan, as the average level of happiness in these countries is also below what one would expect when looking at their economic development. I chose France because it is my home country, I speak the French language and I have a personal interest in better understanding what happiness is in France, how the meaning of happiness is conveyed, what people say about it and what the determinants of it are. Since French is my mother tongue, I have easy access to any document in the languages I needed to read on the topic. I wanted to understand the gap between the *expected* quality of life in France and the actual *experienced* quality of French life. Finally, in spite of the attempts to explain this gap, presented in section 1.5, the literature is very scarce and requires more work.

1.6.3 Approach

I explored determinants of happiness in nations to find reasons why French people report relatively low scores on life satisfaction scales. To do this, I identified comparable countries in order to limit the number of variables met along the way and to circumscribe the uncertainty inherent in certain comparisons; see research limitations (subsection 1.6.4 below).

In the frame of this dissertation, I used existing data, most of which is available in the World Database of Happiness (WDH). This data is mainly composed of levels of happiness in regions and nations, correlational and distributional findings. In general I looked at correlational findings at a macro-level, and in particular, I used both *objective* indicators such as purchasing power, economic freedom, social security, and *subjective* indicators such as the experiences of freedom or the perceptions of hierarchy. These indicators have almost exclusively been recorded since

the 1970s for most developed countries. The data used concern mainly the decade 2000-2010.

Most of this dissertation is based on an exploratory approach. I started analyzing data in a mostly inductive way, looking for correlations and patterns that could answer the main question through cross-sectional analysis, comparing across nations and regions. Such an approach has several advantages. Firstly, it allows the researcher to remain close to the data, and not be guided by pre-existing views. A second advantage is that random error is also typically smaller at an aggregated level than at an individual level, and thus correlations are more meaningful. Next, I considered possible flaws in the observed patterns. As a first step, I looked at the literature on determinants of happiness to find factors that could produce a spurious correlation and then controlled for these as much as possible. Once I was reasonably sure that a real correlation existed, I attempted to derive a sense of the causal mechanisms involved. For that purpose, I used path analysis in Chapter 4 and Chapter 5 to get a sense of causality. However, most of the analysis is based on zero order and first order correlations.

I divided the data into different groups: 1) all nations 2) developed nations and 3) Latin European nations. Locating France in each of these groups allows particular aspects to be highlighted. I had to situate France on a happiness map, first from the perspective of general life satisfaction, then from a components of happiness perspective (Chapter 2). Then, to remove as much as possible the influence from factors linked to societal development, I looked more specifically at developed nations. These include about 50 nations as defined in Chapter 4. I then had to find smaller groups to make comparisons within populations and obtain a more detailed understanding of the similarities and differences shown by the data. This was not an easy task *a priori*, as France includes heterogeneous cultures, something that was perhaps most clearly demonstrated when I looked at family types in France (Chapter 7). France, with a Latin-Mediterranean part in the South, a Germanic part in the East and an Anglo-Saxon part in the West seems difficult to classify: to which cultural group should France be linked? The closest countries to France that I found in terms of happiness, of life satisfaction and in terms of components of happiness, were Italy,

which is Latin-Mediterranean, Germany, which is Germanic and the United Kingdom, which is Anglo-Saxon. It was not easy to assign France to a particular cultural area. It was tempting to place it in the Latin area with Italy and Spain, but it can equally be argued that it should be placed in a group of large European nations alongside Italy, the United Kingdom and Germany.

1.6.4 Limitations

Limits of the approach

The exploratory approach followed in this dissertation has certain drawbacks as well.

No random sampling, hence limited generalization

The available data on happiness in nations covers most of the world's population, but do not provide a random sample of nations. Consequently the patterns observed cannot be generalized to all nations and significance tests on this level make little sense. Still almost all developed nations are represented, so that my findings for these countries can be assumed to be reliable.

Limited number of nations and observations per country

Working at a country level means, by definition, working with a limited number of points, which reduces the possibilities of controlling for certain variables or using thorough statistical methods, such as multivariate or multilevel analyses. I computed first-order partial correlations and conducted path analyses in Chapter 4 and Chapter 5. The reader has to bear in mind that this allows only a limited view on the unique effects of the factors considered, which is already difficult due to the entanglement of societal variables at hand.

Reverse causality

The statistical associations reported in this thesis are typically interpreted as resulting from an effect on happiness, such as in the case of the economic development of nations, where the correlation between GDP and average

happiness is usually seen to mean that wealth boosts happiness. But the pre-supposed causality can also work the other way around. For example, happier populations might, for example, create more wealth than unhappier populations. The plausibility of such reverse causation will differ across topics. In the case of climate, no reverse effect is likely to be involved. In other cases, however, the possibility of such effects is at least plausible.

Reverse causality is not unlikely in the relationship between freedom and happiness, which is central in this dissertation. Lyubomirsky et al. (2005) reviewed cross-sectional, longitudinal and experimental studies which show that subjective well-being and positive affects fosters success as well as pro-social behaviors such as social activities or group cooperativeness. These behaviors might lead to more consensus, less frictions and possibly more freedom in various forms. On the other hand, unhappy people could engage in more anti-social behavior, which could lead to restrictions of freedom for individuals, such as choosing one's sexuality, engaging in various forms of commercial exchanges or expressing one's opinion. I was unable to assess the extent to which such effects of happiness on freedom are involved. So, this difficult question remains open for the time being (see section 8.2).

Spuriousness

Based on the correlations I found between happiness and various factors, i.e. hierarchy, participatory teaching, various types of freedom, in this work I propose an interpretative framework to account for levels of happiness in France. When a statistical correlation or another link between two factors results from a third, hidden factor, we face the risk of spurious correlations. Once the effects of this third factor are removed, i.e. controlled, there may be no association between the two factors left. Raw correlations are important, but it is necessary to be aware of possible spurious relationships and to try to identify them. I did my best to identify possible 'hidden' or alternative effects through the literature and through educated guesses. I systematically looked for possible spurious correlations in national data using indicators such as GDP and HDI to control for these; however, it is always possible that I missed a third, hidden factor that would change the interpretation of the findings.

In addition to limitations of my theoretical imagination, there are limitations due to the availability of data. I could only control for factors on which data was available for a sufficient numbers of countries.

1.6.5 Outline

The goal of this dissertation is to find answers to the main question of the relative French unhappiness, and then to the two additional questions, i.e. on the characterization of happiness clusters on one hand and on the characterization of cultural response effects on the other. I have divided the dissertation into two main parts. The first part is entitled *cross national patterns of happiness and their measurement*. In this part I aim to characterize both the clusters and the cultural response effects in order to give a broad picture of the happiness clusters before narrowing down on the case of France. The second part is entitled *exploring the relative unhappiness of French people*; this is the main part of the dissertation.

Comparisons of happiness across nations reveal interesting disparities between nations and give intriguing results. The usual rankings are commonly based on life satisfaction within a nation or group, and these data reveal a much more complex view when a bi-dimensional view of life satisfaction is adopted, i.e. when happiness is viewed from both hedonic and cognitive perspectives. In Chapter 2, I look at the repartition of the hedonic and cognitive components throughout 133 nations and identify 6 clusters: Asia, Islamic countries, Africa, ex-communist countries, Latin America and developed nations. I observed large differences within the cluster ‘developed nations’. Some countries were noticeably low on both axes on the chart, among them Germany, Japan, Italy and France (Brûlé & Veenhoven 2015a). I focused on the latter case, as France is often associated with a high quality of life in collective narratives, and raise the following question: **How can we explain the relatively low level of life satisfaction in France?**

Using the clusters identified in Chapter 2, I look at distributions in Chapter 3, finding that people in different countries respond differently to happiness questions. As a consequence the distribution of responses to happiness questions varies across countries. I observed what resembles a cultural measurement effect. It is characterized by having more ‘10’

responses than '9' responses: an effect I call the ten-excess phenomenon. It is typically present in Latin America and the Middle-East (Brulé and Veenhoven 2015b). This finding opens up an interesting new perspective for future research since it concerns the issue of cross-national cultural variations as well as methodological questions about measurement bias and the validity of international comparisons on the basis of survey data.

In Chapter 4, I explore happiness through freedom, both in its objective and in its subjective form. I do so by comparing France and Finland, countries that have the same GDP and comparable objective conditions, but have a one-and-half point of difference in life satisfaction on a scale of 0-10. I found a large difference in subjective freedom between the countries. Comparing life satisfaction and subjective freedom using the three dimensions of freedom, i.e. social, psychological, potential, as defined by Bay (1962), I observed that social freedom and potential freedom were somewhat similar, but observed large differences in psychological freedom between France and Finland. I constructed a model and observed a causal relationship between psychological freedom, perceived freedom and happiness (Brulé and Veenhoven 2014a).

In Chapter 5, I demonstrate and discuss, looking at schools, that *participatory teaching* has a large influence on adults' happiness, but not on teenagers'. Using Bay's taxonomy, as in Chapter 4, I observed that psychological freedom is the key to explain this phenomenon. Participatory teaching develops self-development during one's schooling years. Once adult, this psychological freedom is revealed as useful as a decision-making capacity in terms of happiness (Brulé and Veenhoven 2014b).

In Chapter 6, I present an observation of the influence of *power distance*, which I call *hierarchy*, on the happiness of people. Looking at developed nations, we see a very strong direct effect of hierarchy on happiness. This is particularly true when comparing the Southern countries of Europe and the Northern countries of Europe. It is not embedded in the values of the countries, as all the countries seem to value hierarchy somewhat similarly. It is a difference rather in practice; the difference between 'as it is' and 'as it should be' seems to be larger in the Southern European nations. I explain this using a macro-sociological approach (Brulé and Veenhoven 2012).

In Chapter 7, I look at the links between freedom and happiness in the context of the family unit. Comparing the dominant family type and average happiness across the regions of Europe, I observed a link between intragenerational freedom and happiness, and no link between intergenerational freedom and happiness; the more egalitarian the dominant family type is, the unhappier the inhabitants of a region are (Brulé and Veenhoven 2014c). I explore this apparent contradiction in the conclusion.

Finally, in Chapter 8, I summarize the main findings and talk about future challenges for happiness research, including my own research.

Chapters 2 to 7 are based on papers that are either published (Chapters 2, 4, 5, 6 and 7) or in the process of being published (Chapter 3). As compared to the published versions I have kept the paragraphs on definitions, data and measurements in the chapters to a minimum, concentrating this information in the introductory chapter, in order to avoid redundancy.

PART I:

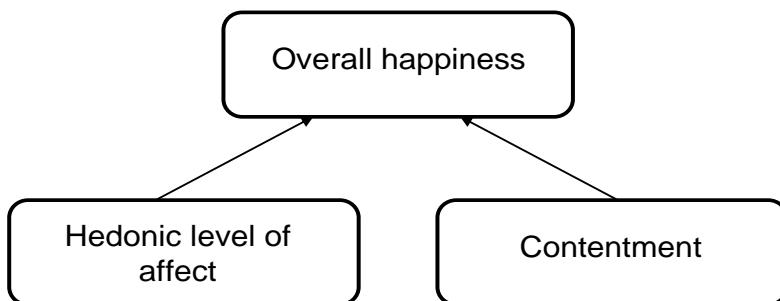
CROSS-NATIONAL PATTERN OF HAPPINESS

Chapter 2: Geography of happiness⁷

2.1. Introduction

Much of the research described in the previous chapter is focused on happiness in the sense of overall life-satisfaction. This overall appraisal of life is seen to draw on two sources of information that are called ‘components’ (Veenhoven 2009): 1) how well one feels most of the time and 2) to what extend one’s wants are being met (Figure 2.1). These components of happiness can be measured separately and therefore it is also possible to assess these in nations. Though possible in principle, such measures were not available until recently. Yet since the start of the Gallup World Poll in 2005 we got data on both components of happiness for most nations of the world. This makes it possible to explore variations on components of happiness across nations.

Figure 2.1: Overall happiness, i.e. life-satisfaction and its ‘components’



Hedonic level of affect.

Like other animals, humans can feel good or bad, but unlike other animals, we can reflect on that experience, assess how well we feel most of the time

⁷ This chapter is published as Brulé G. and Veenhoven R. (2015) Geography of happiness: components of happiness in 133 Nations. *International Journal of Happiness and Development*. Vol.2, n°2.

and communicate this to others. This is the feeling-based part of happiness. Veenhoven assumes that affective experience draws on gratification of innate needs and infers on this basis that the determinants of hedonic happiness are universal (Veenhoven, 2010).

Contentment

Unlike other animals, humans can also appraise their life cognitively and compare their life as it is with how they want it to be. Wants are typically guided by common standards of the good life and in that sense contentment is likely to be more culturally variable than affect level. This cognitive appraisal of life assumes intellectual capacity and for this reason this concept hardly applies to people who lack this capacity, such as young children, for whom it is harder to oversee their life as a whole and thus to have clear standards in mind.

Literature on components of happiness in nations

In that context a first question is which of these two components weights most in the overall evaluation of life and whether the weights differ across cultures. That question has been considered by Rojas and Veenhoven (2012). In the same vein, Clark and Senik (2011) compared the link between life satisfaction and cognitive, hedonic and eudemonic components in 21 European countries and found that these components do not correlate well for all nations.

Another question is to what extent these sub-appraisals of life go together and whether correlations differ across cultures. As yet few studies have compared ‘components’ of happiness across nations⁸. Can people in a country be contented cognitively, while feeling miserable affectively? Some critics of modernity (Scitovsky (1976), Lane (2000)) see the high rates of depression in ‘happy’ nations as a proof. Likewise, could it be that people in a country are discontented with what they have, but still feel fine affectively? In that line, a common narrative is that people in poor nations are ‘poor but happy’, a Western stereotype well depicted by Lévi-Strauss

⁸ This is reflected in the above-mentioned collection ‘Happiness in Nations’ of the World Database of Happiness. Among the findings on average happiness in nations, only 8 % are based on measures of affect level and 12% on measures of contentment

(1955). These guesses link up with a wider question of the effect of societal development on happiness. Life-satisfaction is typically higher in developed nations, but is that because modern people feel better or because of a smaller gap between what they want and what they have? As we will see in more detail below that latter question is critical in the moral evaluation of societal development.

Measures of hedonic level of affect

There are several ways to ask people to assess how well they feel generally. One way is to invite to a general estimate, for instance with the question: 'How often have you felt happy during the past 6 weeks?' Questions of this kind are coded A-TH (Affect: Time Happy), in the collection of happiness measures.

A second method used to assess happiness is multi-moment assessment and this involves a series of repeated questions such as: 'How happy do you feel right now?' Measures of this kind are coded A-ARE, (Affect: Average Repeated Estimates), in the collection 'Measures of Happiness'.

A third approach to assessing hedonic level is to ask first about various specific affects experienced in the recent past, both positive affects such as 'joy' and negative affects such as 'anger'. Next an 'affect balance score' is computed by subtracting reported negative affects from reported positive affects. Measures of this kind are coded A-AB (Affect Balance) in the collection Measures of Happiness. A common example is the PANAS scale (Watson et al., 1988). A variant of this latter method was used in this study.

Measures of contentment

Contentment can be measured using a global question, such as: 'How successful are you in getting what you want from life?' (code C-RW, Contentment: Realize Wants).

A more sophisticated method to assess happiness involves three steps: First respondents are asked to list the things they want from life. Next they rate how successful they are in reaching each of these things. Finally the investigator computes the respondents' average success in

meeting their wants, eventually weighed by importance. Measures of this kind are coded C-ASG (Contentment: Average Success in Goals) in the collection 'Measures of Happiness'.

A variant of the above approach which I have briefly described in the previous chapter as self-defined scale, does not ask respondents for personal 'wants', but rather refers to notions of the good life. The first step is to ask people what they think of as the 'best possible life' and next what constitutes the 'worst possible life'. After priming the respondents with these open questions, they are presented with a ladder and asked to imagine that the top of the ladder represents the best possible life that they just had described and that the bottom of the ladder represents their worst concept of the worst possible life. As a last step respondents are asked to rate their present life on the ladder, in some variants of this approach this is done after respondents have been asked to rate their life 5 years ago and how they envisage their life 5 years from now. This method is known as Cantril's (1965) 'ladder of life scale' and is coded C-BW (Contentment: Best Worst) in the collection 'Measures of Happiness'. In this study I used a simplified version of the method that involved only the last step.

2.2. Data

The Gallup Organization has been involved in cross-national surveys on happiness since the 1970s (Gallup, 1976). In 2005 Gallup started its 'World Poll', which involves yearly surveys in almost of all the countries of the world. Data are now available for 155 nations for the years 2006 to 2009 (Gallup, 2009). In each country, about 1,000 people were interviewed. In 22 countries of the 155⁹, data on at least one of the components is not available, which is why I draw on 133 countries.

In some countries, surveys were held in all the study years (2006, 2007, 2008, 2009) and in some countries data was collected only once in this period. When data on more than one year were available for a country,

⁹ Suriname, Western Sahara, Guinea Bissau, Gabon, Lesotho, Swaziland, Somalia, Eritrea, Oman, Bhutan, North Korea, Papua new guinea, New Caledonia, Vanuatu, Fiji, Salomon Islands, Kiribati, Greenland, Hong Kong, Yemen, Guinea, South Georgia and the South Sandwich Islands.

I took the average¹⁰. One might wonder about the stability over time of the results. The data on contentment and hedonic level of affect does not allow one to assess stability over time, but we know that overall happiness is stable over time within countries¹¹; thus, it is very likely that its subcomponents, contentment and hedonic level of affect also are stable over time.

In 2006 the questionnaire of The Gallup World Poll contained questions on all three happiness variants: a question on overall life-satisfaction, a question on contentment and a series of questions on affect. The results of the Gallup World Poll are not freely available, but some of them can be accessed temporarily on the Gallup World View website <https://worldview.gallup.com/>. Among these free data are the average responses in countries to the questions about affect and contentment. I kept track of these reports and entered the findings in our data file ‘States of Nations’ (Veenhoven, 2014f).

Questions on hedonic level of affect

The Gallup World Poll contains 14 questions about how the respondent felt yesterday. The first eight are introduced with the following lead question:

‘Did you experience the following feelings during a lot of the day yesterday? How about: (a) enjoyment, (b) physical pain, (c) worry, (d) sadness, (e) stress, (f) anger, (g) depression, (h) love.’ Respondents were also asked: *‘Now please think about yesterday, from the morning until the end of the day. Think of where you were, what you were doing and how you felt: (i) Did you feel well rested yesterday? (j) Did you smile or laugh a lot yesterday? (k) Did you learn or do something interesting yesterday? (l) Would you like to have more days just like yesterday? (m) Were you proud of something you did yesterday? (n) Were you treated with respect all day yesterday?’*

¹⁰ The years and the size of the samples can be accessed at:

http://www.worlddatabaseofhappiness.eur.nl/hap_nat/desc_qt.php?qt=92

¹¹ Trend report for Belgium, Denmark, France, Germany, Greece, Italy, Ireland, Japan, Luxemburg, the Netherlands, Spain, UK, USA are available at:

http://www.worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/TrendReport_AverageHappiness.pdf

Respondents can answer either ‘yes’ or ‘no’ to each of these questions. On its World View website Gallup reports the percentage ‘yes’ responses to each of these questions in the participating countries. It is on this basis that I computed the average percentage of positive affects reported in each of the countries: $(a+h+i+j+k+l+m+n)/8$. Likewise, I computed the average percentage of negative affects reported: $(b+c+d+e+f+g)/6$. As a last step, I subtracted the latter percentage from the former. The resulting affect balance score denotes the degree to which positive affects outweigh negative affects.

It appears that the sum is positive in all countries, which means the percentage of positive affects reported tends to be greater than the percentage of negative affects. The percentages range from 11 (Ethiopia) to 66 (Iceland). This variable is entered in the data file ‘States of Nations’¹².

The method above is not suited for measuring the hedonic level of affect of individuals, since yesterday’s affect does not always correspond with the typical affect of the individual. Yet this method can be used to measure hedonic level in aggregates, such as nations, since individual variations balance out in big samples.

Questions on contentment

The single question on contentment in the Gallup World Poll reads as follows: ‘*Here is a picture of a ladder, suppose that the top represents the best possible life and the bottom the worst possible life. Where on this ladder would you place your current life?*’ (0 worst possible, 10 best possible). Average responses differ widely across nations, the highest average is observed in Denmark (8.0) and the lowest in Iraq (3.2). This data is also stored in the data file ‘States of Nations’¹³.

2.3. Results

I plotted average affect against average contentment in nations and inspected the extent to which these components of happiness converged or diverged and if I could find any pattern in this mapping.

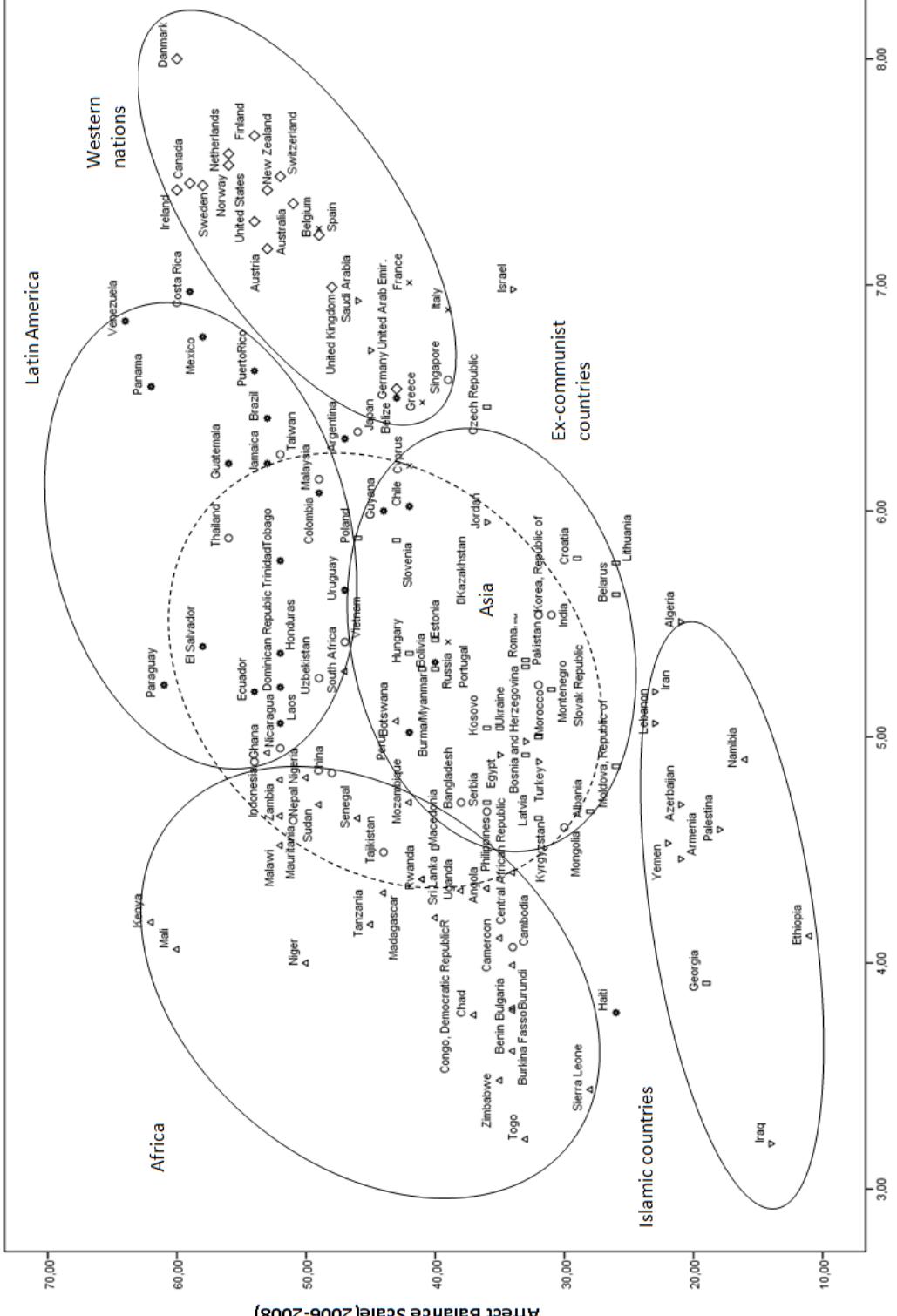
¹² Variable name: HappinessYesterdayABS_2006.08.

¹³ Variable name: HappinessBW11_2006.09

Correlation between average affect and contentment in nations

Not surprisingly, scores on the two components of happiness tend to go together, in countries where affect is high, contentment also tends to be high; $r = +.48$. Yet the correlation is far from being perfect. This is in line with the findings of Rojas and Veenhoven (2013). While these authors looked for the contribution to life satisfaction of each of the components, I looked at the way these two components of happiness go together. I looked for similarities in co-variance and recognized clusters of countries in specific geographical areas and sharing a common culture. These clusters are circled in Figure 2.2.

Figure 2.2: Configurations of average affect balance by average contentment in 133 countries in the world 2006-2009



Geographical areas

Six geographical areas stand out in Figure 2.2: one, Western nations, composed of the wealthiest countries; two, former communist countries; three, Latin America; four, Africa; five, Asia and six, Islamic countries. Table 2.1 presents variance within the different clusters as well as intercluster variance. Intercluster variance is superior to intracluster variance and indicates that this set of clusters is relevant.

Table 2.1: Comparison of variance between and within clusters

Intracluster variance	+.16
Black Africa	+.20
Asia	+.22
Latin America	+.20
Western nations	+.12
Islamic	+.13
Ex-communist	+.11
Intercluster variance	+.33

These clusters cover most of the countries quite well, however, a few countries fall out of their geographical zone. Noticeable outliers are Germany, Spain, Portugal, Chile, Bolivia, Peru and Bulgaria.

Correlation within cultural clusters

We have seen that the general correlation is +.48, but there are large difference in homogeneity of the above-mentioned zones. The correlation coefficients of the different zones are presented in Table 2.2 below.

Table 2.2: Correlation between average hedonic level of affect and contentment in nations by cultural zone

Cultural zone	N	R
Black Africa	29	+.43
Asia	25	+.23
Latin America	22	+.74
Western	20	+.70
Islamic	15	+.45
Ex-communist	20	+.38

Inter-zone correlations between the two components of happiness range from +.23 (Asia) to +.81 (Latin America). The correlation for Asia (+.23) is lower than the global correlation (+.48), which is not surprising: this area presents the highest heterogeneity among the different zones. The correlations for former communist countries and Africa are more in line with the global correlation (+.38 and +.43). Relatively high correlations appear in the Western countries, Islamic countries and Latin America (respectively +.70, +.78 and +.81).

Concordance in combinations of affect and contentment in nations

In order to explore patterns of convergence and divergence, I divided the scores on both components of happiness into the tiers ‘low’, ‘medium’ and ‘high’. This resulted in nine possible combinations, three of which were concordant, e.g. low affect – low contentment, and six of which were discordant, e.g. low affect – medium contentment.

Concordant combinations

Areas where affect and contentment go hand in hand are presented in Figure 2.3. The concordant combination ‘low-low’ was typical of Islamic countries. The concordant combination ‘medium-medium’ gathered most of the Asian countries, whereas the ‘high-high’ combination was typical of rich countries, mostly western nations.

Figure 2.3: Concordant combinations

		Hedonic level		
		<i>Low</i>	<i>Medium</i>	<i>High</i>
Contentment	<i>High</i>			Western nations
	<i>Medium</i>		Asia	
	<i>Low</i>	Islamic countries		

Discordant combinations

Area's where affect and contentment diverge are presented in Figure 2.4. The combination of low affect and medium contentment appeared to be typical for the former communist nations. The combination of medium affect and low contentment appeared to be characteristic of African countries. The combination of high affect and medium contentment was typical for Latin America. The combination of high affect and low contentment was seen in a few African countries, i.e. Kenya, Mali and Niger. There were no countries with low affect and high contentment.

Figure 2.4: Discordant combinations

		Hedonic level		
		Low	Medium	High
Contentment	High			
	Medium	Former communist countries		Latin America
	Low		Africa	

2.4. Discussion

What does this empirical exploration tell us about happiness? Below I will first interpret the patterns in the light of existing civilizations matrices. Next I will look at these societies from the perspective of needs and wants.

2.4.1. Why geography makes sense?

Our approach is empirically-driven and most geographical clusters were trivial. The question is why does geography matter so much? Why would geographical clustering make any sense at all? By definition, geographical areas present some continuity and some resemblance, at least more so than with any random remote country, for instance with link to the climate. Because all borders have been to various degrees porous at some point in history, they also present some continuity; through these pores, different materials (economic, genetic and cultural) have been exchanged. This means that neighbouring societies are likely to share some resemblance in societal development and cultural environment, more so than with any other country. This is also true for countries with a common culture and a comparable level of development but no geographic proximity (e.g. United

Kingdom and Australia). In general, countries from a common geographical area also present as well some heterogeneity, but as seen in the previous section, not as much as with other areas in average. In particular, societal development and cultures within geographical areas are much closer than they are between geographical areas. Thus, gratification of wants and needs and the way inhabitants answer to those questions are likely to converge to some extent. Below I discuss first, the cultural homogeneity looking at existing classifications and second, I look at societal development using Veenhoven's theory of gratification of needs and wants.

2.4.2. Link with cultural differences

I identified 6 geographical clusters. Is there a link with clusters as identified in comparative studies of culture? Below I consider three of these.

Inglehart's value zones

Inglehart(2000) defines 8 cultures through the study of clusters of values: Africa, South Asia, Confucian, English speaking, Protestant Europe, Catholic Europe, Latin America and Ex-Communist. Probably because of lack of data, an obvious miss is Islamic culture; this would make nine cultures.

At first, we can see that the clusters I defined are quite in line with Inglehart's classification. Africa, Latin America and ex-communist are the same clusters as the ones that stand out on Figure 2.2. Then, there are slight differences between classifications.

The cluster 'Western nations' I defined correspond to Inglehart's 'Catholic Europe', 'Protestant Europe' and 'Anglo-Saxon countries' clusters combined. I reckon they are large differences inside the cluster as I defined it and there would be room to define sub-clusters, although they would be different from Inglehart's classification. Whereas I would define it as the South part of Europe (geographically), Inglehart mainly introduces religion. A good example of difference is Austria; although this is a Catholic country, it clearly does not fit in the Latin Europe sub-group as the hedonic component is higher than this group and is, in my classification clearly in the Protestant group, which also includes Germanic countries. Next, whereas Inglehart makes a distinction between Protestant Europe and

English speaking, I reckon that the three sub-groups, ‘Protestant Europe’, ‘Anglo-Saxon countries’ and ‘Germanic countries’ form a homogeneous group, with high scores on both hedonic and cognitive components.

Finally, I define a wide cluster ‘Asia’ whereas Inglehart’s separates ‘Confucian countries’ from ‘South Asia’. When looking at the map of happiness, it is impossible to dissociate Confucian countries from south Asian ones as the overlap is too important to dissociate them. This is partly due to the high heterogeneity of the two groups and particularly the South Asian one, who gathers countries as different as Vietnam, Armenia, Turkey, India or Israel. Furthermore, it seems wise to split the category South Asia in two parts, one to be added to the Asian group and one to the Islamic group.

Nadoulek’s religious civilizations

Nadoulek defines 7 civilizations largely based on religion: Catholic, Protestant, Hindu, African, Islamic, Asian and Orthodox. Inglehart’s and Nadoulek’s matrices present some similarities in the structure and some noticeable differences. Nadoulek places together Latin America with Latin Europe under ‘Catholic’ whereas Inglehart has them separately. Both authors divide Asia in two parts, but the Hindu part of Nadoulek is restricted to two nations (India, Sri Lanka) which are included in the South Asian part of Inglehart together with many countries.

The clusters I identified present some strong similarities with Nadoulek’s classification. The groups African and Islamic are identical. Nadoulek’s Orthodox group is very close from the ex-communist group as I defined it except a few differences; for instance Greece is in the Western nation group and not in the ex-communist group in my classification, as its happiness configuration is closer to Western nations than to the ex-communist one.

A major difference between Nadoulek’s classification and the one I defined is the Latin civilization; whereas Nadoulek joins the group of Latin America and Latin Europe under Catholic culture, their happiness is clearly different. In terms of happiness, Latin America and Latin Europe, which is part of the cluster ‘Western nations’ are completely separated, the former combining high affect level and medium contentment, the other one

presenting the reverse pattern. Finally, it integrates as well the Hindu culture as a category on its own; with only two countries (India, Sri Lanka), it is complicated to see if this makes a group on its own. However, it does fit very well in the Asian group. I do not deny it to be a cultural group on its own, but on the basis of the two components of happiness, it is not justifiable to isolate it.

Huntington's civilizations

Huntington defines 8 types of civilizations: Western, Orthodox, Islamic, Latin American, Sinic, Hindu, Buddhist and Japanese (and may be African).

The classification presents some similarities with the one I defined; Islamic and Latin American are strictly identical, Orthodox, as for Nadoulek, is almost identical to the ex-communist group in my classification.

Next, there are some differences. That the African civilization, the oldest civilization, representing 650 million people might not be a civilization according to the author can interrogate us on the validity of his set of civilizations. I do see a clear Black African group consisting of low contentment and medium to high hedonic level of affect. Furthermore, Huntington defines 4 Asian civilizations: Sinic, Hindu, Buddhist and Japanese. As for Inglehart, I am not able to disentangle different groups within the Asian clusters for different reasons. The overlap between the Sinic and the Buddhist is too wide for me to separate them. As for the Japanese and the Hindu ones, they consist of respectively one and two countries and those sub-clusters perfectly fit with the wider Asian cluster. Therefore, leave them together does not seem to be a bad idea.

All in all, the clusters I defined show a common ground with each of the three classifications of cultures discussed above. This suggests a simple, although far-reaching implication, that each civilization has a distinct pattern of happiness.

2.4.3. Interpretation through the lens of needs and wants

According to Veenhoven (2009) hedonic level of affect draws on the gratification of *needs*, while contentment is a matter of perceived realization of *wants*.

In his theory ‘needs’ are vital requirements for survival, such as eating, bonding and exercise. Nature seems to have safeguarded the gratification of these needs with affective signals such as hunger, love and zest. These separate signals generalize in the hedonic tone of mood and consequently good mood seems to denote that most needs are sufficiently met (Veenhoven, 2009). As such, good mood tells us that we are doing well.

In this theory ‘needs’ should not be equated with ‘wants’. Needs are inborn and universal, while ‘wants’ are acquired and can vary across cultures. One may want things one does not need, or needs things one does not want. Such divergence occurs at the individual level, e.g. a priest who wants to forsake his need for sex, and at the societal level. A common criticism of western society is that it creates wants that do not fit needs. In that line Scitovsky argues that the products we buy do not satisfy (Scitovsky, 1976). Likewise Lane argues that we want wealth, while we need companionship (Lane, 2000).

Explanation of convergence

We have seen above that average affect and contentment go closely together in half of the nations (Figure 2.3) Seen in the context of this theory this means that we typically want what we need. If need gratification falls short in a country, people feel bad and are also discontented and if needs are well met in the country, scores on both components of happiness are high.

Explanations of divergences

Yet we have also seen several discordant combinations (Figure 2.4). If needs gratification and wants gratification tend to go together, how can we explain the divergent cases?

Let us first consider the case of the former communist nations, where the level of affect is low, and contentment is medium. The low level of affect indicates deficient need gratification. This can for instance be an

echo of the communist past, which seems to have worked out negatively on intimate networks and to have reduced the capacity of individual to take control of their own lives. This may have thwarted gratification of the needs for companionship, self-respect or self-actualization. Yet much has changed for the better in these countries and for that reason one can imagine that people do not rate their life as ‘worst possible’, but rather tick the middle of the contentment scale.

In the same vein, how can we explain the situation of the countries with high contentment and medium affect, such as France, Israel, Italy and Germany? It is well possible that these societies with a high level of development fail to meet human needs such as self-esteem or self-realization. Possible explanation for this would be the teaching practices or the high power distance that is present in most of these countries which is likely to thwart the need for ‘self-respect’. This explanation fits my findings on the negative effect of vertical teaching practices (Chapter 5) and high power distance ((Chapter 6).

How about Africa, where affect is at the medium level, but contentment low? The medium level of affect indicates that need gratification might not too bad in these countries, possibly because of seasoned survival strategies embedded in these cultures. Why then are people not equally contented? Probably because they are aware that life could be better and in particular that their material standard of living could be higher. The low contentment of Africans could then be a matter of ‘relative deprivation’. Possibly contentment would have been scored at the medium level if Africans were unaware of living conditions elsewhere.

Following this line, the pattern of high affect and medium contentment in Latin America would mean that human needs are fairly well met in Latin American societies, though life falls short on notions of how it could be. It is not easy to grasp why Latin American societies do so well with respect to need-gratification. It has been suggested that the need for social contact is well met in Latin culture, but it is difficult to prove that this really makes a difference. It is easier to understand why contentment is only at the medium level in Latin American countries, the high income inequality found in these countries is likely to foster a sense of relative

deprivation in most individuals and across borders the salient example of the United States of America is likely to do the same.

Explanation for absence of low affect-high contentment combination

As we have seen, the combination of high contentment-low affect balance was not found. In the context of this theory that can be interpreted as preponderance of needs over wants. When minimum gratification of needs is at risk, we might feel so bad affectively that we cannot comfort ourselves with cognitive accommodation.

Application to differences in components across societal development

Earlier research has shown that overall life-satisfaction tends to be higher in developed nations than in developing ones. This difference appears in strong correlations with various indicators of societal development, such as wealth e.g. Schyns (1998), Layard (2005), Bjornskov (2007), Stanca (2010), democracy e.g. Frey & Stutzer (2002), institutional quality e.g. Ott (2010) and value pattern (e.g. Inglehart (2000)). In this data set the correlation between overall life-satisfaction and income per capita is +.61.

Let's now consider the correlation with each of the components of happiness: the correlation between income per capita and average affect level is much lower: $r = +.20$. Reversely the correlation with contentment is higher: $r = +.79$, as highlighted by Rojas and Veenhoven (2013). How to make sense of these findings?

At first sight this could mean that the effect of societal development on happiness is a matter of comparison in the first place and that modern society does not do much better in meeting human needs. This interpretation would fit the earlier mentioned qualms about the livability of modern society and the related claim that the higher 'happiness' in modern nations is mere superficial contentment that masks an epidemic of depression. Yet that explanation does not fit the fact that average affect is still higher in the developed nations than in developing ones. This explanation does not fit either with the observation that affect and contentment are highly correlated in developed nations, since this explanation would rather predict a non-correlation or even a negative one.

Rather than denouncing the happiness in developed nations, one could read these data as showing that need-gratification is not so bad in developing nations, though still not so good as it is in developed nations. In this context the discordant combination of affect and contentment in African countries makes sense. People do not feel too bad, so their basic needs are reasonably met. Still they know that life could be better and for that reason they do not report contented. Africans score indeed low on contentment and the correlation between affect and contentment is relatively low in nations of low development.

2.4.4. What strategy for the delineation of clusters?

The two criteria that are important to delineate proper clusters are: one, maximization of intercluster variance and two, minimization of intracluster variance. Most of the time, these two criteria are contradictory, e.g. when increasing the number of cluster, the intracluster variance increases whereas the intercluster variance decreases. As for now I delineated large clusters, maximizing intercluster variance. The large clusters could be broken down into sub-clusters and that would be a nice work to do in the future. Already, based on my observation, I see potential sub clusters in the western nations one; for instance, we can see ‘Latin Europe’, ‘English speaking’ and ‘Protestant Europe’. The first one differs from the rest with a middle hedonic level of affect whereas the rest is characterized by a high level. Yet one have to be consistent in terms of aggregation and in this chapter, my interest was into defining the largest clusters and to maximize intercluster variance. Future work could consist in dividing these large clusters into sub-clusters.

2.5. Conclusions

Life can be appraised on the basis of two components: how well one feels and to what extent one perceives oneself to get what one wants from life. Ratings on these ‘components of happiness’ seem to differ quite a lot across nations. As one might expect, affect and contentment tend to go hand in hand in most cases; yet there is also a cluster of nations in which people report fairly contented but feel bad, i.e. former communist countries, and several clusters of nations where people report to feel fairly good but

discontented, i.e. Latin America. These differences across geographical clusters are likely to correspond to some extent to variations in societal characteristics as well as in cultural differences.

Chapter 3: Cultural variation and measurement bias in survey responses: presentation of the 10-excess¹⁴

3.1 Introduction

3.1.1 Research biases in happiness studies

Survey questions

Survey research involves interrogation, typically using ‘closed’ questions. Respondents are presented with a standard question and answer by choosing one of a few response options, such as ‘very happy’, ‘pretty happy’ or ‘not too happy’. Questions are presented in personal interviews, in questionnaires or via internet. This method of collecting information is vulnerable to various biases. Below I mention some of these and discuss how these may affect the measurement of happiness.

Validity doubts

Responses to survey questions may fail to measure what they are supposed to measure. In this context, Bourdieu (1994) argues that closed questions might shed light on topics that people would not otherwise consider. Likewise, Morin (1994) argues closed questions ‘trap’ respondents in pre-established schemes. An objection particular to survey questions on happiness is that such questions tap how happy respondents feel they should be given their situation, rather than how happy they actually are.

These qualms have given rise to many validity tests, see the 31 publications listed in section Ca01 of the Bibliography of Happiness. The conclusion is that the validity of such responses is quite good, provided that questions clearly address subjective appreciation with one’s life as a whole.

¹⁴ This chapter is accepted with minor modifications in *Social Indicators Research* and is to date (August 2015) in the reviewing process.

Still there are persistent qualms about the reliability of answers to questions about happiness.

Reliability biases

Even if responses to questions about happiness reflect the respondents' life satisfaction, they may do this inaccurately. Responses can be distorted in several ways, some of which are listed below.

Desirability bias: It has been suggested that desirability bias produces unrealistically high scores on happiness; for instance self-ratings of happiness tends to be slightly higher in personal interviews than on anonymous questionnaires (Phillips & Clancy 1972).

Interviewer bias: This occurs when responses are influenced by characteristics of the interviewer; for instance, if the interviewer is in a wheelchair, the benefit of good health is salient. Respondents in good health will then rate their happiness somewhat higher and the correlation of happiness-ratings with health variables is more pronounced (Smit et al. 1995).

Extreme Response Bias (ERB): Some respondents tend to tick the highest or the lowest option. Greenleaf (1992) found that this tendency is related to the age, education level, and household income of respondents, but not to their gender. Vulnerability varies across topics, in a study on positive and negative effects; Diener et al. (1991) report that mood intensity is quite vulnerable to extreme response bias. Maggino (2003) found that longer scales less vulnerable to extreme response biases than shorter scales.

Contextual bias: The presentation of the study, the conversational context (Smith et al, 2006) and the day of the week are among other factors that influence the response of interviewees. Responses to questions about satisfaction with one's life as a whole tend to be slightly more positive when asked on a Monday than on a Friday, Saturday or Sunday (Akay & Martinsson, 2009).

Questionnaire effect: The order of questions has been proved to influence both the distribution of responses and the association with other variables(Glenn & Taylor 1990)., e.g. the observed correlation between happiness and income tends to be higher if the question on happiness follows after questions about income.

Cultural measurement bias: The above mentioned biases can be random or systematic. Random bias is no great problem in cross-national happiness research, since random distortions typically balance out in big samples. Systematic bias is trickier, in particular when cultural factors are involved. This is called ‘cultural measurement bias’.

Veenhoven (2012) estimates the degree to which cross-national differences in average happiness are distorted by cultural measurement bias, but to a small extent. Although cultural measurement might not be dramatic, it is still worth knowing what particular biases are involved and whether these distortions can be corrected.

In this context the extreme response bias (Diener et al. 1991) deserves consideration, as this kind of bias appears to differ across cultures. Culpepper & Zimmerman (2006) have shown in a study done in an American university, that Hispanic students are more prone to extreme responses; Hispanic students were less likely to go for middle responses and would go more for extremes than their Anglo-Saxon counterparts. Likewise, Chinese students were less inclined to extreme responses than Caucasian students (Song et al. 2011). In a bi-ethnic comparison in Israel, Arab respondents have been shown to go more easily for extreme responses than their Jewish counterparts (Baron-Epel et al. 2010). In this respect, one can question the attempt of Johnson et al. (2005) to link response styles with Hofstede’s measures, as those are themselves heavily depending also on response styles.

3.1.2 The ‘10-excess’ phenomenon in responses to questions on happiness in different nations

A particular type of extreme response bias (ERB) appears in responses to survey questions about happiness using a numerical response scale ranging from 0 to 10: in several countries the percentage of responses in the highest

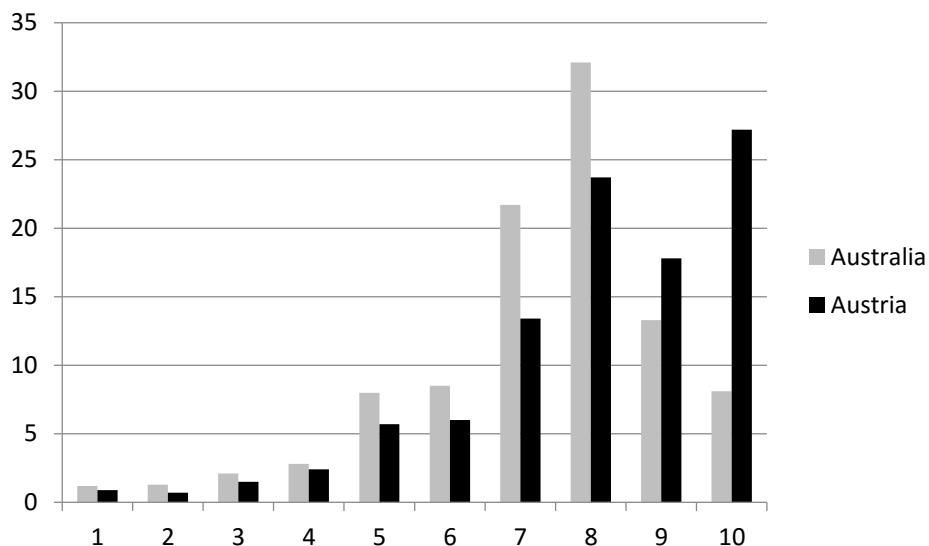
category (10) is surprisingly high and does not fit the unimodal distribution we typically see. In these cases the option ‘10’ is more often ticked than the option ‘9’.

An example of such a frequency distribution is presented on Figure 3.1. This is the case of Austria where the percentage of 10 responses is almost twice as high as the percentage of 9 responses, contrary to Australia, which shows a more classic unimodal curve. I call this the ‘10-excess’ phenomenon.

As we will see in more detail in section 4, this pattern appears in many countries all over the world and is particularly frequent in Latin America and the Middle East.

Figure 3.1: Two distributions of responses to a single question about life satisfaction

Classic, Australia 2005 and 10-excess, Austria 1999



3.1.3 Research question

Our goal with this chapter is to give a first exploration to the 10-excess phenomenon: how often does it appear and where? What are the possible

reasons behind this response pattern? Is this a reflection of reality or a matter of measurement bias? This is worth knowing as the 0-10 numerical response scale has become standard in happiness studies. Understand this type of response pattern will help us researchers in happiness studies gain understanding of the tools we are using.

3.1.4 Plan of this chapter

I will first describe how I define ‘excess’ in the most positive response possible (Section 2). Next I assess the prevalence of the 10-excess phenomenon, how often it occurs and in which nations in particular (Section 3). On that basis I suggest several possible explanations for this phenomenon and check these one by one (section 4). Most of the explanations I considered failed an empirical test. I conclude that some cultural bias is involved (section 5).

3.2 Subject matter

3.2.1 Data on happiness in nations

I used this collection of data responses and considered the findings obtained for questions that used a numerical response scale (type n), with at least 10 options, that is, either 1 to 10 scales, as in Figure 3.1, or 0 to 10 scales. This type of response scale has been used for that use the keyword ‘happiness’ or ‘life-satisfaction’ and also for ratings of one’s life between ‘best possible’ and ‘worst possible’, a rating which is better known as the Cantril ladder (Cantril 1965).

To date these kinds of questions have been used in more than 5000 survey studies in the general public of nations and for 1367 of the surveys the full distribution of responses is reported, rather than only the mean and standard deviation. In section 3 I inspect the 10-excess responses in the 1367 distributions.

3.2.2 Identification of 10-excess in responses to survey question on happiness

I speak of ‘10-excess’ when the number of 10 responses is higher than that of the number of 9 responses. The degree of excess is expressed in a Ten

Over Nine ratio, that I call the TON. I speak of 10-excess when TON is greater than 1.

3.3 Prevalence of 10-excess

In responses to questions on life-satisfaction

Out of the 1367 distributions, 534 are on a numerical scale ranging from 0 to 10 and 833 on a scale ranging from 1 to 10. Since this small variation in scale length might make a difference, I considered them separately. For reasons of readability, I will present only the first 15 countries by alphabetical order in the tables to come, the complete results are available online¹⁵.

As a first step I inspected the distribution of responses, and I present an illustrative overview of the most recent scores on the 1-10 scale in 15 nations in Table 3.1.

Table 3.1: Distribution of responses to a question on life-satisfaction in the years 2006-2009 on a 1-10 numerical scale

First 15 cases out of 90

	1	2	3	4	5	6	7	8	9	10	TON ratio
Albania	4,6	6	15,4	15,9	16,7	11,7	11,3	10,2	5,3	2,7	0,51
Algeria	12,6	5,6	8,4	5,9	12,9	10,5	13,6	11,5	6,3	11,9	1,89
Andorra	0,5	0,4	1,3	2,5	12,5	13,3	23,1	29,7	9,9	6,7	0,68
Argentina	1,2	0,7	2	1,4	7,3	5,3	18,8	26,6	13,4	22,5	1,68
Armenia	14,3	10,5	16,5	12,8	17	9,3	8,2	5,7	2,9	2,5	0,86
Australia	1,2	1,3	2,1	2,8	8	8,5	21,7	32,1	13,3	8,1	0,61
Austria	0,9	0,7	1,5	2,4	5,7	6	13,4	23,7	17,8	27,2	1,53
Bangladesh	3,3	1,1	7,5	10,5	35	9,3	8,9	10,6	2,9	9,5	3,28
Belarus	6,8	8,3	14,2	13,5	21,5	8,9	10,1	8,1	3,3	1,9	0,58
Belgium	3	0,7	1,7	2,6	6,3	7	15,9	29,4	15,7	16,8	1,07
Bosnia	7,3	3,3	5,1	8,6	24,3	13,3	13,2	11,6	5,3	7,8	1,47
Brazil	1,9	0,9	1,4	2,2	10,9	8,6	12,4	23,8	13,4	24,3	1,81

¹⁵ Complete dataset : http://gaelbrule.com/data/10_excess/

Bulgaria	5,8	6,6	11,3	11,6	18,7	11	14,9	8	4,8	2,8	0,58
Burkina	3,6	4,6	6,7	12,1	26	15,2	11,1	8,2	3,1	7	2,26
Canada	0,8	1,2	1,4	2,6	6	7,3	14,1	28,6	19,4	18,6	0,96

Data: Happiness in Nations (Veenhoven 2013c), table 122F

I then assessed the frequency of the 10-excess in all 1367 surveys that have involved a question on life satisfaction. The frequency on a 1 to 10 scale is reported in Table 3.2a and the frequency on the 0 to 10 scale in Table 3.2b. I also assessed the frequency of the pattern in questions about contentment, see Table 3.2c.

Scale 1-10: On the 833 distributions on scale 1-10 observed in 97 nations, 462 had a TON greater than 1, which is 55%. Among these 97 nations, 23 systematically had a TON higher than 1. These were: Argentina, Bosnia Herzegovina, Brazil, Colombia, El Salvador, Guatemala, India, Indonesia, Jordan, Luxembourg, Mali, Malta, Montenegro, Morocco, Peru, Philippines, Poland, Puerto Rico, Taiwan, Tanzania, Trinidad and Tobago, Uganda, Uruguay, Zimbabwe.

Scale 0-10: On the 534 distributions on scale 0-10 observed in 88 nations, 199 had a TON greater than 1, which represents a percentage of 37%. Among these 88 nations, 23 always had a TON higher than one: Belize, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Guyana, Honduras, Hong Kong, Jamaica, Macao, Nicaragua, Palestine, Peru, South Africa, Surinam, Trinidad and Tobago, Turkey, Uganda, Uzbekistan, Venezuela, Viet Nam.

In responses to question on 'best-worst possible life (Cantril ladder)

On the 48 distributions on the Cantril ladder scale, 18 had a TON higher than 1, which is 38%. The following countries presented a TON ratio of more than 1: Argentina, Brazil, China, Guatemala, Honduras, Italy, Japan, Jordan, Mexico, Pakistan, Peru, Slovakia, South Africa, Uganda, Uzbekistan, Venezuela, Viet Nam, Russia, and Pakistan.

Table 3.2a: 10-excess frequency in responses to a question on life satisfaction on a 1-10 numerical scale. First 15 cases out of 97

	Surveys with TON>1	Total number of surveys	Ratio
Albania	0	6	0,00
Algeria	4	6	0,67
Andorra	0	4	0,00
Argentina	11	11	1,00
Armenia	4	8	0,50
Australia	1	9	0,11
Austria	3	4	0,75
Azerbaijan	2	9	0,22
Bangladesh	11	14	0,79
Belarus	3	10	0,30
Belgium	2	6	0,33
Bosnia Herzegovina	4	4	1,00
Brazil	10	10	1,00
Bulgaria	4	16	0,25
Burkina Faso	6	9	0,67
All 97 cases	462		0,54

Data: Happiness in Nations (Veenhoven 2013c), table 122F

Table 3.2b: 10-excess frequency in responses to a question on life satisfaction on a 0-10 numerical scale

First 15 cases out of 88

	Number of surveys with TON>1	Total number of surveys	Ratio
Angola	0	1	0,00
Argentina	1	5	0,20
Australia	4	6	0,67
Austria	3	6	0,50
Bangladesh	0	2	0,00
Belgium	1	14	0,07
Belize	1	1	1,00
Bhutan	7	22	0,32
Bolivia	2	5	0,40
Brazil	7	7	1,00
Bulgaria	6	8	0,75
Canada	3	6	0,50
Chile	4	4	1,00
China	1	3	0,33
Colombia	3	3	1,00
All 88 cases	199	534	0,37

Data: Happiness in Nations (Veenhoven 2013c), table 122G

Table 3.2c: Distribution of responses to a question on 'Best-Worst possible life' (Cantril ladder) in the years 2006-2009 on a 11-step numerical scale

	0	1	2	3	4	5	6	7	8	9	10	TON
Angola	2,5	10,0	8,7	16,8	20,2	20,3	10,1	5,5	3,3	0,8	0,6	0,75
Argentina	4,5	1,6	2,2	5,4	7,2	19,5	13,8	16,3	17,0	4,9	7,0	1,43
Bangladesh	0,0	2,1	16,8	8,8	21,3	28,1	9,6	4,8	5,7	1,8	0,6	0,33
Bolivia	1,2	2,9	4,2	6,7	11,9	29,5	12,7	12,9	9,4	4,1	3,9	0,95
Brazil	1,8	2,1	2,8	6,1	7,8	21,0	14,7	13,1	14,5	3,8	11,3	2,97
United Kingdom	0,8	0,5	2,3	4,2	6,7	21,4	10,9	21,5	19,9	6,6	4,6	0,70
Bulgaria	5,7	7,8	12,3	19,3	16,6	21,2	7,1	4,3	3,3	0,6	0,2	0,33
Canada	0,4	0,3	0,6	1,1	3,9	15,5	10,5	22,9	29,0	7,9	6,9	0,87
China	3,1	2,6	2,9	6,8	9,2	32,9	19,4	10,1	9,5	1,7	1,8	1,06

Czech Republic	1,0	0,0	1,0	4,4	9,3	27,5	16,0	22,9	13,2	2,6	2,0	0,77
Egypt	0,1	0,2	1,2	4,1	7,7	18,7	22,4	18,3	15,5	7,9	3,2	0,41
France	0,0	0,4	1,6	1,2	4,9	20,9	14,2	28,2	22,9	3,9	1,6	0,41
Germany	0,8	0,7	1,8	3,9	5,8	22,7	15,1	21,6	18,5	4,9	3,6	0,73
Ghana	1,0	2,6	7,4	16,4	19,5	26,2	14,1	7,5	2,1	0,6	0,3	0,50
Guatemala	1,0	0,4	0,2	1,2	3,6	11,6	10,2	17,4	29,0	11,4	13,6	1,19

Data: Happiness in Nations (Veenhoven 2013c), table 31D

I summarize these results by comparing the phenomenon in 6 geographical areas: Africa, Latin America, North America, Asia, Europe and Middle East. The 10-excess pattern appears in all parts of the world, but it is particularly present in Latin America and the Middle East as Table 3.3 shows.

*Table 3.3: TON distribution in parts of the world*¹⁶

	TON >1/total	10-excess frequency(%)
Africa	8/11	73
Latin America	10/10	100
USA/Canada	0/2	0
Asia	7/17	42
Europe	17/40	42
Middle East	10/10	100
Total	52/90	58%

Robustness check

As a robustness check, I considered the most recent distribution in each country separately, limiting to surveys held after the year 2006. The rates of 10-excess responses were similar (tables not shown).

A second robustness check is to look at the prevalence of the phenomenon at higher levels of TON, for instance TON inferior or equal to 2.

¹⁶ Life Satisfaction in 90 nations, scale 1-10, Happiness in Nations (Veenhoven 2013c), table 122F

Out of the 535 surveys presented on a 1-10 scale, the number of TON superior to 2 drops to 35, which represents 6.5 % of the surveys. Out of the 833 surveys on a 0-10 scale, 153 have a TON superior to 2, which represent over 18% of the surveys. Finally, out of the 48 distributions on the Cantril ladder, 5 countries (10%) have a TON superior to 2 (Brazil, Italy, Pakistan, Peru and Turkey).

3.4 Explanations

Is there any system in this 10-excess pattern of responses to survey questions about happiness? I first considered whether this pattern is particular for cognitive evaluations of life. This appears to be the case it may reflect reality and next whether we deal with measurement bias.

3.4.1 Reflection of social inequality?

A possible explanation for this 10-excess phenomenon is that societal factors are responsible. In this hypothesis, the society with a high number of 10 responses would be characterized by a particularly privileged class, whose members would easily tick the top of the scale.

The Latin American countries, largely represented among the countries with a 10-excess, are also among the ones with the highest income difference. South Africa and Hong Kong, also present in the 10-excess list, are also among the most unequal countries in the world. However, this explanation faces many exceptions: much more equal societies frequently show a 10-excess, e.g. Luxemburg, Czech Republic, Austria, Mali. This is confirmed by the relatively low correlation between the TON ratio and income inequality measured with the Gini coefficient: $r=+.28$. Income distribution seems to have an impact on but its contribution seems rather small. Still more aspects of inequality may be involved.

3.4.2 Measurement bias?

If this pattern does not reflect reality, there must be measurement bias. The question is then: What kind of bias? Below I check some possibilities.

A matter of grading culture?

Ratings on the numerical scale of happiness could be influenced by the way school performance is graded in the country. For instance, a study¹⁷ comparing the American, British and Dutch systems show that the first ones give the most top grades whereas it is nearly impossible to get a top grade in the Netherlands. The highest grade frequency is consistent in order with the TON, at least for these three examples, the America having the highest frequency of 10-excess and the Netherlands the least. We miss systematic data on grading culture that would be of much interest here.

Part of a wider extreme response style?

The 10-excess pattern observed in responses to questions about happiness can be part of a wider tendency to tick extreme response options. If so, that must manifest in ratings of other things than happiness, such as in responses to questions about perceived freedom. I checked using the item in the World Values Survey¹⁸. Among the 57 nations for which data is available, 41 present a 10 excess in feeling of freedom, which represent a percentage of 71 % of TON. Thus, TON rate is higher than for life satisfaction or happiness questions. The correlation between TON for life satisfaction and feeling of freedom is strong: +.58, which confirms the close links between life satisfaction and perceived freedom that I will detail in the next chapter. Hence, the 10 excess is likely to be anchored in a wider response style.

A matter of survey technique?

The phenomenon we observe might be caused by subtle differences in survey techniques, such as in the sampling of respondents, the place of happiness in the questionnaire and the behavior of the interviewer. If so, we can expect that TON differs across surveys in the same country. I checked using the countries where different survey programs had measured happiness on 1-10 or 0-10 numerical scales. To do so, I took the example of

¹⁷ <http://www.studyinholland.nl/documentation/grading-systems-in-the-netherlands-the-united-states-and-the-united-kingdom.pdf>

¹⁸ Item 46: Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means ‘no choice at all’ and 10 means ‘a great deal of choice’ to indicate how much freedom of choice and control you feel you have over the way your life turns out (code one number):

Brazil, a country that often presents the 10-excess. I compared different surveys. Results are shown in Table 3.4a.

Table 3.4a Comparison of surveys in Brazil in various years

Year	N	Survey	0	1	2	3	4	5	6	7	8	9	10	TON
2002	1 000	2002	1,80	2,10	2,80	6,10	7,80	21,00	14,70	13,10	14,50	3,80	11,30	2,97
2008	1 353	LAPOP 2008	0,89	0,37	1,03	3,10	4,43	15,59	15,15	17,81	19,07	10,35	12,20	1,18
2010	2 010	LAPOP 2010	0,90	0,52	0,76	1,90	3,85	14,27	14,03	18,60	23,17	8,90	13,08	1,47
2007	1 000	PEW survey 2007	1,20	1,60	1,00	2,60	4,60	14,70	11,60	18,00	21,30	9,70	13,40	1,38
1975	382	Kettering Survey	1,00	2,00	2,00	5,00	8,00	21,00	19,00	14,00	14,00	5,00	9,00	1,80
1975	382	Kettering Survey	1,00	1,00	2,00	3,00	5,00	13,00	11,00	17,00	18,00	12,00	16,00	1,33
2006	1 495	WorldValuesSurvey 5		1,90	0,90	1,40	2,20	10,90	8,60	12,40	23,80	13,40	24,30	1,81
1998	414	WorldValuesSurv 1-5		2,60	0,70	2,50	4,10	11,70	10,00	13,40	21,70	9,30	23,80	2,56
1998	1 471	WorldValuesSurv 1-5		3,50	2,20	3,10	3,60	14,60	7,60	11,30	16,30	9,00	28,20	3,13
1998	268	WorldValuesSurv 1-5		7,10	3,70	3,70	1,90	11,50	10,00	10,00	11,20	6,70	33,80	5,04
1998	523	WorldValuesSurv 1-5		2,50	1,80	2,80	4,00	13,90	6,90	11,90	14,80	8,90	32,00	3,60
1998	230	WorldValuesSurv 1-5		0,00	0,00	0,80	3,40	11,10	13,20	15,10	23,60	7,50	25,20	3,36
1998	190	WorldValuesSurv 1-5		1,80	0,90	0,00	1,40	10,30	8,60	17,60	22,40	14,30	22,70	1,59
1998	428	WorldValuesSurv 1-5		2,70	1,70	1,60	2,60	13,30	8,40	9,80	23,20	13,00	23,20	1,78
1990	1 502	WorldValuesSurvey 2		2,98	1,29	2,33	3,72	14,31	7,39	13,11	17,11	8,81	28,24	3,21
1996	1 149	WorldValuesSurvey 3		4,87	2,96	3,66	3,74	13,14	8,79	9,66	14,88	8,62	29,33	3,40
2007	1 035	GallupWorldPoll2007	0,60	0,70	1,10	1,70	2,90	9,40	10,60	16,50	24,70	9,50	22,50	2,37

Variations can be seen between regions, years, scales but the 10-excess phenomenon is systematically present. I compared also the variance in TON within survey programs with variance in TON across survey programs. I compared the LAPOP, What World Thinks and PEW surveys asking the same question on contentment on a 0-10 scale in the years 2000. Results are presented in Table 4b below. The LAPOP presents the same survey in the years 2008 and 2010 and their difference are very small, with a variance of 0.05. The variance among the three types of surveys is much more important (0.5), which seems due to the fact that the TON is much higher in the What World Thinks survey (2.37) whereas LAPOP (1.32) and PEW(1.38) are very close.

Table 3.4b comparison of variance between surveys in Brazil

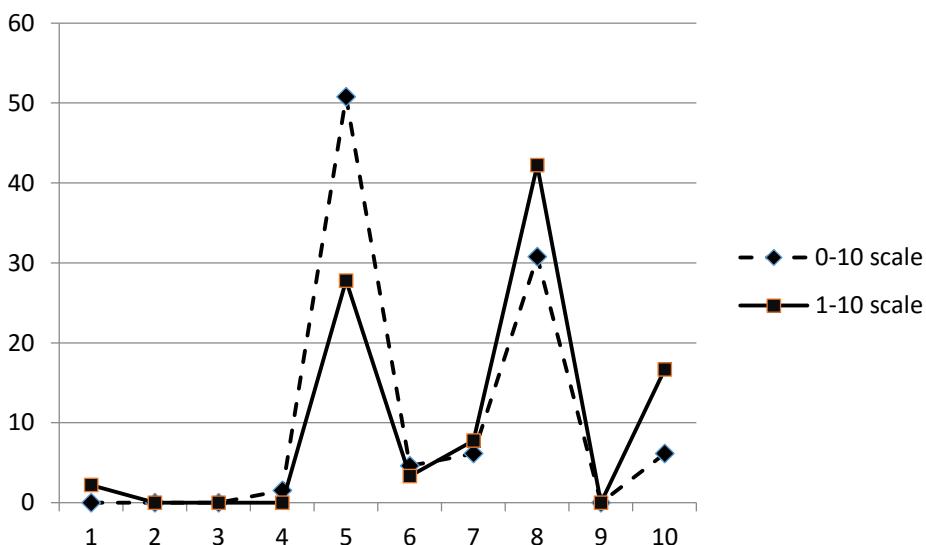
	Variance
Variance within LAPOP surveys	0.05
Variance among surveys	0.5

The surveys show different results but the phenomenon is still systematically present.

Particular to 1-10 scale?

I first hypothesized that the 10-excess phenomenon is typical for short response scales and therefore occurs more often on 1-10 scales than on the 0-10. People might be less prone to go to 10 once they have imagined what zero means versus 1 which is less extreme. This was found to be the case: the 10-excess was rather less present on a 0 to 10 scale (37%) than on a scale from 1 to 10 (55%) as shown in Figure 3.2 below. However, if a difference can be observed, it still represents a high percentage of the distributions in both cases.

Figure 3.2: Distribution of the highest values for the latest data on a 0-10 scale(65 nations) and on a 1-10 scale (90 nations)



Particular to extreme labeling of scale end?

The 10-excess phenomenon could be more common if the positive end of the rating scale is labeled modestly, using terms such as 'satisfied' or 'happy', rather than with stronger terms such as 'completely satisfied' or 'extremely happy'. To check this explanation I selected pairs of questions used in the same country in the same period, that differed only in the

labeling of the extremes of the numerical response scale. The only match in terms of length of scale, period and measure type are the questions¹⁹ O_SLW_c_sq_n_10_a (World Values Survey, wave 1-5, 1990-2005) and O_SLU_c_sq_n_10_b (European Quality of Life Survey 2003). Both address life satisfaction on a 1 to 10 scale in European nations between 1990 and 2005. However, whereas the first one ranges from ‘dissatisfied’ to ‘satisfied’, the second one ranges from ‘very dissatisfied’ to ‘very satisfied’. As shown in Table 3.5, the prevalence of the 10-excess is exactly the same in both cases (36%), so there is no difference in the only comparison case we have.

Table 3.5: Comparison of two types of surveys

	Labeling	Number of surveys for European countries	Number of surveys presenting a 10 excess	Ratio of surveys presenting the 10 excess
O_SLW_c_sq_n_10_a (World Values Survey, wave 1-5, 1990-2005)	‘dissatisfied’ to ‘satisfied’	149	54	36%
O_SLU_c_sq_n_10_b (EQS 2003)	‘very dissatisfied’ to ‘very satisfied’	28	10	36%

Particular to numerical response scales?

Still another possibility is that the 10-excess pattern occurs typically on numerical scales, because the number 10 is open to more interpretations

¹⁹ Codes used in the collection ‘Measures of Happiness’ of the World Database of Happiness (Veenhoven 2013f)

than a word like ‘satisfied’. Ideally this requires a comparison with responses scales with an equal number of verbal response options. Such cases are not available however; the longest verbal response scales provide only seven options.

Therefore I compared means obtained using numerical scales to the mean scores on verbal response scales, which were later transformed to a secondary 0-10 numerical scale. To that end, I selected average values: for numerical scales, I used the average mean score given for a 11-step numeral Life Satisfaction scale (Table 122F) and for verbal scales, the average values given for 4-step scales (Table 111 C), this data for both was available in the collection ‘Happiness in Nations’ of the World Database of Happiness²⁰. I then assessed whether the means on the numerical response scales tended to be higher than the means obtained using verbal response scales. I repeated this analysis for the countries where 10-excess responses were observed.

The differences between average scores on the numerical scale, 1 to 10, and a verbal scale , very unsatisfied to very satisfied, that was projected on a numerical scale to see if some differences could be observed are presented in Table 3.6. There are differences between the responses to the two types of scale, but no systematic differences; in my 10-excess list, some countries like Argentina or Brazil offered quite a large difference between the verbal and the numerical scale, which might tell us that this excess came from a scale effect; however, when looking at Venezuela, Colombia and Costa Rica, the results on the two scales were the same and in some cases, the result on the verbal scale was even higher than the one on the numerical scale.

I computed the difference between average scores obtained using a numerical scale and verbal scale; a 4-step numerical scale was more vulnerable to excess responding than a 10 or 11 step scale. When subtracting scores on a verbal scale from average score on the numerical scale, the difference was +0.32 in the case of the countries that did not

²⁰ Transformation from verbal to numeral scores were obtained using experts ratings; for instance very satisfied corresponds to a 9.3 on a 0-10 scale, satisfied to a 6.5, quite unsatisfied to a 3.7, and very unsatisfied to a 1.3 (Veenhoven, 1993: section 7/3.3.2). It is then possible to obtain a value on a 0 to 10 scale from a distribution of verbal answers.

present a 10-excess, and +0.16 in the case of the countries presenting a 10-excess. Therefore, the difference was even smaller in the countries presenting a TON effect. So numerical responding does not seem to explain the bias in responses to happiness questions, quite the contrary.

Table 3.6: Mean scores on pairs of questions on life satisfaction in the same country and period

0-10 numerical scales compared to transformed scores on a 4 step verbal response scales

Country	Average score on 0-10 numerical scale	Average score on equivalent question rated on a verbal response scale and transformed to range 0-10	Difference
Argentina	7,3	6,39	+0,91
Armenia	5	4,78	+0,22
Austria	7,6	6,7	+0,90
Belarus	5,2	5,5	-0,30
Belgium	7,3	6,85	0,45
Belize	6,6	6,64	-0,04
Bolivia	6,3	6,12	0,18
Brazil	7,5	6,6	0,90
Bulgaria	4,4	4,17	0,23
Canada	7,8	7,91	-0,11
Chile	6,7	6,49	0,21
China	6,3	6,11	0,19
Colombia	7,7	7,39	0,31
Costa Rica	8,5	7,74	0,76
Croatia	6	5,94	0,06
Average	6.65	6.4	0.25

Data: Happiness in Nations (Veenhoven 2013c), tables 121C and 122F.

Social desirability bias?

Happiness is highly valued in most societies and claiming to be very happy could be a way to obtain prestige and social acceptance. Therefore I checked social desirability. In a study among college students in 41 nations, Diener (2000) assessed the degree of life-satisfaction they deemed *ideal*. Ideal scores range from 19.80 (China) to 31.14 (Australia)²¹. Ideal happiness tends to be higher in 10-excess nations; e.g. in Puerto Rico (30.70), Colombia (31.12), Brazil (29.07), Peru (28.98) and Argentina (27.72). Yet the two countries with the highest ideal happiness, Australia (31.14) and Spain (31.02), are not among the countries that frequently present a 10-excess. The correlation between the ideal life satisfaction and the TON ratio is +.27, thus the valuing of happiness does seem to be involved, but since the correlation is modest this is not the whole story.

Typical for Latin American and Middle Eastern countries?

The 10-excess pattern is observed in countries with different cultures; however, we do see a particularly high occurrence of this pattern in Latin America and Middle East. As noted in section 3.1.1, Culpepper & Zimmerman (2006) have shown that Hispanic students are more prone to extreme responding on different topics. Baron-Epel showed that Arabic students were prone to choose extreme answers, a phenomenon also highlighted in the case of Jordan by D'Iribarne(2012) (Jordan is also one of the most dramatic examples of 10-excess: the last data giving 8.9% of 9-respondents for 30.4% of 10-respondents, which gives a TON of 3.42, the second highest after Puerto Rico (3.52)). These results seem to be in line with those previous works; therefore the 10-excess might therefore be largely drawn from cultural measurement bias. Whereas the exact mechanisms underlying this phenomenon are largely unknown yet, Culpepper & Zimmerman showed some independent positive influences of masculinity and power distance on the occurrence of 10-excess and an independent negative contribution of individualism on the 10-excess.

Check of the bias explanation

²¹ Ratings were made on the 5 item Satisfaction With Life Scale (SWLS), possible scores on which range from 7 to 35

The above analyses suggest that the 10-excess phenomenon is at least partly due to measurement bias. If so, scores of average happiness in nations are often inflated and will as such lower the correlation with nation characteristics, such as the income per head. This allows us to check whether measurement bias is really involved and to get a view on the size of this bias.

In that vein I explored the effect of three corrections for 10-excess in the distribution of happiness in nations. First I simply changed the frequencies of 9 and 10 for the countries presenting a 10-excess. Second, I reduced the 10 scale by combining the responses in the following way: 1-2, 3-4, 5-6, 7-8 and 9-10. Third I applied a more complicated method in which I computed the ten over nine(TON) ratio for the 371 distributions on a 1-10 scale that do not present a 10 excess; the average TON was 0.64. I made the assumption that this ratio is a better reflection of reality and I applied it to countries presenting the 10-excess to remove the bias; I then computed a new percentage of 10 respondents by multiplying the number of 9 respondents by 0.64, thus obtaining a corrected 10 percentage, which was lower than in the original data. The sum was then lower than 100%; so I computed a new average with the corrected percentage of ten respondents to reach 100% by multiplying the average by $(100/(100-((\text{original 10})-(\text{corrected 10})))$ so the 10-excess was distributed over all the bars, respectively of their proportional weight.

The question is then whether these corrected means of happiness in nations correlate better with societal quality than the uncorrected original means. I examined that 97 nations around the year 2000, using the nation characteristics: buying power per capita, the human development index, government effectiveness and economic freedom. Data were drawn from Veenhoven's (2013e) 'States of Nations'. The results are presented in Table 3.7. These variables explained 69% of the variance in uncorrected average happiness in nations. When corrected averages happiness was used, the explained variance rose to 71% in the case of the 9-10 Swap, 70% in the case of the merge and up to 74% for the TON 0.64 method. So in all cases, there was a gain in explained variance. This confirms that considerable measurement bias is involved in the '10-excess' phenomenon.

The bias is possibly greater than these. Correcting this extreme response bias could possibly be done in many other ways, e.g. by squeezing the observed distribution on this 0-10 numerical scale into a reference distribution obtained using a survey question on the same topic in the same year with a different response scale (De Jonge et al. 2013). The purpose of this chapter is not to select the best correction; as for now, it is sufficient to demonstrate the plausibility of bias.

Table 3.7: Explained variance in average happiness in 97 nations around 2005 (with and without correction for 10-excess bias)

<i>Average happiness in nation</i>	<i>Explained variance</i>
No correction	69%
Merge 10 step scale into 5 step scale	70%
Swap 9 10 scores	71%
Transform to TON 0.64	74%

All the correlations are significant at the 0.01 level

Data: States of nations (Veenhoven 2013e) variables RGDP_2005, HDI_2009, GovEffectiveness_2006, FreeEconIndex1_2005

3.4.3 10-excess typical for cognitive evaluation of life?

So far I considered the 10-excess pattern in responses to questions on life satisfaction and on the Cantril ladder that invites for a rating between the best and worst possible life. Both these questions invite a cognitive evaluation of life. Does the same pattern appear in responses to more affective toned questions? Let's see with questions that use 'happiness' as the keyword²². The reason is that responses to that question are mostly recorded on shorter scales with verbal response options, such as 'very happy'; data on numerical ratings of 'happiness' and 'mood' are scarce. Still the European Social Survey includes a question with 'happiness'²³, as the key word, responses on which are recorded on the same a 0-10 numerical scale as the question on life-satisfaction²⁴ used in that survey.

²² See 1.2.1 'Key terms used in this dissertation'

²³ Taking all things together, how happy would you say you are?

²⁴ All things considered, how satisfied are you with your life as a whole nowadays?

This enables us to check whether the same response pattern appears the more affectively toned question. I find a noticeable difference, 25% of 10-excess in responses to the question on ‘satisfaction’ and only 10% in responses to the question on ‘happiness’. So, affective measures seem to be less vulnerable to the extreme responding than more cognitive measures, at least in Europe.

This difference can be understood in the context of the theory that we draw on two sources of information when evaluating our life; how well we feel affectively most of the time and to what extent we perceive that life meet standards of the good life (Veenhoven 2009). The question on ‘happiness’ reflects the former affective appraisal more than the question on ‘life-satisfaction’ and this gives rise to slight variations in correlation with other variables, such as with income (McKennell 1978).

In that context it seems that we are better in grading how well we feel, than in judging how successful we are in meeting standards. One reason could be that there are many standards for judging life and performance on these is not always clear. It is easier to rate how you feel than rate the distance to the best possible life. The more fuzzy an object is, the more vulnerable its evaluation is for side influences, such as the above discussed sources of bias.

3.4.4 Combinations of different explanations

Of course, the 10-excess is not due to one factor, rather to a combination of factors. I have highlighted a non-exhaustive list of contributing factors. Knowing their exact contributions is desirable but it would mean having all the surveys mentioned above for all the years in all countries labeled and sampled similarly; unfortunately it is not the case so, as for now, the remedy of multivariate analysis would be as bad as the pain.

3.4.5 Summary

The 10-excess phenomenon, as many response biases, is not due to one single reason; rather it is linked to several factors (social, cultural, survey techniques...). Nonetheless, I have shown that some factors are much more influential than others and a hierarchy of those reasons can be drawn, in the frame of knowledge we dispose of. The phenomenon seems to be only a

poor reflection of reality and seems largely anchored in cultural measurement bias. In this context, the survey techniques, the scaling, the labeling, in brief, all the survey factors seem to play a minor role. Keywords are influential to some extent: in Europe for instance, happiness is less vulnerable to this phenomenon than life satisfaction. A few hints seem to tell us the grading culture might have an influence, but the grading culture might in turn be a part of a wider response pattern. The large correlation between 10-excess on happiness and life satisfaction and perceived freedom shows that a wider cultural frame involved. Still, the phenomenon is observable overall, and differently in different geographical areas. All these assumptions seem to indicate that the main factor is largely cultural, with systematic presence in Latin America and in the Middle East; this is in line with other studies (Culpepper and Zimmerman (2006), Baron-Epel et al (2010), D'Iribarne (2012)) that mentioned Extreme Response Bias among Latin Americans and Arab respondents. The exact underlying mechanisms are yet unknown even if some links with values have been drawn.

3.5 Future work

This study faced several limitations and therefore there are options for future improvement. If I think I have highlighted the main reasons behind the 10-excess, the quantitative contributions to the phenomenon should be determined in future studies. However, qualitatively, we know the major influence is the larger cultural influence, key words, scale and social desirability seem to have a moderate influence, and that labeling and survey technique have only a small influence. Moreover, the comparison of grading cultures was limited to only three countries; if it seems to be implicated, we do not know to what extent and the causality even if it is likely to be a part of the larger cultural response pattern; hence, more systematic data in this field would be insightful for researches dealing with response patterns. The keyword seems to play a role in Europe, but it would be very interesting to have comparable surveys for all countries, and particularly Latin America and the Middle East. Finally, the impact of social desirability has been understudied and if the sparse data we have

seems to indicate that this might play a role, its actual contribution is yet opaque.

3.6 Conclusions

Survey questions on happiness that use 0-10 numerical response scales often elicit more ratings on option 10 than on option 9. This ‘10-excess’ pattern is most common in Latin America and the Middle East. At least part of the phenomenon seems to be due to cultural measurement bias and questions that invite to a cognitive evaluation are particularly vulnerable. Further research is required into the nature of this bias and its correction.

PART II: EXPLORING THE RELATIVE UNHAPPINESS IN FRANCE

Chapter 4: Freedom(s) and happiness²⁵

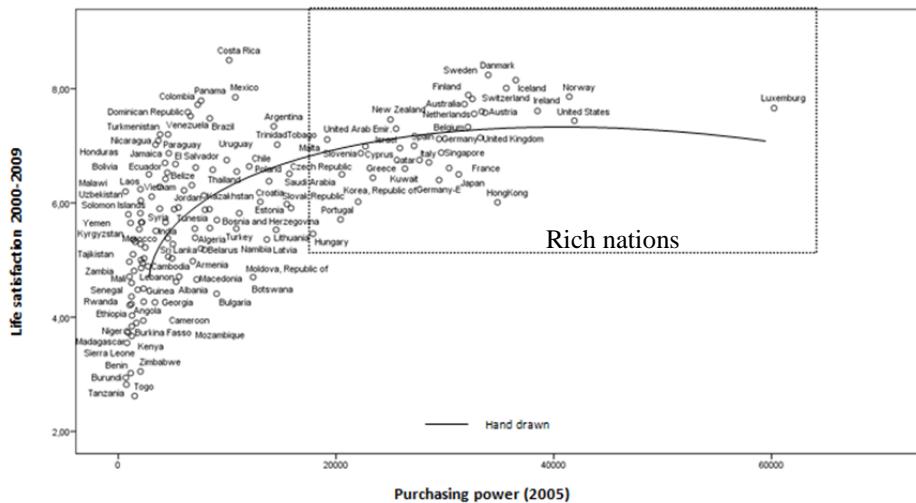
In the following chapter, I raise the question: *how can the relatively low level of happiness in France be related to freedom, both in its objective and subjective meaning?*

4.1. Introduction

Comparative research on happiness shows, typically, that people live happiest in the richest nations of this world. This pattern was already visible in the first cross national comparison in 1960 by Cantril (1965) and has been replicated over and again, e.g. Arthaud-Day & Near (2005), Fisher (2008) or Clark (2011) on ever larger numbers of nations. A plot of happiness versus buying power in 138 countries in 2005 is presented in Figure 4.1.

Figure 4.1: Life satisfaction rated by economic prosperity in 138 countries around 2005

²⁵ This chapter is published as Brulé G. and Veenhoven R.(2014) Freedom and happiness in nations. Why the Finns are happier than the French. *Psychology of Well-Being: Theory Research and Practice* 2014, 4:17



Average happiness differs across rich nations

Happiness increases significantly with GDP in the first part of the graph, where the poor nations are situated, and reach a plateau around 20,000 dollars per capita. In these nations, sufficient individuals have a purchasing power high enough for economic affluence to have little influence on happiness; this represents 49 nations²⁶. Among the rich nations, we see large differences in happiness among countries with the same purchasing power, e.g. more than two points between Hong Kong and Denmark, one point and a half between France and Finland.

Comparison between Finland and France

Let us consider this latter case in more detail. Finland and France are both affluent societies, with purchasing powers per capita that are very comparable (\$32,153 for Finland versus \$30,386 for France in 2005), yet with remarkable life satisfaction differences, as shown in Table 4.1. The difference in happiness is consistent: the French are not only less satisfied

²⁶ Rich nations are shown in Figure 3.1. 49 nations are included in this group: Argentina, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Brunei, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Guinea, Hong-Kong, Hungary, Iceland, Israel, Italy, Japan, Korea, Kuwait, Luxemburg, Malta, Netherlands, New Zealand, Norway, Oman, Poland, Portugal, Puerto Rico, Qatar, Saudi Arabia, Seychelles, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Arab Emirates, United Kingdom, United States

with their lives as a whole, they also feel less well affectively and see a greater difference between how their lives are and how they want it to be compared to the Finns. In short, this case represents one of the cases where two countries from the same civilization (western culture), with similar purchasing powers, present the highest difference in happiness.

Table 4.1: Average happiness in France and Finland for the period 2000-2009

Nation	Life satisfaction (Overall happiness)	Mood (affective component)	Contentment (cognitive component)
Finland	7.9	54	7.6
France	6.6	42	7.0
Average rich countries	7.0	45	6.7
<i>Difference</i>			
- in points on scale	1.3	12	0.6
- in % actual scale range in the world	26%	25%	12%
- in % actual range among the rich nations	40%	30%	21%

This example illustrates that there can be large differences in happiness and its components at comparable economic development. So happiness depends on more than just wealth. What other factors can be involved? I considered other factors, widely regarded as the most important societal predictors for happiness, to be: quality of government, rule of law, social security, and inequality in income and between sexes (Ott 2010). Finland has a substantial advantage on government effectiveness and rule of law, a slight advantage in terms of sex inequality, both countries were comparable in terms of income inequality, while France was ahead in terms of social security. I saw differences in these factors, mostly in favor of Finland, but no difference seemed significant enough to explain this ‘happiness gap’. Results are summarized in Table 4.2 below.

Table 4.2: Institutional differences between France and Finland

Factor	Reference in data file 'States of Nations'	Finland	France	Percentage of the total range of rich countries ²⁷
Government effectiveness ²⁸	GovEffectiveness_2006	2.2	1.5	30%
Rule of law ²⁹	RuleLaw_2006	2.0	1.4	22%
Social security ³⁰	WelfareExpense1_2006	26	29	13%
Income Inequality ³¹	Incomeequality_2000_2008	33	30	12%
	IncomeInequality1_2006	27	33	24%
Gender Inequality ³²	GenderEquality_2_2005	0.89	0.72	25%
	GenderEquality_4_2007	0.95	0.95	0%

Focus on freedom

²⁷ This percentage represents the ratio (difference between France and Finland)/highest difference amongst rich nations

²⁸ Veenhoven R. (2011b) *States of Nations, Governance*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

²⁹ Veenhoven R. (2011b) *States of Nations, Law and order, Legal system*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³⁰ Veenhoven R. (2011b) *States of Nations, Health, health expenditures*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³¹ Veenhoven R. (2011b) *States of Nations, inequality, income inequality*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³² Veenhoven R. (2011b) *States of Nations, inequality, gender inequality*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

What are the other factors that might be involved here? According to Verme (2009), a sense of freedom is the strongest predictor for happiness across nations. There are indeed sizable differences in perceived freedom among rich nations and the French feel less free than the Finns do (6.2 versus 7.5 on a ten-scale) ; however, one needs to be careful as this correlation might be inflated by a common response tendency , i.e. a tendency to answer less positively to any question. If no such distortion of responses is at hand, it is still possible that this difference in perceived freedom does not correspond with a difference in actual freedom. The French could be more perceptible for limitations to freedom than the Fins are, while they are in fact equally free is also possible that the difference is largely driven by happiness, unhappiness making people more prone to see their limitations than their opportunities. Thus, in this chapter, I decided to investigate the freedom factor in greater depth and investigate if I can find any hints of the lower reported life satisfaction in perceived freedom and/or actual freedom.

Plan of this chapter

Following Bay I distinguish several kinds of actual freedom and note the difference with perceived freedom. Next I analyze the relationship between these freedom variants and average happiness in 49 rich nations. I will then show that actual freedom, affects happiness, both directly and indirectly through perceived freedom. The difference between Finland and France fits that wider pattern

4.2. Concepts and measures

The terms ‘happiness’ and ‘freedom’ are often used in political rhetoric, but are in that context seldom properly defined. Greater precision is required for this empirical analysis, both with respect to the concepts and for their measurement. The definition and the measurement of happiness have been defined in the previous chapters. What is ‘freedom’ precisely? How can that be measured in nations? Is there a difference between ‘actual’ freedom and ‘perceived’ freedom in nations?

4.2.1. Concepts

In the broadest sense, freedom can be defined as the possibility for an individual to make choices, typically major life choices. The 'possibility' to choose requires first of all that there is an 'opportunity' to choose, which is an attribute of the environment in which an individual lives. Then, making a choice requires that an individual has the 'capacity' to choose, which is an individual attribute (Veenhoven 2008).

Following Bay (1970) I further distinguish two aspects of the capacity to choose, which results in three kinds of freedom: social freedom, psychological freedom and potential freedom. *Social freedom* is about opportunity to choose and denotes absence of restriction by other people. *Psychological freedom* is about the capacity to choose and denotes absence of inner restrictions. *Potential freedom* is about information on possible choice options and awareness of external opportunities.

This difference in three kinds of freedom can be illustrated by the case of a prisoner in a cell with an unlocked door and a route to freedom. The prisoner can decide not to use that opportunity to escape because he or she foresees punishment. This is a case of social unfreedom. The prisoner can also decide to forego the escape opportunity because he or she does not dare to escape, preferring the security of the prison above the challenges of real life. This is a case of psychological unfreedom. Lastly the prisoner can miss out the escape opportunity because he or she did not know that the door was open. This is a case of potential unfreedom.

In addition to *actual* freedom, there is *perceived* freedom. Though typically related, these kinds of freedom can diverge; one can think one is free while one is not, or think one is not free in spite of considerable choice. Both actual freedom and perceived freedom can affect happiness, possibly independently.

4.2.2. Indicators of freedom in nations

How can these three kinds of freedom be measured and compared across nations?

Actual freedom

Below I present the available indicators for the three kinds of actual freedom in nations and check whether the conceptual distinction is reflected in the data. Full detail for the operationalization is presented on the technical appendix.

Social freedom. External restriction to choice can be measured in different domains. In this study I use available information on choice restrictions in the domains of economic life, political life and private life of citizens (or individuals within that nation).

- *Economic freedom* is measured by absence of restrictions on business using available indexes that differ slightly in the aspects they cover. I combined three indexes to get an average ‘Economic freedom’ index: the Economic Freedom of the World, the Heritage Index and the Freedom House Index. Indexes are detailed in Appendix.
- *Political freedom* is measured using absence of restrictions for individuals to participate in the political process, such as civil liberties within a nation. Nation scores on these matters are gathered by Freedom House (2005). Indexes for civil liberties are presented in Appendix.
- *Private freedom* is measured absence of restrictions on choice in the personal sphere of life, such as travel, abortion and marriage, first gathered by Veenhoven (2000).

Data on the above mentioned indicators of social freedom were taken from the dataset ‘States of Nations (Veenhoven 2013b) On that basis I calculated a *comprehensive index of social freedom* by adding the z scores of the indexes of economic freedom, private freedom and political freedom above and then the indicator was adjusted to a [0-1] range.

Psychological freedom. Psychological freedom is a lack of inner restrictions for seizing opportunities to choose. There are several such inhibitions and we do have data on the prevalence of some of the inhibitions in nations.

- A first inner constraint is low *self-esteem*. If you do not feel good about yourself, you will be less apt to take control. Self-esteem is

commonly measured using the Rosenberg Self-Esteem Scale (Rosenberg, 1965) and average scores on that scale are available for 53 nations over the years 1965-2002 (Schmitt & Allik, 2005). The variable name is SelfEsteem_2002.

- A second psychological restraint is *acquiescence*, that is, a tendency to agree with what other people say. This trait is measured using 'yes-saying' to survey questions and is commonly used as an indicator of response style. However, a strong tendency to agree to any question can also be seen as a 'lack of guts', i.e. a lack of psychological freedom. Data is available for 56 nations over the years 1980-2004 (Smith, 2004). The variable name in States of Nations is Acquiescence_2002.

I calculated a comprehensive index of *psychological freedom* by adding the z scores of the two aspects, giving positive weight to self-esteem and negative weight to acquiescence. The indicator was then adjusted to a [0-1] range.

Potential freedom. As noted above, potential freedom is one's awareness of opportunities. As such potential freedom in nations may be reflected by two indicators:

- the number of newspapers per 1000 inhabitants
- access to internet per 1000 inhabitants

The indicator for potential freedom was calculated as the sum of these adjusted to a [0-1] range.

Total actual freedom. Finally, the indicator of actual freedom was calculated as the sum of social freedom, psychological freedom and potential freedom, adjusted to a [0-1] range.

Relationship between the three types of freedom in nations. I conducted a factor analysis in order to see how the different indicators presented above were connected to the three indices following Bay's (1970) classification.

The results are presented in Table 4.3 below. I conducted first a factor analysis to determine the number of factors. Using the scree plot, three factors had an Eigen value superior than 1 and the slope was sharper after the third factor; this confirmed the prominence of three factors. The

variance explained by these three factors is 76.3%. After a varimax rotation, I obtain the factor loadings shown in Table 4.3, values below 0.30 are not considered. Three factors load distinctively. Nonetheless, there are some overlaps between the different types of freedom; freedom to travel loads mainly on social freedom, but there is a small loading on factor 2, psychological freedom. Economic freedom 2 loads almost as much on factor 3, potential freedom as on factor 1, social freedom. Finally, the number of newspaper is loading mainly on potential freedom as expected, but it loads almost as much negatively on factor 2, psychological freedom.

Still the three factors reflect Bay's taxonomy fairly well.

Table 4.3: Indicators of freedom in nations: a factor analysis (N=33)

	Social Freedom Factor 1	Psychological freedom Factor 2	Potential freedom Factor 3
Freedom of marriage	.965		
Freedom to travel	.893	-.321	
Freedom to abort	.369		
Suppression Civil Liberties	-.938		
Economic freedom 1	.700		
Economic freedom 2	.581		.515
Acquiescence		-0.988	
Self-esteem		0.575	
Internet users			.911
Number of newspaper		-.590	.615

Perceived freedom

Perceived freedom in nations can be seen as the degree to which citizens feel they are in control of their life. The World Values Surveys contain a question on that matter that reads 'Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means 'none at all' and 10 means 'a great deal' to indicate how much freedom of choice and control you feel you have over the way your life turns out'. This variable is available for 85 nations between 1990 and 2005 and is labelled as FreeLife_1990.2005 in the data file States of Nations.

4.3. Results

Let us now see how freedom and happiness relate in rich nations. Note that I do not report statistical significance of correlations; since the data I use cover almost all developed nations such test makes no sense.

4.3.1. Actual and perceived freedom

As shown in Table 4.4, the zero-order correlations of social, potential and psychological freedom with perceived freedom are equivalent (respectively +.32, +.29 and +.32) but small. One interpretation is that the measures of actual freedom I defined do not capture the limitations to choice very well. Another interpretation is that much of the perceived freedom is illusory.

Table 4.4: Zero order correlations between perceived freedom and actual freedom indicators (N=33)

	1. Perceived freedom	2. Social freedom	3. Psychological freedom	4. Potential freedom
1. Perceived freedom	-	.32	.32	.29
2. Social freedom	-	-	-.16	.42
3. Psychological freedom	-	-	-	.42

4.3.2. Happiness and actual freedom

All correlations between happiness and freedom in Table 4.5 are positive, which means that freedom and happiness tend to go hand in hand. The zero-order correlations vary from modest in the case of psychological freedom ($r=+.27$) to strong in the case of potential freedom ($r=+.60$). The pattern changes dramatically when controlling for economic prosperity. Whereas the partial correlation of psychological freedom with happiness increases slightly from +.27 to +.30, the correlations with social and potential freedom are largely wiped out. This means that the latter two kinds of freedom are a by-product of societal development, while

psychological freedom is rather independent or even negatively correlated to societal development. In other words, social and potential freedom are part of a wider set of external conditions for happiness, while psychological freedom is about inner capability to deal with these conditions, which is not implied in these.

Table 4.5: Freedom and happiness in 33 nations 2000-2009

Freedom	Correlation with average happiness	
	<i>zero-order</i>	<i>wealth controlled</i>
Actual freedom		
- social freedom	+.37	+.09
- psychological freedom	+.27	+.30
- potential freedom	+.60	+.11
Perceived freedom	+.64	+.48

4.3.3. Happiness and perceived freedom

The strongest correlations in Table 4.5 are between happiness and perceived freedom in nations. The zero-order correlation is +.64, which fits the earlier analysis of Verme (2009). The partial correlation is somewhat lower, but with +.48 still sizable.

Paths from freedom to happiness

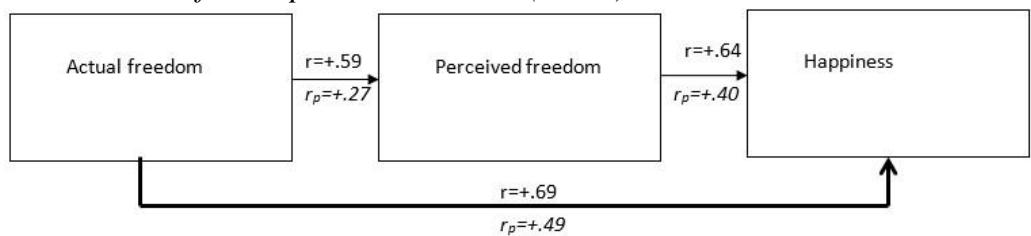
So all kinds of freedom correlate more or less with average happiness in nations, since these variants of freedom are inter correlated (cf. Table 4.4) one kind of freedom may affect happiness through the other. Below I report some attempts to disentangle these effects.

Simple path

To what extent perceived freedom can be explained by actual freedom? I aggregate the z-scores of the three types of freedom and build an ‘actual freedom’ indicator, and calculate zero order correlations as well as partial correlations between actual freedom, perceived freedom and happiness. The results are presented in the Figure 4.2 below. The link between actual

freedom and happiness is the most important one. When controlling for actual freedom, the partial correlation between happiness and perceived freedom is much lower ($r=+.40$) than the zero order correlation, but it still does not explain everything. One reason might be that there is an illusory freedom that does not find echo in the ground of actual freedom. Another reason may again be that the indicators of actual freedom do not cover all opportunity to choose.

Figure 4.2: Link between actual freedom, perceived freedom and happiness in rich nations for the period 2000-2009 (N=40)



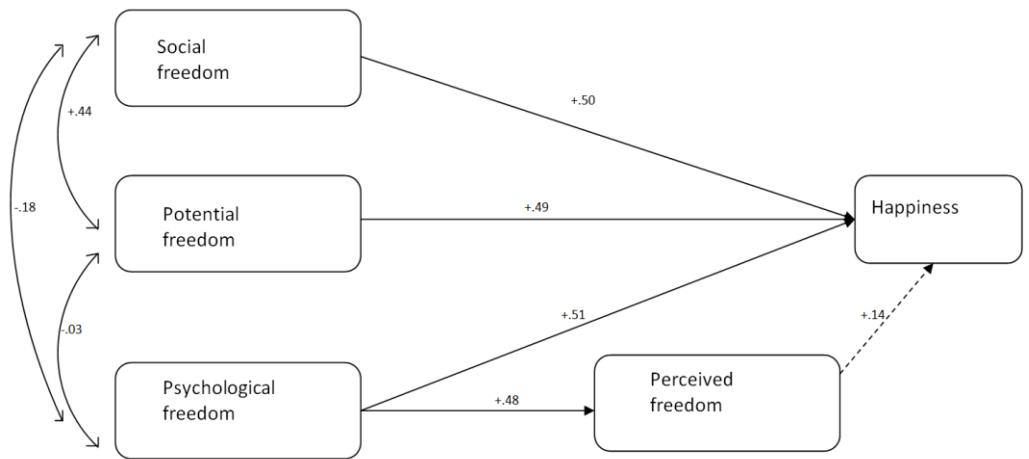
Full path

As shown in the previous sections there are differences in actual freedom and in perceived freedom, and each correlate with happiness. Social freedom and potential represents the freedom of the environment in which individuals live; so I expect them to have a large influence on happiness, as largely depicted in the literature (Murray (1988), Morrissey (1991), Frijters et al. (2004)) but not to be the main contributors of perceived freedom *per se*. Conversely, I expect perceived freedom to be more a mental construal than a result of the environment, hence I expect perceived freedom to be determined mainly by psychological freedom; therefore, the influence of psychological freedom on happiness should be mediated by perceived freedom.

I expect 1) an influence of psychological freedom on happiness via perceived freedom and a direct effect, 2) a direct influence of social freedom on happiness, 3) a direct influence of potential freedom on happiness.

I checked this hypothesized path using AMOS 5.0. See Figure 4.3. This analysis suggests that the three types of freedom influence happiness equally (+.50, +.49 and +.51). There is also a direct effect of psychological freedom on perceived freedom. The hypothesized model showed a good fit with the data: $\chi^2(3)= 3.52$, NFI=0.95, CFI=0.97, RMSEA=0.06.

Figure 4.3: Happiness and freedom in nations 2000-2009; a path model ³³



4.3.4. The case of Finland and France

How does this all fit the difference in happiness between Finland and France? Finland scores better on all aspects of freedom. However, whereas the difference in social and potential freedom are not that dramatic, the differences in psychological freedom and perceived freedom are very strong, as shown in Table 4.6.

³³ CFI=0.95, RFI=0.97, RMSEA=0.06, N=33

Table 4.6: Actual and perceived freedom in France and in Finland, z scores range [0-1]

Freedom	France	Finland	Percentage of difference in scale range in rich nations
Actual freedom	0.47	0.78	31%
Social freedom	0.62	0.74	12%
Psychological freedom	0.37	0.68	31%
Potential freedom	0.92	1	8%
Perceived freedom	0.53	0.93	40%

4.4. Discussion

Explanations

So much of the difference in average happiness between Finland and France seems to be in psychological freedom. This raises the question of what explains these disparities in psychological freedom. Socialization naturally comes to mind. Socialization is deeply embedded in a culture and involves several aspects. The first is parental rearing. When asked about what are the important values to teach a child, French parents, for instance, tend to be keener to answer ‘obedience’ than their Finnish counterparts, 35% in France versus 28% in Finland. Finnish parents tend to value much more ‘independence’, 57% in Finland versus 24% in France. We can imagine this has an influence on the psychological freedom for the inhabitants of rich countries.

A second explanation could be in education and in particular in teaching practices. Two kinds of teaching practices can be distinguished: horizontal teaching and vertical teaching (Algan, 2011). In horizontal teaching, children are encouraged to work in groups and self-motivate, in the vertical teaching lecturing and note taking is favored. France has the most vertical teaching system whereas the Finnish system appears among the most horizontal ones. We can easily imagine that psychological freedom and feelings of freedom follow the same pattern and there is a link

between teaching practices and happiness. This will be described in depth in the next chapter.

Another possible explanation for the disparity in psychological freedom is religion. Protestantism dominates in Finland and Catholicism in France. Several studies have shown that Catholicism tends to foster hierarchical relations. The church is hierarchical in itself with its many different levels, pope, bishops, priests, monks, etc., that is led from the top down and where there is little room for interpretation. Protestantism, in contrast, sees less need for intermediaries between the believer and God and leaves the believer more freedom. Thus, the Catholic's 'top-down approach' will create less psychological freedom than the Protestant's 'bottom-up approach'. This viewpoint is explored in detail in Chapter 6.

Limitations

Cases: It should be noted that the number of nations used here is fairly limited, with just above thirty countries for which full data set is available. This analysis should be replicated once more data become available.

Measurement: the measurement of freedom in nations was not ideal either. Regarding social freedom, I was limited by the data available to build an indicator of personal freedom; a few indicators, especially the ones built by Humana (1992), were a grade from 1 to 4. While this might be fine to compare all nations, this is not the best indicator when comparing developed nations, as most of them have the best grade. Likewise, the results from the World Values Survey cannot be used as they are based on surveys, and my intention was to avoid a response factor effect and use objective data (i.e., either data that is either measurable or drawn from experts' ratings). Therefore, I was limited in the construction of some indicators, particularly for personal freedom. This also means we need more objective indicators of types of freedom such as contraception, homosexuality or euthanasia.

Regarding psychological freedom, I used acquiescence and low self-esteem as a proof to lack of guts. I see self-esteem as a prerequisite to take risks and seize opportunities, which is congruent with the definition of psychological freedom. Likewise, acquiescence, which according to

Schmitt et al. (2007) is more present in the collectivistic cultures, obviously carries a cultural load and can be seen as a form of social code. Together with the social code, acquiescence might carry a form of mental restrictions to answer bluntly. A way to complete this indicator would be to add a proper indicator of risk avoidance.

Finally, I feel the operationalization of potential freedom is decent. However, the way I defined these three types of freedom is just a first step. I certainly hope to see future improvement in the construction of these indicators.

Causality: This study reports a cross-sectional analysis and that method sets limits to identifying causality. Possibly part of the correlation is due to effects of happiness on freedom, rather than reversely and this is most likely to be the case with psychological freedom. Trend analysis can answer that question when more data points become available in the future.

4.5. Conclusion

Much of the difference in average happiness across rich nations seems to be due to variation in freedom, not only perceived freedom, but independent of that also actual freedom and in particular psychological freedom. One reason why the Finns report happier than the French seems to be that they feel more free. Their greater actual freedom seems to be not only a matter of less restrictiveness in Finish society but also in the minds.

Appendix

Variables used in comparative analysis of 49 nations

Variable	Measurement	Name in data file States of nations
Happiness	Average answer to question 'Taking all together, how satisfied or dissatisfied are you with your life as a whole these days?'	HappinessLS10.11-2000s ³⁴
Contentment	Average answer to question 'Here is a picture of a ladder, suppose that the top represents the best possible life and the bottom the worst possible life. Where on this ladder would you place your current life?'	HappinessBW11_11to15aged_2001.2006 ³⁵
Hedonic level of affect	The affective component of happiness is measured on the basis of responses to a series of 14 questions on how one has felt yesterday, which figured in the Gallup World Polls (Gallup, 2009). Typical questions are whether one had felt 'depressed', 'stressed' or rather had felt 'well rested' and 'smiled a lot' yesterday. Respondents could answer 'yes' or 'no'. I computed an affect balance score per nation, subtracting the	HappinessYesterdayABS_2006.08 ³⁶

³⁴ Veenhoven R. (2011b) *States of Nations, Happiness, Average happiness*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³⁵ Veenhoven R. (2011b) *States of Nations, Happiness, Average happiness*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³⁶ Veenhoven R. (2011b) *States of Nations, Happiness, Average happiness*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

	percentage of negative feelings from the percentage of positive feelings. The variable name in the data file States of Nations is HappinessYesterdayABS_2006.08.	
Psychological freedom	Rosenberg (1965) Self Esteem Scale: 10-item questionnaire a: I feel that I am a person of worth, at least on an equal plane with others, b: I feel that I have a number of good qualities, c: All in all, I am inclined to feel that I am a failure, d: I am able to do things as well as most other people, e: I feel I do not have much to be proud of f: I take a positive attitude toward myself, g: On the whole, I am satisfied with myself, h: I wish I could have more respect for myself, i: I certainly feel useless at times, j: At times I think I am no good at all	SelfEsteem_2002 ³⁷
	Acquiescence: Revised NEO personality inventory	Acquiescence_2002 ³⁸
Political freedom	Civil liberties: respect of civil liberties in nations is estimated on the basis of	CivilLiberties_2004 ³⁹

³⁷ Veenhoven R. (2011b) *States of Nations, Personality*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³⁸ Veenhoven R. (2011b) *States of Nations, Personality*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

³⁹ Veenhoven R. (2011b) *States of Nations, Freedom, Democracy*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at:

http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

	expert rating of eleven aspects: 1. Free and independent media, 2. Open public discussion, free private discussion, 3. Freedom of assembly and demonstration, 4. Freedom of political organization, 5. Equal law, non-discriminatory judiciary, 6. Protection from political terror, 7. Free trade unions, effective collective bargaining, 8. Free professional and other private organizations, 9. Free business, 10. Free religion, 11. Personal freedoms such as: gender equality, property rights, freedom of movement, choice of residence, choice of marriage and size of family. Scores are also available for 132 nations. Scores are given between 1 and 7 by a team of regional experts and scholars (A rating of 1 indicates the highest degree of freedom and 7 the least amount of freedom)	
Private freedom	1) Abortion: (FreeAbortion_1995): Legal grounds, number in law. Grounds are: a) to save women's life, b) to preserve physical health, c) to preserve mental health, d) rape or incest, e)fetal impairment, f) economic or social reasons, g)on request. Higher number indicates more freedom. 2)Marriage(FreeMarriage_1990, 'Legal restrictions to interracial, interreligious, or civil marriage' and 'Equality of sexes	PrivateFreedom_1990s ⁴⁰

⁴⁰ Veenhoven R. (2011b) *States of Nations, Freedom, Private Freedom*, Erasmus University of Rotterdam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

	<p>during marriage and for divorce proceedings'), as ranked by Humana(1992) on a scale from 1 to 4, items 36 and 37</p> <p>3)Travel (mean of FreeTravel1_1990 'Freedom to travel in own country' and FreeTravel2_1990 'freedom to travel outside the country') as ranked by Humana(1992) on a scale from 1 to 4(items 1 and 2),</p>	
Economic freedom	<p>Economic freedom Index 1: The first index of Economic Freedom of the World (EFW) was compiled by Gwartney and Lawson (2006) and is called the Fraser Index. The EFW index contains 38 components designed to measure the degree to which a nation's institutions and policies are consistent with voluntary exchange, protection of property rights, open markets, and minimal regulation of economic activity. The indexes are classified in 5 categories: size of the government, property rights, access to sound money, freedom to trade internationally, regulation of credit labor and business. Scores on this index are available for 138 nations around 2006.</p>	FreeEconIndex1_2006 ⁴¹
	<p>Economic freedom Index 2: Freedom</p>	FreeEconIndex3_1995 ⁴²

⁴¹ Veenhoven R. (2011b) *States of Nations, Freedom, Economic Freedom*, Erasmus University of Rottodam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

⁴² Veenhoven R. (2011b) *States of Nations, Freedom, Economic Freedom*, Erasmus University of Rottodam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

	House Index developed by (Messick and Kimura, 1996): A total of eighty-two countries are rated using six criteria: Freedom to hold property, Freedom to earn a living, Freedom to operate a business, Freedom to invest one's earnings, Freedom to trade internationally, and Freedom to participate in the market economy. For the first four items, countries are scored 0, 1, 2, or 3, with 3 being the most free. For the last two items, countries are scored 0, 1, or 2, with two being the most free. The index is based on the simple sum of these six scores. The highest possible score, indicating the most freedom, is 16. The lowest possible score is 0. Scores on this index are available for 69 nations in the years 1995-96.	
Potential Freedom	Internet Use: Availability of internet users per 1000 people as defined by the United Nations-United Development Reports(2007)-table 13	InternetUse_2005 ⁴³
	Newspaper Use: Newspaper consumption per 1000 people as defined by the United Nations-United Development Reports(1998)-table 34	Newspapers_1995 ⁴⁴

⁴³ Veenhoven R. (2011b) *States of Nations, Modernity, Informatization*, Erasmus University of Rottodam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

⁴⁴ Veenhoven R. (2011b) *States of Nations, Modernity, Informatization*, Erasmus University of Rottodam, accessed on 1/11/2011 Available at: http://worlddatabaseofhappiness.eur.nl/statnat/statnat_fp.htm.

Chapter 5: Education and happiness⁴⁵

In Chapter 5, I investigate the link between education and happiness and raise the following question: *how are the teaching methods and the level of happiness related in developed nations?*

5.1. Introduction

The differences in average happiness in nations have been explained mainly using social structural variables, for which considerable international statistics are available. By lack of data, cultural explanations have received less attention. Still there are indications that culture does matter. Inglehart (2000) has found strong correlations between happiness and value patterns in nations, people being happier in nations where individualistic values prevail. Likewise Senik (2011) has highlighted the influence culture has on happiness on immigrants in France.

Focus on education

In this chapter I look into the effects of education on happiness in nations. Education is likely to be a powerful determinant of happiness, since we spend a substantial part of our life in school. Merton(1949) states that together with family and religion, education is one of the main mechanisms for transmitting culture.

A special reason for focusing on education is that, as we saw in Chapter 4 in the illustrative case between France and Finland, a considerable part of the difference in average happiness across developed nations is in the psychological autonomy of its citizens. This calls for an explanation of this difference in ‘national character’.

In the previous chapter I have considered the link between various types of freedom (social, psychological, potential) and happiness. In particular I found that psychological freedom is playing a key role in

⁴⁵ This chapter is published as Brulé G. and Veenhoven R. (2014) Democratic teaching and happiness in developed nations. *Advances in Applied Sociology*, 4:11.

explaining the difference of happiness in the illustrative case of France and Finland. In this context I explore in this chapter whether the observed differences in self-direction are reproduced in school education. In my view the difference is not in *what* pupils learn in school, since curricula are quite similar in developed nations. I rather look at *how* pupils learn, since teaching practices involve much implicit learning. In that context I focus in particular on ‘participatory teaching.’ I expect that participatory teaching fosters psychological autonomy, which in its turn fosters happiness. Thus, can participatory teaching provide some understanding in the somewhat lower reported life satisfaction in France? Below I describe the plan to attempt to bring some answers.

Plan of this chapter

Below I will consider teaching styles and how these are measured. I construct an index of ‘participatory teaching’ and inspect how the scores on that index differ across nations.

On this basis I will then explore the relation between happiness and participatory teaching in nations. For reasons of comparability I have limited myself to comparing developed societies. I used data on teaching in 37 nations and I checked whether differences in this kind of teaching correspond to differences in average happiness in nations, both in the general public (Study 1) and among secondary school pupils (Study 2). I find a strong correlation in Study 1, but not in Study 2.

Having established these basic facts, I go on to explore a possible causal path, and test the hypothesis that participatory teaching adds to happiness through its effect on psychological autonomy. In that context I explore the link between participatory teaching and freedom, I then investigate its link with happiness and explain why participatory teaching influences happiness for adults and not for teenagers. Finally, I acknowledge the limitations of my study.

5.1.1. Participatory teaching

As noted, I focused not on *what* pupils learn in school, but on *how* they learn. I looked for teaching practices likely to influence self-direction.

Concept

I have built on work by Algan (2011) who distinguishes two types of teaching: *vertical* teaching and *horizontal* teaching. The former refers to lecturing and note-taking, while the latter is based on work in groups and cooperation among students. Below I describe how these matters are measured and how I combined the results to obtain an index of 'participatory' teaching.

Measurement

Two studies have been done to assess teaching practices across nations and the results show considerable differences.

The *Civic Education Study (CES)* is a survey of pupils and teachers in the eighth grade, in 25 countries⁴⁶ in 1999. Pupils are teenagers around 13-14 years old. The survey was run by the International Association for the Evaluation of Educational Achievement (IEA). Both pupils and staff completed questionnaires. The pupils from each country were selected in a two-step process; first by random selection of schools and then by random selection of pupils in the selected schools. The teachers and school principals of the selected schools also completed a questionnaire.

The teacher questionnaire involved questions about teaching practices: 'In your class, a) How often do students work in groups? b) How often do students work on projects? c) How often do students study textbooks? d) How often do students participate in role play, e) How often does the teacher lecture? , f) How often does the teacher include discussions? g) How often does the teacher asks questions?'. The answers were given the values 1 never, 2 sometimes, 3 often and 4 very often.

Following Algan's method, I focused on the two ends of the spectrum of teaching practices from the CES, 'Teacher lectures' on one side and 'Students work in groups' on the other. The former indicates

⁴⁶ Australia, Bulgaria, Chile, Cyprus, Czech Republic, Denmark, England, Estonia, Finland, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Russian Federation, Slovak Republic, Slovenia, Sweden, Switzerland and the United States

vertical teaching practices, the latter horizontal teaching. These dimensions have also been referred to as respectively ‘teacher centered’ and ‘student centered’ education. A ‘z-score’ was calculated, ranging from 0 for the country with the most vertical teaching (France) to 1 for the country with the most horizontal teaching (Sweden).

The *Trends in International Mathematics and Science Study (TIMSS)* is a multi-country comparative test of student cognitive achievement in mathematics and science, conducted in 1995 by the IEA, the same international consortium that constructed the CES database. The TIMSS also contains information about grade 8 students and covers 37 countries⁴⁷. Students, school principals and teachers were questioned using a representative sample of schools and students from the different nations studied. Teaching practices were measured using the individual student surveys conducted in all classrooms in each of the sampled schools.

The survey covers class subjects including: mathematics, science, biology, chemistry and the earth sciences. I focused on the teaching practices in mathematics, as this allowed us to make comparison between a maximum number of countries. Additionally, the focus on mathematics was expected to be a good case for comparing how pupils learn, because of the great similarity in what is being learned.

The questions on teaching practices used in my analysis were: ‘In school, how often do you do these things? Copy notes from the board during the lessons? Work together in pairs and small groups in class?’ The answers ranged from 1 all the time, 2 often, 3 sometimes, to 4 never. A z-score was calculated, ranging from 0, the country with the most vertical teaching (Romania) to 1, the country with the most horizontal teaching (Switzerland).

Pooled data: In order to have the highest number of countries I combined

⁴⁷ Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Indonesia, Iran, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Netherlands, Norway, Portugal, Romania, Russia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States

the ratings obtained in the two studies, the TIMSS and the CES. When both studies covered the same country, an average score was used.

Index of participatory teaching in nations

I combined the scores for nations on horizontal and vertical teaching, by subtracting the latter from the former. The resulting index indicates the extent to which horizontal teaching dominates in a country. I call it the index of *participatory teaching*. The results for 37 nations are shown in Table 5.1.

Table 5.1: Participatory teaching ranking in 37 nations

Switzerland	0.95
Denmark	0.87
Sweden	0.85
Iceland	0.85
Netherlands	0.85
United Kingdom	0.84
Canada	0.82
Norway	0.74
United States	0.72
Slovak Republic	0.72
Lithuania	0.71
Australia	0.70
Poland	0.64
Germany	0.64
Israel	0.58
Slovenia	0.56
Latvia	0.53
Belgium	0.51
Finland	0.51
Hong Kong	0.49
Estonia	0.48
Portugal	0.47
Spain	0.47

Italy	0.44
Bulgaria	0.37
Hungary	0.34
Czesc Republic	0.33
Austria	0.28
Korea, Republic of	0.27
Romania	0.27
Cyprus	0.26
Turkey	0.21
Greece	0.19
Russian Federation	0.18
Japan	0.10
Ireland	0.06
France	0.00

Differences across nations

Looking at Table 5.1 it can be seen that France is the country where teaching appears as the least participatory and that the country where teachers seem to use the most participatory methods in Switzerland. The low score of France fits a wider south European pattern and is possibly enhanced by the selective nature of the French schooling system. The high score of Switzerland fits a north-western European pattern and is possibly fostered by the high degree of direct democracy in the Swiss political system. This South of Europe-North of Europe will be explored more in depth in the next chapter for power distance.

Not a matter of money

Do these differences in teaching style reflect cultural differences, or are they a by-product of financial investment in education? This could be the case as vertical teaching is likely to be cheaper than horizontal teaching. There is indeed a correlation between ‘participatory teaching’ and the percentage of GDP spent in education, however it is small ($r= +.24$) and a look at the relationship between participatory teaching and educational expenses shows considerable divergence: for instance participatory

teaching is less common in France and Spain than in the Netherlands, while these countries spend equally on education (11% of GDP). Ireland scores the second lowest on participatory teaching, although it spends the most on education.

5.2. Study 1 : Participatory teaching and happiness in the general public in developed nations

Are these differences in participatory teaching in nations related to happiness? I explored this in a comparison of average happiness in the general public of 27 developed nations.

5.2.1. Method

Cases

For reasons of comparability and availability of data, I restricted the data to that for developed nations (as described in previous chapter, a nation is considered as ‘developed’ when its GDP is superior to \$20,000). Of the 37 nations for which we have data on both participatory teaching and happiness 27 fit this criterion. These nations are: Austria, Australia, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Israel, Italy, Japan, the Netherlands, Norway, Portugal, Slovenia, South Korea, Spain, Sweden, Switzerland, United Kingdom, and the United States.

Measures

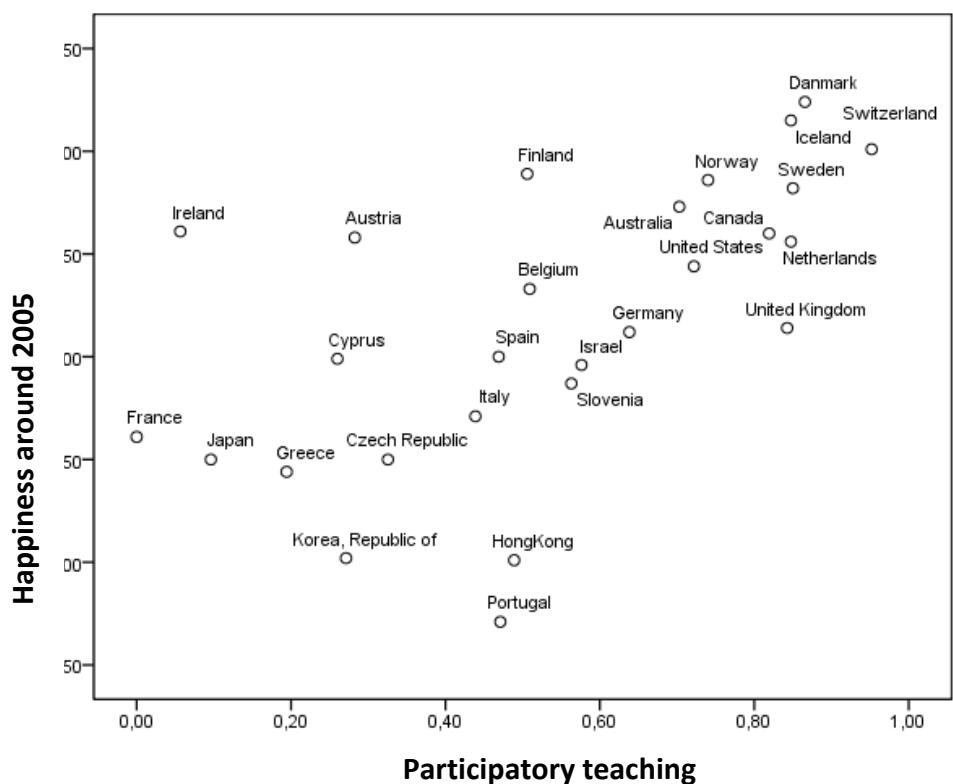
Happiness in these nations is measured using the average response to the question: ‘Taking all together, how satisfied or dissatisfied are you with your life as a whole these days?’, Please answer by ticking a number between 0 to 10, where 0 stands for most ‘dissatisfied’ and 10 for most ‘satisfied’. In the World Database of Happiness this question is classified as a measure type O-SLW-c-sq-n-11-a (Veenhoven 2012d). Responses to this question and equivalent ones are gathered in the collection ‘Happiness in Nations’ of the World Database of Happiness (Veenhoven 2011b).

Participatory teaching in nations is measured using the prevalence of horizontal teaching over vertical teaching (cf. section 1.2).

5.2.2. Results

I started with a scatter plot of participatory teaching (horizontal) against and happiness (vertical). See Figure 5.1. We see a linear pattern of correlation, in which Switzerland stand out as the country with most participatory teaching and the highest happiness and Japan as a case of little participatory teaching and low happiness. Ireland shows a particular pattern, with a relatively high level of happiness in spite of little participatory teaching.

Figure 5.1: Happiness and participatory teaching in 27 developed nations: scatter plot



Given this linear pattern it makes sense to compute a correlation: $r = +.60$ ⁴⁸. To appraise the strength of this correlation I compared it with other variables in the same nation set. The correlation between happiness and percentage of GDP spent on education was +.30, which means that from a happiness perspective, teaching methods are more important for happiness than the amount of money a nation invests in education. The correlation between happiness and participatory teaching is also stronger than that for happiness and income inequality (-.25) or public health expenditures (+.37). The strength of the correlation for happiness and participatory teaching is comparable to institutional factors such as gender equality (+.60) and government effectiveness (+.73). So we have really hit on something important.

Analyzing horizontal and vertical teaching separately does not change the picture. Horizontal teaching is positively correlated with happiness while vertical teaching is negatively correlated. Separate analysis of the two datasets also did not change the picture. Participatory teaching correlates positively with happiness in TIMSS data (+.56) and in CES data (+.55).

Next to these bi-variate analyses, I checked for possible spuriousness in the correlation, controlling for variables that are likely to produce an inflated correlation, without wiping away true correlation⁴⁹. Since wealth might be such a factor and there are still differences in affluence in this set of developed nations, I controlled buying power per head, which reduced the correlation to +.43. I also controlled average IQ as an indicator of the quality of the educational system and the murder rate as an indicator of order in society. The partial correlations are respectively +.63 and +.54 which suggests that there is a considerable correlation between participatory teaching and average happiness in developed nations.

⁴⁸ Avoiding common practice we do not report statistical significance of correlations among macro variables. Tests of significance inform us about the probability that a relationship found in a random sample also exists in the population from which that sample is drawn. This set of countries was not a random sample and for this reason significance testing makes no sense.

⁴⁹ Contrary to common practice we did not control for all other correlates of happiness in nations. Given the causal interrelations, that would be like throwing away the baby with the bathwater.

5.3. Study 2: Participatory teaching and happiness among high school pupils in nations

5.3.1. Method

After analyzing the relationships between participatory teaching and happiness in the general public, I also assessed the relationship between participatory teaching and happiness in another population, using high-school pupils. Data on happiness were taken from the Health Behaviour in School-aged Children survey (HBSC). In this study, data has been collected about health, health behaviors and life satisfaction among 11, 13 and 15 year olds pupils. The units of sampling are school classes and sample sizes are 1550 per age group in nations (Currie, 2008).

Cases

Data on both happiness of high-school pupils and participatory teaching are available for 22 developed countries. The countries included in the dataset were: Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, United Kingdom and the United States.

Measures

In the HBSC studies happiness is measured using responses to the question: 'Here is a picture of a ladder, suppose that the top represents the best possible life and the bottom the worst possible life. Where on this ladder would you place your current life?' (0 worst possible, 10 best possible). This question differs from the question used in study 1 in that it invites respondents to make a more cognitive evaluation of their life. In the world Database of Happiness this question is classified as a measure of 'contentment' and coded C-BW-c-sq-l-11-c (Veenhoven 2012d). Participatory teaching was measured in the same way as in study 1.

5.3.2. Results

In this case I saw no correlation between average happiness and participatory teaching in nations: $r = +.02$. Separate analysis of horizontal and vertical teaching confirm this correlation as both correlations are very low; the correlation between average happiness and horizontal teaching is -0.03 while correlation between average happiness and vertical teaching is -0.15 .

5.4. Explanations

Why does the average citizen report happier in nations where participatory teaching prevails? Below I will argue that participatory teaching enhances freedom, psychological freedom in particular. In its turn freedom adds to happiness and, especially to happiness in a modern multiple-choice society. Why then are high-school pupils no happier in nations where participatory teaching prevails? Below I will argue that the main effect on happiness is found in long-term personality formation, rather than in short-term enjoyment of school hours.

5.4.1. Participatory teaching prepares for freedom

Much of the differences in average happiness across nations can be explained by freedom, the more freedom society allows, the happier citizens typically are (Veenhoven 2008). Below I will argue that participatory teaching is likely to foster one aspect of freedom in particular, that is, psychological freedom, also called ‘psychological autonomy.’ To that end I will first discuss the concept of freedom and how it affects happiness.

Aspects of freedom

As we saw in Chapter 4, Bay (1970) distinguishes three aspects of freedom: social freedom, psychological freedom and potential freedom. *Social freedom* is about the opportunity to choose and denotes the absence of restrictions imposed by other people. *Psychological freedom* is about the capability to choose and denotes an absence of inner restrictions. *Potential freedom* is about access to information on possible options for choice.

In Chapter 4, I presented indicators of each of these kinds of freedom in nations and a factor analysis confirmed this conceptualization. For the purpose of this study I repeated that analysis for the 27 nations at hand here. The variables used are described on Appendix A. I use different indicators that neatly load on three distinct factors that fit Bay's distinction between three kinds of freedom. See Appendix B.

How freedom can enhance happiness

In Chapter 4, the links between the three types of freedom and happiness was shown. Each type of freedom will add to the chance that one lives a life one wants to live and that one can change one's way of life if it is no longer satisfying. Although there are costs to freedom, such as choice stress, the positive effects appear to dominate (Veenhoven 2000, 2008).

In this context *social freedom* enlarges an individual's opportunities to choose, for instance if choice of a spouse is not limited to one of the same religion, there is a better chance of finding one that really fits you. Opportunities can only be used if one is aware of them, and this is where *potential freedom* comes in. In the example of marrying someone from another religion, there can be misinformation about the consequences of mixed marriage, such as the contention that children from such marriages lack a moral orientation and often end up in jail. Even if one is well informed one may still lack the guts to choose and that is what *psychological freedom* is about. In the above example you may forsake your real love and settle for a marriage of reason in order to avoid rejection by your mother.

How participatory teaching can enhance freedom

Participatory teaching may affect freedom in various ways. One can expect that citizens in societies where participatory teaching prevails press more for freedom practicing in their political behavior what they have learned in school. As such participatory teaching could foster *social freedom* in nations. Participatory teaching also adds to an individual's *potential freedom* in that it trains information seeking and creates more awareness of informational manipulation. Participatory teaching is also likely to foster

psychological freedom, which will add to the chance that citizens use opportunities to choose, and resist pressures to conform.

5.4.2. Test of the causal chain:

Participatory teaching → freedom → happiness

I checked this explanation in a further analysis of Study 1. As a first step I assessed the correlations of the three freedom variant with participatory teaching and average happiness. See table 5.2.

Table 5.2: Correlations of freedom with participatory teaching and happiness in 27 developed nations

<i>Freedom</i>	<i>correlation with participatory teaching</i>	<i>correlation with happiness</i>	
		<i>zero order</i>	<i>participatory teaching partialled out</i>
Social freedom	+.62	+.63	+.55
Psychological freedom	+.69	+.59	+.17
Potential freedom	+.42	+.55	+.58

Two very strong correlations appear between participatory teaching and psychological freedom ($r=+.69$) and between psychological freedom and happiness (+.59), which fits the explanation that participatory teaching appears to add to happiness by fostering psychological autonomy. Yet the data also show effects through other variants of freedom. In order to assess the independent effect of each kind of freedom I computed partial correlations, which are shown in right hand column of Table 5.2.

Looking at these partial correlations, we can see that the correlation between psychological freedom and happiness (+.59) almost disappears when controlling for participatory teaching (+.17). Likewise, we can see in table 5.3 that the relationship between participatory teaching and happiness in nations (+.60) is halved when psychological freedom (+.32) is partialled out. Conversely, the link between participatory teaching and psychological freedom (+.69) is little reduced when happiness is controlled (+.52).

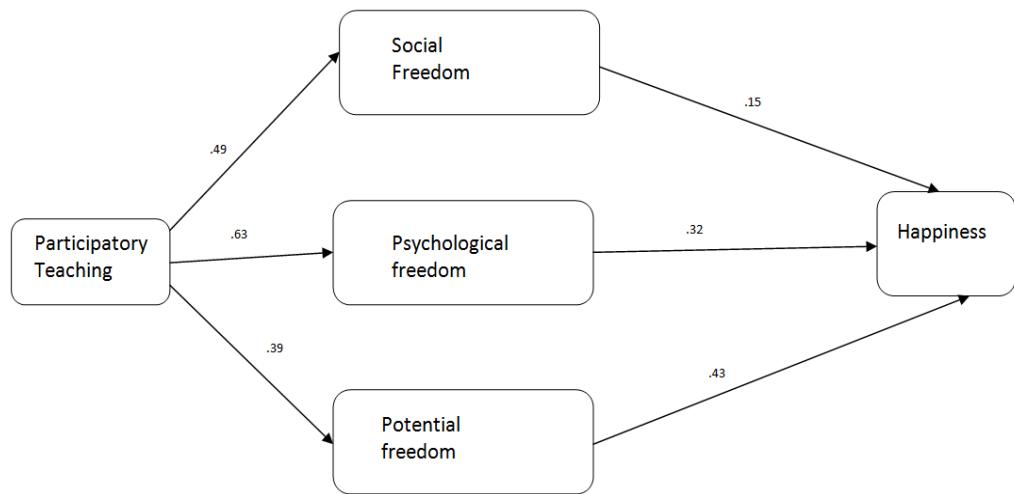
Table 5.3: Correlation of happiness with participatory teaching in 27 developed nations

		+.60
Zero order correlation		
Partial correlations controlling	social freedom	+.32
	psychological freedom	+.32
	potential freedom	+.48

We can also see that social freedom is involved in the link between participatory teaching and happiness as the partial correlation is the same as in the case of psychological freedom (+.32). Participatory teaching does not seem to have an influence in the link between social freedom and happiness as the partial correlation (.55) is almost the same as the zero order correlation (.62). The partial correlation between participatory teaching and happiness (.45) is higher than in the case of psychological freedom. Participatory teaching has no influence on the correlation between potential freedom and happiness.

In this analysis, psychological freedom appears to be the main mediator in the relation between participatory teaching and happiness in nations. Participatory teaching seems to enhance psychological freedom and social freedom, which are both strongly correlated to happiness. To verify this hypothesis I performed a path analysis. Results are presented in Figure 5.2.

Figure 5.2: Participatory teaching, freedom and happiness in 27 developed nations: path analysis



In this analysis we see again that participatory teaching adds to happiness through its effect on psychological freedom in the first place. In this case the influence of potential freedom is a bit higher, while the influence of social freedom is lower than in the earlier partial correlation analysis. The difference is probably in the 5 cases lost in this analysis. Though the model fit could be better, the pattern of links is confirmed.

5.4.3. Why is there no correlation among high school pupils?

The effect of participatory teaching on happiness appeared to be strong in Study 1 among adults in 27 nations, but non-existent in Study 2 among high school pupils in 22 nations. How can we explain this difference? At first one would expect that the effect of teaching style on happiness to be stronger among those sitting on the school bench.

A methodological explanation might be found in the measure of happiness used. In Study 1 happiness among adults was measured using a question about ‘life-satisfaction’ while in Study 2 high-school pupils rated their life on a ladder ranging from the ‘best possible’ to the ‘worst possible.’ The former question taps ‘overall happiness,’ while the latter taps the cognitive component of happiness, called ‘contentment’ in Veenhoven (2012d). Is average ‘contentment’ less sensitive to participatory teaching and freedom? I checked in Study 1 among general population samples, for which data on contentment are also available. I found the link between

participatory teaching and contentment for adults to be in the same range as for life satisfaction (+.55). Possibly the question on contentment is not the most appropriate for youngsters, who typically have less crystallized ideas of what the best possible life is like, as mentioned in Chapter 2. High-school pupils will be more aware of how happy they feel most of the time, so future studies on high school pupils should use affective measures of happiness. For the time being I do not know whether this will make a difference to the results I get.

A more substantive explanation is that there is little difference in freedom among high-school pupils. At that age there is not much to choose to do and one's choices are limited by adults, such as one's parents and teachers. So even if participatory teaching prepares them for freedom, it would make little difference in their present situation and hence seems to have little effect on their happiness.

A related explanation is that the effects of participatory teaching on freedom manifest later in life, when personality has crystallized and when real choices have to be made. In other words, psychological freedom has no use during teenage years, as the number of choices is limited. Participatory teaching is a favorable ground to develop an internal locus of control, and later on, this control orientation favors freedom.

One effect is that inner controlled citizens are more likely to press for social freedom in their society and thus create more opportunity to choose. Another effect is that this psychological mindset will add to the chance that they take advantage of these opportunities to choose and develop a life-style that fits them well. As a result they will be happier.

So it seems that the seeds of participatory teaching flourish only in adulthood in its long-term effects on an individual's psychological freedom. Teenagers reap these fruits later in life.

5.4.4. Net effect of teaching style

The development of psychological autonomy depends on more than just teaching style in school and is particularly influenced by socialization at home. This begs the question of whether there is any independent effect of teaching style. If not, the correlation between participatory teaching and happiness will disappear when home socialization for independence is

controlled. I checked using data of the World Values Survey that involves questions about the importance of things that children can be encouraged to learn at home, one of which is 'independence'. I computed the percentage of affirmative answers in nations and partialled that variable out⁵⁰. This halved the correlation, but did not wipe it out. This does suggest an independent effect.

5.5. Limitations

It should be noted that the number of nations for which all data is available is fairly limited; a larger number of nations with systematic, reliable data would make the conclusions more robust.

Another limitation is in the cross-sectional nature of this analysis, which can suggest causality, but cannot prove that. Cross-national panel studies could solve that problem, but for the time-being such data is not available.

The data used here are at the macro level of nations. My explanation assumes effects at the micro-level, in particular that participatory teaching fosters the development of more autonomous personalities, which later in life results in better choices and hence in greater happiness. Though autonomy ranks high as a goal in participatory education, I found no empirical evidence for long-term effects of this kind of teaching on the development of related personality traits such as self-esteem and control orientation. I neither found any individual level data on school environment in youth and happiness in adulthood. So for the time being, I must make do with these findings at the macro level and these suggest a robust effect of participatory teaching on happiness.

5.6. Conclusion

Adults report happier in nations where participatory teaching prevails. The effect of participatory teaching seems to lie in its fostering of freedom in society. Participatory teaching might provide a countervailing power

⁵⁰ N = 18

against attempts to impose limits on individual's choice and could help individuals develop the psychological autonomy required to use these opportunities.

Appendix A

Measures of variables used in cross national analysis

Variable	Measurement	Used in study	Name in data file States of nations
Happiness	Average answer to question 'Taking all together, how satisfied or dissatisfied are you with your life as a whole these days?'	1	HappinessLS10.1 1-2000s
	Average answer to question 'Here is a picture of a ladder, suppose that the top represents the best possible life and the bottom the worst possible life. Where on this ladder would you place your current life?'	2	HappinessBW11_11 to 15aged_2001.2006
Economic prosperity	The purchasing power per capita is obtained by dividing the nation's GDP at purchasing power parity (PPP), i.e. all goods and services produced in the country valued at prices prevailing in the United States.	1-2	RGDP_2005
Participatory teaching	<p>Participatory teaching is computed from two studies: the CES study and the TIMSS.</p> <p>CES: the teacher questionnaire involved questions about teaching practices: 'In your class, a) How often do students work in groups? b) How often do students work on projects? c) How often do students study textbooks? , d) How often do students participate in role play, e) How often does the teacher lecture? , f) How often does the teacher include discussions, g) How often does the teacher asks questions?'. The answers were given the values 1 never, 2 sometimes, 3 often and 4 very often.</p> <p>TIMSS: Students, school principals and teachers were questioned using a representative sample of schools and students from the different nations studied. Teaching practices were measured using the individual student surveys conducted in all classrooms in</p>	1-2	ParticipatoryTeaching_1995.99

	each of the sampled schools. The survey covers classes on: mathematics, science, biology, chemistry and the earth sciences.		
Psychological freedom	Index of: 1) <i>Rosenberg (1965) Self Esteem Scale:</i> 10-item questionnaire a: I feel that I am a person of worth, at least on an equal plane with others, b: I feel that I have a number of good qualities, c: All in all, I am inclined to feel that I am a failure, d: I am able to do things as well as most other people, e: I feel I do not have much to be proud of f: I take a positive attitude toward myself, g: On the whole, I am satisfied with myself, h: I wish I could have more respect for myself, i: I certainly feel useless at times, j: At times I think I am no good at all. 2) <i>Acquiescence:</i> Revised NEO personality inventory.	1	SelfEsteem_2002 Acquiescence_2002
Economic freedom	Index of: 1) Economic freedom Index 1: The first index of Economic Freedom of the World (EFW) was compiled by Gwartney and Lawson (2006) and is called the Fraser Index. The EFW index contains 38 components designed to measure the degree to which a nation's institutions and policies are consistent with voluntary exchange, protection of property rights, open markets, and minimal regulation of economic activity. The indexes are classified in 5 categories: size of the government, property rights, access to sound money, freedom to trade internationally, regulation of credit labor and business. Scores on this index are available for 138 nations around 2006. 2) Economic freedom Index 2: Freedom House Index developed by (Messick and Kimura, 1996): A total of eighty-two countries are rated using six criteria: Freedom to hold property, Freedom to earn a living, Freedom to operate a business, Freedom to invest one's earnings, Freedom to trade internationally, and Freedom to participate in the market economy. For the first four items,	1	FreeEconIndex1_2006 FreeEconIndex3_1995

	<p>countries are scored 0, 1, 2, or 3, with 3 being the most free. For the last two items, countries are scored 0, 1, or 2, with two being the most free. The index is based on the simple sum of these six scores. The highest possible score, indicating the most freedom, is 16. The lowest possible score is 0. Scores on this index are available for 69 nations in the years 1995-96.</p>		
Political freedom	<p>Index of: 1) <i>Civil liberties</i>: respect of civil liberties in nations is estimated on the basis of expert rating of eleven aspects: a) Free and independent media, b) Open public discussion, free private discussion, c) Freedom of assembly and demonstration, d) Freedom of political organization, e) Equal law, non-discriminatory judiciary, f) Protection from political terror, g) Free trade unions, effective collective bargaining, h) Free professional and other private organizations, i) Free business, j) Free religion, k) Personal freedoms such as: gender equality, property rights, freedom of movement, choice of residence, choice of marriage and size of family. Score are also available for 132 nations.</p>	1	CivilLiberties_2004
Private freedom	<p>Index of: 1) Free abortion: Legal grounds, number in law. Grounds are: a) to save women's life, b) to preserve physical health, c) to preserve mental health, d) rape or incest, e) fetal impairment, f) economic or social reasons, g) on request. Higher number indicates more freedom.</p> <p>2) Free marriage, 'Legal restrictions to interracial, inter-religious, or civil marriage' and 'Equality of sexes during marriage and for divorce proceedings'), as ranked by Humana (1992)</p> <p>3) Free travel: freedom to travel outside the country' as ranked by Humana (1992) on a scale from 1 to 4(items 1 and 2),</p>	1	FreeAbortion_1995 FreeMarriage_1990 FreeTravel1_1990 FreeTravel2_1990

Potential Freedom	Index of: 1) Availability of internet users per 1000 people as defined by the United Nations-United Development Reports(2007)-table 13 and 2) Newspaper use: Newspaper consumption per 1000 people	1	InternetUse_2005 Newspapers_1995
IQ	IQ tests in general population samples completed with estimates based on observations in comparable countries.	1	IQ_2006
Murder rate	Murder rates per 100,000 inhabitants	1	MurderRate_2004.09
Value independence	% affirmative answers to a question on importance of 'independence' as a quality that children can be encouraged to learn at home	1	ValueChildIndependence_2000s

Source: Data file 'States of Nations' (Veenhoven 2012d).

Appendix B

Factor analysis⁵¹ of indicators of freedom in 27 developed nations

<i>Indicators of freedom</i>	<i>Factors</i>		
	<i>Social Freedom</i> <i>Factor 1</i>	<i>Psychological freedom</i> <i>Factor 2</i>	<i>Potential freedom</i> <i>Factor 3</i>
Freedom of marriage	.97		
Freedom to travel	.89	-.32	
Freedom to abortion	.37		
Suppression Civil Liberties	-.94		
Economic freedom 1	.70		
Economic freedom 2	.58		.52
Acquiescence		0.99	
Self-esteem		0.58	
Internet users			.91
Newspaper use		-.59	.62

Data: appendix A

⁵¹ The three factors had an Eigen value greater than 1 and the slope was sharper after the third factor. This confirmed the prominence of three factors. The variance explained by these three factors represents 76.3%. After a varimax rotation, we obtain the factor loadings presented here; values below 0.30 are not considered.

Chapter 6: Hierarchy and happiness⁵²

In Chapter 6, I explore the links between hierarchy and happiness, and more specifically I attempt to answer the following question: *can hierarchy explain the relatively low level of happiness in Latin European nations?*

6.1. Introduction

Life in Mediterranean countries is often characterized by the term *dolce vita* (sweet life in Italian), which carries the idea of a pleasurable life in the sun, with good food and rich cultures enjoyed by friendly relaxed people. This stereotype fits the experience of tourists fairly well, but contradicts with the results of survey research on happiness. Cultural differences between the South and the North of Europe have been highlighted in terms of culture and religion by Weber (1905) and Inglehart (2000). A look at the World Map of Happiness (Veenhoven 2011a) reveals that people live happier in the rainy north of Europe than in the sunny south, France being closer to the South than to the North in terms of happiness. Why is there a significant difference between the North and the South of Europe in terms of life satisfaction? Some possible answers to this question are explored in this chapter.

I will begin this chapter by explaining how I distinguish between ‘Northern’ and ‘Latin’ nations in Europe. Next, I will discuss the evidence for lower happiness in Latin Europe than in the North and consider the possibility of cultural measurement bias. I will then review possible explanations for this North-South difference with a particular focus on social hierarchy. I will show that the more hierarchical cultures of the Latin European countries have a role in explaining part of the difference in happiness. I will also show that France follows the southern pattern. Having established these facts, I theorize about origins of this difference, drawing on macro-sociological theories.

⁵² This chapter is published as Brulé & Veenhoven (2012). Why Are Latin Europeans Less Happy? The Impact of Hierarchy, *Polyphonic Anthropology – Theoretical and Empirical Cross-Cultural Fieldwork*, Prof. Massimo Canevacci (Ed.), ISBN: 978-953-51-0418-6

In this analysis of European nations ‘Northern’ countries will include Scandinavia (Denmark, Norway, Sweden, Finland and Iceland) and the Netherlands. ‘Latin’ countries denote the following Mediterranean countries: Portugal, Spain, France, Italy and Greece. North European Germany, Poland and the Baltic countries are left out because average happiness in these nations is still influenced by war and regime change in the past century. The South European Balkan countries were not included for the same reason. For comparison matters, three representative countries of each group are selected: Denmark, Sweden and the Netherlands for Northern countries, France, Italy and Spain for Latin Countries.

6.2. Are Latin Europeans really less happy?

Let us now take a closer look at average happiness in the Northern and Latin countries of Europe.

6.2.1. Happiness in Northern and Latin European nations

The differences in overall happiness and its components between Northern and Latin European nations are presented in Table 6.1. There is a consistent difference: inhabitants of Latin European nations are clearly less satisfied with their life as a whole, they feel less well affectively and report a greater difference between how their life is and how they want it to be.

Table 6.1. Average happiness in Northern and Latin European nations around 2005

Region	Nation	Life		
		satisfaction (Overall happiness)	Mood (affective component)	Contentment (cognitive component)
Northern	Denmark	8.3	60	3.9
	Netherlands	7.7	58	3.9
	Sweden	7.8	56	4.1
	Average	7.9	58	4.0
Latin	France	6.6	42	3.5

Italy	6.7	39	3.3
Spain	7.3	49	3.6
Average	6.9	43	3.5

North-South difference

In points on scale	1.0	15	0.5
In % actual scale range in Europe	27%	37%	32%

This difference in the appreciation of life as a whole is paralleled by similar differences in satisfaction with particular life-domains, some of which are presented in Table 6.2.

Table 6.2. Life, work and financial satisfaction in Northern and Latin European nations around 2005

Region	Nation	Satisfaction with job ⁵³	Satisfaction with home life ⁵⁴	Satisfaction with financial situation of household ⁵⁵
Northern	Denmark	8.2	8.7	7.3
	Netherlands	7.6	8.1	7.5
	Sweden	7.7	8.4	6.8
	Average	7.8	8.4	7.2
Latin	France	6.9	7.6	6.0
	Italy	7.3	7.7	6.8
	Spain	7.1	7.6	6.1
	Average	7.1	7.6	6.3

⁵³ Data file States of Nations(Veenhoven 2011d), JobSatisfaction_1980_2005

⁵⁴ Data file States of Nations(Veenhoven 2011d), HouseholdSatisfaction_1980_2005

⁵⁵ Data file States of Nations(Veenhoven 2011d), FinancialSatisfaction_1980_2005

North-South difference

In points on scale	0.7	0.8	0.9
In % actual scale range in	23%	23%	21%
Europe			

6.2.2. Cultural measurement bias?

These counterintuitive results have raised suspicion about the comparability of happiness across cultures. Several possible sources of cultural measurement bias have been suggested.

One possibility could be that the words used in survey questions have different connotations in Latinate languages than in Germanic languages. Yet several arguments plea against this explanation. One is that the survey questions in Table 5.1 used various words, particularly in the 14 questions about yesterday's mood. Another counter indication is that no such divide between North and South appears in the International Happiness Scale Interval Study (Veenhoven 2009), where native speakers are asked to rate numerical equivalents of verbal response options, such as 'very happy'.

Another possible explanation is that national response tendencies play us false and in this context, Ostroot and Snyder (1985) have suggested that French cynicism results in lower responses to questions about happiness than those given in the US, while both the French and the American respondents may feel equally well. If so, we can expect that the difference will be less pronounced in the responses to questions about yesterday's affect, since this is closer to the respondent's direct experience and the affect balance score does not involve an encompassing judgement. Yet Table 6.2 does not show such a difference.

Any such cultural measurement bias must reflect in the low correlation of average happiness with objective living conditions, if these measures merely tap hot air, scores on them will not be coupled with e.g. economic affluence and respect for human rights in nations. Yet cross-national research shows the reverse, about 80% of the differences in average happiness in nations can be explained by a handful of objective societal characteristics, see for example Ott (2010). So if cultural

measurement bias is involved at all, the bias must be limited. The issue of cultural measurement bias is discussed in more detail in Veenhoven (1993) Chapter 5/2.1.

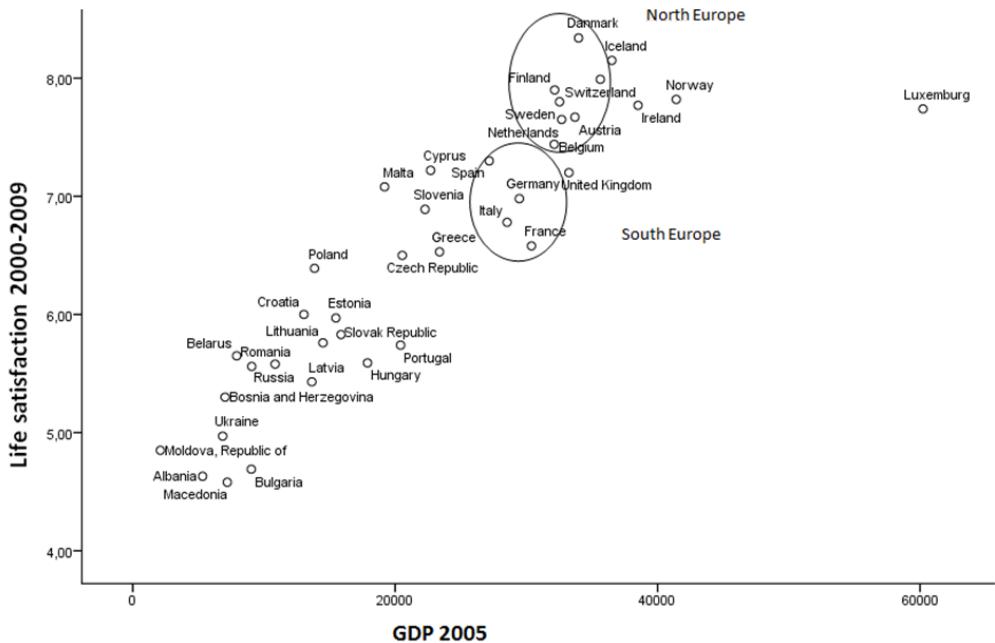
6.3. Why are people less happy in Latin countries?

Comparative research on happiness shows typically that people live happiest in the most modern nations of this world, see for example Inglehart et al. (2008) and Berg & Veenhoven (2010). To what extent can this explain the difference discussed here? The most comprehensive indicator of modernity of nations is their economic prosperity, and this is commonly measured using the indicator buying power per capita. For that purpose I used variable RGDP_2005 from the data file ‘States of Nations’. A plot of happiness versus buying power in European countries is given in Figure 6.1.

As we can see from Figure 6.1, average happiness ranges from 4,5 (Macedonia) to 8,3 (Denmark). The circles highlight the difference between Latin and Northern European countries on both variables; the difference in happiness is great, while the difference in affluence is relatively small. So, economic affluence is only small part of the story.

Figure 6.1. Life satisfaction by economic prosperity in Europe around 2005⁵⁶

⁵⁶ Variables in States of Nations (Veenhoven 2011d): HappinessLSBW10.11_2000.09 and RGDP_2005



What other factors can be involved in explaining the differences between these two clusters, one formed with Latin European nations on one hand, one formed with Northern European nations on the other hand? A look in the literature shows that happiness in nations also depends on the degree of freedom societies allow their members (Veenhoven 2000), on the degree to which citizens trust each other (Helliwell 2003) and on the quality of government within that society (Ott 2010). A common effect seems to be that these societal conditions add to the chance that citizens find a way of life that fits their nature. In terms of institutional economy, this societal constellation adds to the ‘optimal allocation’ of human resources.

Societies can limit individual choice in several ways. One way is by setting normative constraints on self-direction. This is typically the case in collectivistic cultures and happiness is indeed lower in nations where collectivistic values prevail than in nations where individualist values rank highest (Veenhoven 1999). Likewise, happiness is lower in nations where men and women have to meet traditional gender roles in contrast to nations

where female emancipation has led to a more varied repertoire of life style options (Bjørnskov et. al. 2007).

A related factor, not yet considered in much detail, is the degree of social hierarchy in a society. Social hierarchy involves differences in power and prestige. Power differences might reduce a person's self-direction, the more power other people have over you, the lower the chance that you can live the way you would like. Differences in prestige will also reduce self-direction in a more subtle way: if other people are held in much higher esteem than you are, you might be less self-confident and therefore less apt to go your own way. Bay (1970) refers to this limitation as 'psychological (un)freedom', as defined in Chapter 4.

Let us see whether hierarchy can indeed help explain the difference found in happiness between the North and the South of Europe, and if so, to what extent. If France follows the southern pattern, let us see if it possible to find some possible answers to response the wider question of the French relative unhappiness.

6.3.1. Definition of hierarchy

Social 'hierarchy' involves differential access to power and prestige. Hierarchy exists in all social institutions, though not to an equal degree. Hierarchy is typically more pronounced in institutions such as the army and work organizations, than within the family and groups such as sport clubs. The degree of hierarchy in these institutions varies across societies and there is also societal difference in the degree to which these hierarchies converge.

6.3.2. Indicators of hierarchy in nations

Hierarchy as such is not easily measurable, at least not at the level of nations. In this study I used four indicators. The first was the amount of hierarchy inhabitants perceived to exist in their country. The second indicator was the degree to which people felt that they were being controlled by others. The third indicator was the degree to which hierarchy was morally accepted. The fourth indicator was the Hofstede's (1994) Power Distance Index (PDI), which is used to depict both the degree of

hierarchy actually perceived to exist and the degree of hierarchy deemed desirable. Therefore, this last indicator summarizes the previous items.

Perceived hierarchy: In the context of the GLOBE study in 62 societies (House et al. 2004: 537-9) middle managers were asked to rate their agreement with the following statements: 1) In this society, followers are expected to obey their leader without question, 2) In this society, power is concentrated at the top. 3) In this organization, subordinates are expected to obey their boss without question, and 4) In this organization a person's influence is primarily based on one's ability and contribution to the organization. Agreement was rated on a numerical scale, ranging from little (1) to much (7) power distance. The highest average score was observed in Hungary (5,6) and the lowest in Denmark (3,9). The variable code in data file States of Nations is PracticePowerDistance_1996.

Perceived fate control: Another indicator of hierarchy in nations is the degree to which citizens perceive they are in control of their situation; the less control citizens perceive they have, the more hierarchical their society is likely to be. The World Values Survey (Inglehart 2000) contains several questions on this matter, two of which concern control in the workplace and one is about control of one's life in general.

The first question on self-direction at work reads: 'Thinking of your job, do you often or occasionally feel that you are being taken advantage of or exploited, or do you never have this feeling?' 1: often; 2: sometimes; 3: never. Responses to this question are available for 16 nations. The variable code in States of Nations is FeelExploited_1990s. A second question concerns perceived freedom at work and reads: 'How free are you to make decisions in your job?' 1: not at all; 10: a great deal. Responses to this question are available for 41 nations. The variable code in data file States of Nations is FreeWork_1990s.

The question about control in life in general reads 'Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means 'none at all' and 10 means 'a great deal' to

indicate how much freedom of choice and control you feel you have over the way your life turns out'. This variable is available for 63 nations and is labelled as FreeLife_1990s in the data file States of Nations.

Approval of hierarchy: One source of data on the social approval of hierarchy is the above mentioned GLOBE study in which middle managers have first rated how much power distance exists in their society and organization. Subsequently they rated how much distance they feel *should be* in their society and organization, in response to the same four topics. Desired distance was again rated on a numerical scale ranging from not desired (1) to much desired (7). Scores ranged from 2,2 in Finland to 3,5 in Albania (House 2004: 540). This variable is available for 56 nations. The variable code in States of Nations is ValuePowerDistance_1996.

Hofstede's Power Distance Index: In the context of Hofstede's (1994) landmark study of work values in business organizations employees all over the world answered the following questions; 1) How frequently are employees afraid to express disagreement with their managers? 2) How would you describe the actual decision-making style of your boss (paternalistic, authoritarian vs. else) and 3) What decision-making style would you prefer your boss to have? The first two questions depict actual hierarchy and the last approval of hierarchy. The summed Power Distance Index (PDI) summarizes the previous indicators by mixing perception and preference. The latest update of the Hofstede study covers 74 nations and regions (Hofstede & Hofstede 2005). Ratings are available in the 'States of Nations' data file as variable PowerDistance_1965.2002.

6.3.3. Hierarchy and Happiness in the South and the North

How do these measures of hierarchy in nations relate to average happiness? Below I will consider the correlation. I present below the indicators of perceived hierarchy and approval of hierarchy as well as one mixed indicator.

Indicators of perceived hierarchy

Happiness and perceived hierarchy in nations: When looking at middle manager's perceptions of power distance at work, a very large difference between the Northern and Latin countries can be observed, as the difference of average of the two sets of country covers 59% of the whole European range as highlighted in Table 6.3 below.

Happiness and perceived control in nations: Hierarchy is also reflected in individuals perceived freedom at work as well as freedom in general and in perceived control in life, the less freedom and control individuals perceive in a country, the more hierarchical that society apparently is.

Indicator of valuation of the hierarchy

Happiness and acceptance of hierarchy in nations: One might think that people in Latin countries value hierarchy and power distance more than in the North. Yet there is little difference in the valuation of the hierarchy between the South and the North. There is even a slightly greater preference for equality among Latin Europeans. Consequently, the difference between 'power distance as it is' and 'power distance as it should' is much larger in the South than in the North, which obviously entails frustration and unhappiness.

Mixed (perceived and valuation of hierarchy) indicator

Happiness and power distance index: Hofstede's Power Distance Index encompasses the previous results and is probably the most robust indicator of social hierarchy to date. Again Northern European countries stand out as egalitarian and happy, while Latin European nations combine a hierarchical orientation with relatively low happiness. The main results in terms of acceptance of the hierarchy and perception of freedom in the two sets of countries are shown in Table 6.3.

Once more we see that the difference between Northern and Latin Europe fits this general pattern. Both perceived individual freedom and happiness are higher in the Northern countries and both are lower in Latin countries. This data corroborates well with the data from the World Values

Survey of Table 6.3, where it appears that the freedom of choice in Northern Europe is about one point higher than in the South. Reduced individual freedom at work might increase frustration at work and unhappiness. This is even more striking when looking at the percentages of people feeling exploited in their work, which represents more than half of Latin Europeans.

*Table 6.3. Perception and valuation in the equality of hierarchy in Northern and Latin countries*⁵⁷

		Perception of hierarchy	Perception of freedom			Acceptance of hierarchy	Power Distance Index
		Practised Power Distance ¹	Free in decision-making at work (scale 1-10) ²	Feel exploited at work (in %) ³	Perceived freedom and control in life (scale 1-10) ⁴	Hierarchy as it should ⁵	Hofstede PDI ⁶
Northern countries	DK	3.89	7.4	39	7.1	2.76	18
	NL	4.11	7.3	38	6.2	2.45	38
	SE	4.85	7.4	39	7.3	2.70	31
	Mean value	4.28	7.4	39	6.9	2.64	29
Latin countries	FR	5.28	6.3	62	6.3	2.76	68
	IT	5.43	6.7	46	6.1	2.47	50
	ES	5.52	6.5	45	6.7	2.26	57
	Mean value	5.41	6.5	51	6.4	2.50	58
<hr/>							
North-South difference							
In points on scale		1.13	0.9	12	0.5	0.14	29
In % actual scale range in Europe		68%	30%	50%	23%	10%	35%

The clusters South Europe-North Europe as defined on the Figure 6.1 with the variables purchasing power-happiness show some substantial differences in terms of power distance and freedom at work. France really fits the Latin European cluster and shows the largest power distance. For some variables, such as perceived freedom, the clusters are somewhat less obvious, with some overlapping of the variables, whereas the clustering still makes sense when looking at variables such as happiness or power distance, which are the key variables in exploring the link between hierarchy and happiness. Let's try to make sense of this comparison by taking a broader picture. General trends at the European level are given in Table 6.4, that shows the correlation between happiness, power distance and perceived freedom indicators.

Table 6.4 Correlations between happiness, power distance and perceived freedom indicators

	1	2	3	4	5	6
	Happiness	Practised Power Distance	Value Power Distance	Free Work	Free Life	PDI
1.Happiness	-	-.45 N=19	-.39 N=19	+.75 N=26	+.74 N=40	-.77 N=28
2.Practised Power Distance	-	-	-.27 N=19	-.60 N=17	-.26 N=19	+.61 N=17
3.Value Power Distance	-	-	-	+.24 N=17	-.35 N=19	+.12 N=17
4.Free Work	-	-	-	-	+.72 N=27	-.62 N=21
5.Free Life	-	-	-	-	-	-.60 N=28
6.PDI	-	-	-	-	-	-

Interesting to notice are the very significant correlations of free life, free work and PDI with life satisfaction (respectively +.75, +.74 and -.77). This seems to indicate that perceived freedom is a very strong life satisfaction

predictor at the European level, something already shown by Verme (2009) at a more global scale. The zero order correlation between PDI and happiness among European countries is $-.77$ and it is sensibly the same ($r=-.66$) when controlling with GDP. Also worthwhile noticing are the strong correlations of PDI with perceived freedom at work ($r=-.62$) and in life in general ($r=-.60$). We can regret that the data on each country of Europe is not more systematic, as this would make the analysis stronger.

A large difference in power distance, which appears as a strong life satisfaction predictor in Europe, seems to tell us that the lower happiness found in Latin European countries, particularly in France as the power distance is the largest within Latin societies, is at least partly due to the greater levels of hierarchy that exist in these societies.

6.4. Why are Latin European countries more hierarchical?

Hierarchy exists in all societies, but the degree of inequality differs between societies. Various explanations have been proposed for these differences.

One line of explanation for societal differences in hierarchy focuses on the present and looks for contemporary drivers of hierarchy. A structural explanation in this context is that globalization is weakening the control of nation states, thereby giving free way to the powers of market capitalism. See for example Aghion & Williamson (1998). A related cultural explanation holds that growing individualism is undermining moral restraints to egoism and promoting self-actualization at the cost of fellow man. See for example Elliott & Lemert (2006). Since these contemporary conditions are not much different between the north and the south of Europe we see no evident explanations along this line.

Another line of explanation focuses rather on the past and looks for antecedents of present day hierarchy. A structural theory of that kind holds that the growing division of labor is creating increasing mutual interdependencies and that this is giving rise to reduction of social inequalities (e.g. Lenski & Nolan 2004, Chapter 6). Explanations that focus on political institutions see contemporary hierarchy as an echo of earlier power struggles (e.g. Gurr et al. 1990). In this vein cultural explanations

stress the role of religion and hold that moral teachings of the past have shaped present day hierarchy.

This latter approach has evident applicability to the case at hand, since Catholicism has historically dominated the South of Europe and Protestantism the North. There is a large literature that describes the differences in orientation to hierarchy within these two strands of Christianity. See for example Gustafson (1978), Martin (1985), House (2004, Chapter 17) and Bruce (2004).

Still it is possible that even before the Reformation hierarchy was less pronounced in the North of Europe than in the South and that the change to Protestantism was a consequence of that orientation rather than a cause. In that context it is worth taking a longer view and considering what macro-sociology has taught us about the development of social inequality in human societies.

6.4.1. Hierarchy over societal evolution

Lenski & Nolan (2004) describe several pathways in the developmental history of human society. The main path is depicted as a sequence of the following society types, each of which are described below.

Hierarchy in hunter-gatherers: The first human societies consisted of small bands of about 40 people that lived a nomadic life, roaming large territories. These simple societies were typically quite egalitarian, since this way of life provides little opportunity to harvest any appreciable economic surplus as hunter-gatherers are mainly focused on maintaining a subsistence level. This kind of society was dominant in most of human history and seems to have existed for at least 50,000 years. Other types of societies developed only some 10,000 years ago and were based on modes of existence that involved more social hierarchy.

Hierarchy in horticultural societies: Hunter-gather societies were gradually driven out by horticultural societies, based on slash-and-burn agriculture. This way of existence created a surplus, which came to be taken by warrior classes. This resulted in an unprecedented social inequality, which grew ever stronger when competition within the warrior classes resulted in ever

larger hierarchically organized empires. Slavery was quite common in this phase of societal evolution.

Hierarchy in agrarian societies: The invention of the plow brought about the permanent use of land and this made humans even more dependent on a plot of land and more vulnerable to exploitation by one another. Social inequality reached its historical maximum in the feudal system that came to existence in most advanced agrarian societies.

Hierarchy in industrial societies: Only a few hundred years ago inventions such as steam machine triggered the Industrial Revolution. This way of existence resulted in a considerable decline of social inequality, among other things because the fine grained division of labor has created many mutual dependencies.

In alignment with this main developmental path, Nolan and Lenski describe, several side paths, among which fishing and maritime societies.

Hierarchy in fishing societies: Fishing societies developed in places close to the sea, where fish provided an additional source of subsistence. These societies are also quite egalitarian, among other things because exploitation by warriors is less easy in this case.

Hierarchy in maritime societies: Maritime societies developed from fishing societies, taking advantage of their strategic situation to develop trading and commerce. Egalitarianism continued in this phase, again because this way of existence involves less vulnerability to dominance by others.

6.4.2. Feudal heritage stronger in the South, maritime heritage stronger in the North

In this context we can make sense of the present day difference in hierarchy across the Northern and Latin countries of Europe. When societies drifted away from the hunter-gatherer type of society, the Latin and Northern European areas seem to have followed somewhat different paths, due to different geographical and demographical constraints, as well as

opportunities. Conditions in Northern Europe were more suited for the fishing and the maritime track, as appeared in the flourishing Viking societies before the Middle Ages and in maritime expansion of England and the Netherlands following the Middle Ages. More hierarchical agricultural-based societies came to dominate in Latin Europe and this appears in a greater concentration of landownership and greater dominance of church and nobility. This is likely to have anchored hierarchy more strongly in the culture of Latin societies, whereas the original human bent to equality has been better preserved in Northern European countries.

6.5. Why are people less happy in hierarchical society?

A common view (Baltatescu (2005), Verkerk (2005), Sortheix & Lönnqvist (2014)) is that happiness depends on the degree to which life fits one's values. In this context we could expect that people are less happy, the greater the difference between the degree of hierarchy they perceive to exist in their country and the degree of hierarchy they deem desirable. I checked this explanation using the above mentioned GLOBE study in which both perceived degree and acceptance of hierarchy were assessed in 53 nations. I computed the difference between perceived and accepted hierarchy. In Table 6.3 one can see that this difference is smaller in the Northern nations (1,64), than in the Southern (2,91). I added this difference as the variable ValuePracticeGapPD_1996 to the data file States of Nations and found a negative correlation with happiness. The correlation is small however ($r = -.14$), so this cannot be the whole story.

A less common view holds that happiness depends more on fit of social organization with universal human nature than on fit with culturally variable notions of the good life. This view is explained in more detail in Veenhoven (1999). Seen in this context the question arises: why would human nature be hierarchy averse?

A plausible answer to this question is that the human species evolved in the context of hunter-gatherer society, which was quite egalitarian and allowed a great deal of self-direction. From this perspective, societal development went against human nature, at least in its agrarian phase. This view is presented convincingly by Mariansky and Turner

(1992). In their book ‘The social cage’ they argue that humans are social animals, but that their need for social ties is limited. In their view, evolution has resulted in a human preference for the ‘weak’ social ties that exist in hunter-gatherer societies, over the ‘strong’ social ties that came about later in agricultural society. ‘Strong’ ties with a clan were required for survival in the conditions of agrarian society, but pressed people into a ‘social cage’. In the view of Mariansky and Turner, the Industrial Revolution has opened the door of that cage and has instigated a mass flight from the oppressive social networks of the land to the freedom of city life.

6.6. Conclusion

People report happier in the Northern countries of Europe than in the Latin countries. This difference in happiness is paralleled by a difference in degree of social hierarchy; Latin countries seem to be more hierarchical and this seems to be linked with a lower report happiness compared to a more egalitarian North of Europe. France seems to fit the Southern pattern, showing a high power distance. Historical development of these societies in terms of opportunities and constraints seems to provide some key in this explanation.

Chapter 7 : Family types and happiness⁵⁸

In Chapter 7, I explore the relation between family and happiness and raise the following question: *how do family systems influence the level of happiness in Western Europe?*

7.1. Introduction

In the expanding literature on happiness in regions within nations has received less attention. Oswald and Wu (2009) explored happiness in US states and concluded, after controlling for individual characteristics, that some states had significantly higher level of life satisfaction than others. Research has been done to study life satisfaction across provinces and regions such as Morrison (2007) in New Zealand, Clark (2003) in Great-Britain, Rampichini and Schifini D'Andrea (1998) in Italy or Brereton, Clinch and Ferreira (2008) in Ireland. Okulicz-Kozaryn (2011) studied the link between income and life satisfaction in regions throughout Europe. The differences in happiness across regions, tend to be smaller than differences across nations. The findings from this strand of research are gathered in the report 'Findings on Happiness and Region in Nation' of the world Database of happiness (Veenhoven, 2012d). To date this report involves 71 research findings.

Position in society

Next to research on the effect of societal characteristics on average happiness, there is much research on the effects of position within a society on the happiness of individuals. Much of that research is about socio-economic position in society, typically measured with income, occupational prestige and employment. Likewise there is much research on the effect on happiness of one's position in socio-emotional networks, as measured with things like marital status, family size and contacts with kin. Embedding in

⁵⁸ This chapter is published as Brulé G. and Veenhoven R. (2014) Average happiness and dominant family type in regions in Western Europe around 2000. *Advances in Applied Sociology*, 4, 271-288.

socio-emotional networks appears to matter more for happiness than socio-economic status(Bartolini et al. (2010)).

Much research on happiness and family life

Most of the research on happiness and embedding in socio-emotional networks is about family life. The bulk of research is about the relationship between current family life and happiness of adults, such as the difference in happiness between married and single individuals (Raschke (1977), Hamplova (2006)) or the link between happiness and task division between spouses (Lu & Lin, 1998). There is also quite some research on the effects of family characteristics on the happiness of children and in that strand also on long-term consequences, such as the effects of broken home in childhood on happiness in adulthood. Findings of this strand of research are also gathered in the World Database of Happiness, in particular in the reports 'Happiness and Family' (Veenhoven, 2012e) and 'Happiness and Marriage' (Veenhoven, 2012f), which currently contains respectively 504 and 880 research findings.

Little view on effect of family type

In spite of much research on one's position in the local family system, there is little research on the effect of happiness of family systems as such. Still, there are good reasons to expect that family type shapes happiness (Goode, 2005). As a matter of fact, happiness of individuals depends to some extent on their 'social capital' and some family types may generate more of that than others. Happiness depends also heavily on individuals' psychological autonomy, which may not be equally fostered in all family types. In particular, we might think that some families promotes social capital whereas some others tend to enhance psychological autonomy; both are conducive to happiness so it seems interesting to us to understand if there is one that is most important to happiness or if they are both equally important.

According to Duranton (2009), the taxonomy of family systems has several advantages. First, it captures two fundamental dimensions, which matter within the family and outside the family. For instance, Gross and McIlveen (1998) point out that early childhood experiences are influenced

by adults' values and behavior, and that there is a clear percolation between family values and society values. Second, this two-dimension classification is an ideal level of complexity that enable relatively easy analysis without falling in the oversimplification of 'weak versus strong' family ties. Finally, the family structures are relatively homogeneous in regions and the cohabitation of different systems is quite weak so the family types are empirically measured and quite homogeneous within regions. However, this is tempered by a few examples of coexisting family systems that will be further discussed, as they raise some interesting questions. Therefore, I aim at tackling one of the main weaknesses in the current literature in which the link between family structures and happiness barely goes beyond a 'weak versus strong ties' debate. In this chapter, I question: can we find any link between the family type and the level of reported happiness? Can that explain to some extent the relative unhappiness in France?

Implication for family policy

These considerations might have some important implications when considering family policies; indeed, some policies may foster kids' autonomy while some others might foster family bonds. A large part of this is cultural but one might wonder what to do in certain circumstances: foster autonomy or family bonds? The answer is far from being obvious; this chapter aims at contributing in answering this question to some extent. As we will see, using Todd's work, I use the laws for the wills in order to see if a certain region is dominated by egalitarian ties or not. Finding a difference between the regions that are dominated by equal traditions and the ones that are not can encourage policy-makers to rethink the laws about the wills. Likewise, I determine the links between parents and children by the cohabitation or not of different generations and depending if the sons leave the parental house once married. A difference between the regions with and without dominant cohabiting families might as well provide policy-makers to think of the cohabitants of generations. The family type seems to be an adequate angle to look at the impact of several family characteristics.

Macro-level analysis

Data regarding dominant family types are available at the sub-regional level (NUTS 3), the data on happiness at the regional level (NUTS 2); this means we need to perform a macro-level analysis at two different levels, the national and the regional ones. Not only is macro-level analysis the only way for us to investigate the link between family structures and happiness, it also enables us to enter the field of the culture of happiness since, as Merton (1949) pointed out, the family is the main cultural transmitter. Comparing the maps of happiness and family structures is a way to dig into the culture of happiness through the lens of family structures.

Plan of this chapter

Below I will start by explaining what I mean by ‘happiness’ and how happiness is measured and to what extent average happiness differs across European nations and regions. Next, I will consider family types, following Todd (1990) who distinguished 5 types and measured the prevalence of these in Europe. On that basis I explore the statistical relation between happiness and dominant family types in nations and in regions. I find the highest happiness in nations and regions where the ‘absolute nuclear’ family type prevails and the lowest where the ‘egalitarian nuclear’ family dominates. Having established these basic facts, I go on to explore possible explanations, and consider the effects of freedom and equality.

7.2. Happiness

Data on average happiness

In this study I use happiness as measured in the bi-annual Eurobarometer surveys; these surveys are carried out by the European Commission to monitor public opinion. These data are aggregated at the regional level; by regional level in this study, I mean NUTS units (Nomenclature of Territorial Units for Statistics).

The question is the following: ‘On the whole how satisfied are you with the life you lead? 4: very satisfied, 3: fairly satisfied, 2: not very satisfied, 1: not at all satisfied’. This question has been used at least once every year since the start of the Eurobarometer in 1973. In this study I use the Eurobarometer 44.2 Bis (1996) surveys, which involve respondents

aged 15 years and over, resident in each of the Member States (about 3,000 respondents in Belgium, Denmark, Ireland, The Netherlands, Austria, Portugal, Finland, and Sweden; about 6,000 respondents in West Germany, Spain, France, Italy and Great Britain). From this dataset I computed average scores per nation and within nations also by region; for the regions I used the “administrative regional units”. They thus represent the whole territory of the Member States according to the EUROSTAT-NUTS II(see http://www.ec.europa.eu/eurostat/ramon/nuts/home_regions_en.html). The regional value is taken as the average of different regions, which all consist of thousands of respondents; just a few regions have a very limited number of respondents and should be taken with great care: Corse (Fr, 66 respondents), La Rioja (Sp, 347 respondents), Basilicata (It, 483 respondents), Baden Würtenberg (DE, 309 respondents), Cumbria (UK, 483 respondents), East Midlands (UK, 157 respondents), Uppsala Ostra Mellansverige (SE, 159 respondents), Etelä Savo (FI, 125 respondents).

7.3. Family types

Comparative research on family systems, initiated by Le Play (1871) has shown considerable differences in family systems around the world, such as the difference between stem families and the nuclear family and between matrifocal families and patrifocal patterns. Various consequences of prevalence of one family type or another have been considered, such as effects on economic growth (Sagart, Todd and Little, 1992). Todd (1990) defines families according to two main characteristics: the relationship between parents and children and the equality between children. For the first characteristics, the relationship between parents and children can be defined as *authoritarian* on one side or *libertarian* on the other side. In order to measure this characteristic, Todd used family registers and inspected these throughout Europe.

Several generations co-living under the same roof is a sign of the prominence of the parents' authority on the children and was therefore categorized as 'authoritarian'. In such families, the elder son does not leave the family house once after his wedding; he stays under the authority of the father. Likewise, unmarried daughters stay under the authority of the father

in the first place and then under the authority of the brothers. On the other hand, when families are nuclear (merely composed of their *nucleus*), i.e. when the parents alone or with their children, the links between the generations are considered loose and the family system ‘libertarian’. In such families, when individuals grow up or once they get married (or even before), they leave the parental house and found their own family.

Beside this authoritarian/libertarian distinction depicting the link *among generations*, Todd also defines equality *within generations*: equality define family structures where this value or practice is present, unequal when this value or practice is not present or unconsidered. In order to classify families in one category or the other, Todd looks into the documents of the wills: when the will clearly defines the willingness of distributing equally the goods among the siblings (or at least the brothers), the family system is considered as ‘equal’; if not or if the wills can be distributed unequally among children, then the family system is considered as ‘unequal’.

Todd's family types

The combination of two possibilities on each axis (freedom and equality) gives four main types of family structures.

- 1) Families that combine equality and liberalism are called *egalitarian nuclear*.
- 2) The other nuclear families are called *absolute nuclear* as liberty seems to be the only value considered.
- 3) In the ‘egalitarian nuclear’ system, there is a prominence of stronger relations between the children, at least until the inheritance is completely divided after the parents’ death. When ‘authority’ is combined with ‘inequality’, the family is considered as authoritarian *stem family*. In such a family, the property is typically passed to the eldest son and the values of inequality are institutionalized.
- 4) Conversely, when ‘authority’ is combined with ‘equality’, the family is considered as *communitarian*. In such families, the sons stay living in the parental house, under the authority of the father but the goods and the property are expected to be distributed equally among the siblings (or at least the brothers) after the death of the parents.

5) To these four types of family structures, Todd adds another one, the *incomplete stem family*; he observed that in certain areas where authoritarian and egalitarian *laws* prevailed (which would entail a ‘communitarian’ type of family), in the *facts*, the distribution was largely *inegalitarian* (a ‘stem family’ type of heritage). Contrary to communitarian types, the married brothers do not cohabit together, and contrary to stem family types, there are laws that pledge for an *egalitarian* distribution. In these areas, the strength of the primogeniture tradition tends to override any such *egalitarian* lawmaking. Therefore, this fifth ‘hybrid’ type completes the picture.

In his latest work, Todd has defined 16 family types (Todd, 2011), all derived from the five basic levels, but the high level of complexity as well as the lack of corresponding maps makes it impractical to use, but I will occasionally refer to it. Table 7.1 below summarizes the different types of family.

Table 7.1: Family types in Todd’s classification

	Egalitarian	Inegalitarian
Authoritarian	Communitarian	Stem (complete or incomplete)
Libertarian	Egalitarian nuclear	Absolute nuclear

Data of prevalence of the family types in regions

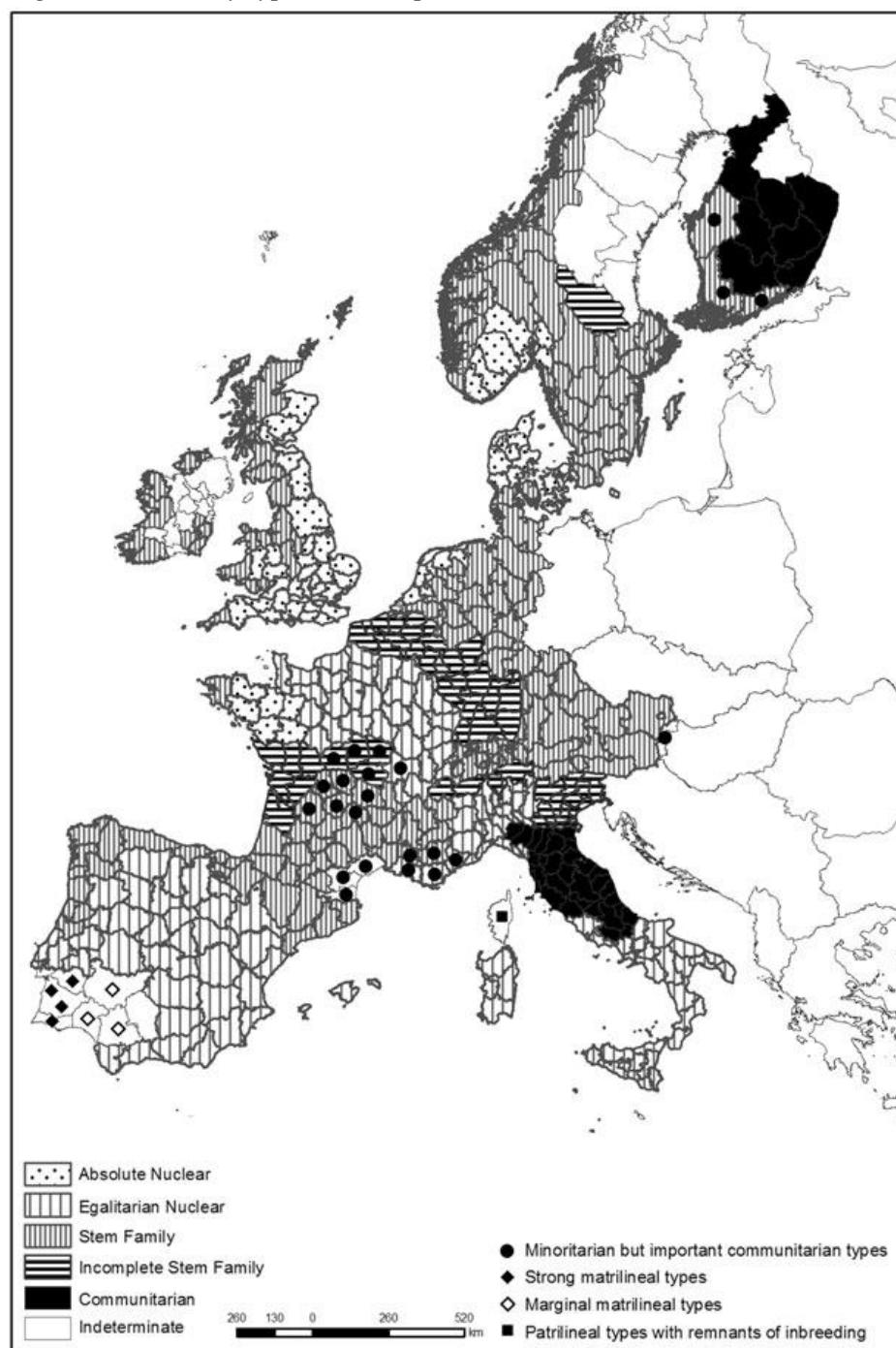
In order to obtain the data for the ‘liberty’ characteristics, Todd first used censuses from Western European countries in the 1950s and 1960s. As the conditions in Europe at that period were particular in this after-war period, for instance due to potentially more pronounced cohabitation, he cross-checked the data obtained with nearly 200 historical monographs in order to verify the validity of the data obtained and checked whether these monographs contradicted his classification. Apart from a few adjustments, Todd claims that the family structures are surprisingly stable throughout time, and that there were very little difference with monographs that were 500 years old and more. For instance, the prevalence of stem families in French Brittany (Finistère), Galicia, Wales and Scotland coincides with

areas where Celtic populations took refuge two millennia ago. The area corresponding with the current communitarian central Italy ties in closely with the area of Etruscan civilization in pre-Roman times.

As for the measurement of the ‘equality’ characteristics, Todd also used relatively recent data for the whole of Western Europe while verifying whether or not the patterns he discovered find some echo in historical monographs. In order to objectivize this equality factor, he analyzed the mechanism of repartition of family property among siblings after the death of the parents. Equality is considered at its maximum when family property is divided evenly among siblings or (more usually) among brothers. This factor can be observed looking into inheritance laws and practices. In some regions, the laws oblige an equal repartition of heritage while in some other regions, there is a remarkable indifference to the principle of equality; in this case, the parents are either free to divide the way they feel is the most appropriate, or the parents are forced to choose an unique child that will inherit everything.

Todd has performed the analysis throughout more than 200 regions. Most regions are labeled with one family type, some other with two. Figure 6.1 below shows the map of Europe according to the different types.

Figure 7.1: Family types in Europe



Source: Todd(1990)

7.4. Method

My research question is whether these family types are equally conducive to happiness in contemporary society. To answer that question I compare average happiness in geographical areas to see if happiness is higher in areas where a particular family pattern dominates. This is a macro-level analysis.

Units

As ‘areas’ I consider both nations and regions. Since I use data on family type gathered by Todd, I limit to 13 European countries. In order to obtain the matrix presenting the happiness level and the family type of all regions of the 13 countries, I combine the data of Todd and of the Eurobarometer; the finest level of detail in the Eurobarometer is the regional level (NUTS 2) whereas Todd use the infraregional level (NUTS 3). Therefore we need to aggregate the data of Todd to match the level of the Eurobarometer (NUTS 2).

Some regions are largely homogeneous in terms of family type so the family type of the whole region is trivial; however, in a few rare cases, regions are composed of more than one family type. In this case, I had to find out which family type was dominant in the given region. To do so, I counted the geographical sub-units (NUTS 3) for each family type and took the most represented family type for the whole region (NUTS 2). For instance, Brittany (France) is composed of 4 sub-units (‘départements’): 3 are dominated by the absolute nuclear family type and 1 by the stem family type; therefore the dominant family type for Brittany is the absolute nuclear one.

Analysis

I first compared nations and inspected whether average happiness is higher or lower in nations where a particular family type dominates. Such differences may be due to other national characteristics than family type and therefore I compared next across regions within nations. Finally, I

checked whether these latter differences can be attributed to other regional characteristics.

7.5. Results

I found that average happiness is highest in regions where family pattern of ‘absolute nuclear’ prevails and lowest in the regions where ‘egalitarian nuclear’ family dominates. This pattern appears both in the comparison of nations and in the comparison of regions with in nations.

7.5.1. Comparison at the aggregated level

Data on average happiness and dominant family type in the 13 European nations are presented in Table 7.2. The values were obtained taking the average values of happiness in regions across Europe, without any national aggregation.

Table 7.2: Average happiness per family type in Europe

	Happiness	Countries	Number of regions
Communitarian	3.06	Fi, It	18
Stem complete	3.07	Be, De, Ie, Fi, Fr, Pt, Se, Sp	85
Stem incomplete	3.00	Be, Fr, It, Ni, Uk,	31
Egalitarian nuclear	2.84	Fr, It, Sp, Pt	29
Absolute nuclear	3.24	Dk, Fr, Ni, Uk	41

One clear difference strikes the eye, the dramatic difference in average happiness between countries where the ‘absolute nuclear’ family type dominates (such as Denmark) and the countries where the ‘egalitarian nuclear’ family is quite common (such as Spain). These differences in family type account for up to 40% of the range in average happiness, which is the difference between happiness in regions dominated by egalitarian nuclear families (2.84) and those dominated by absolute nuclear families(3.24) on a total range of almost 1 point throughout Europe between the least happy and the happiest region(2.65-3.62). There is no real difference between the two (or three) authoritarian models, even if

happiness in stem family (complete or incomplete) is slightly higher than in communitarian family. Looking at the aggregated levels of happiness at the European level, regions where the ‘absolute nuclear’ dominates seem to be the most fertile ground for happiness of the citizens, whereas regions where ‘egalitarian nuclear’ dominate seem to be the least.

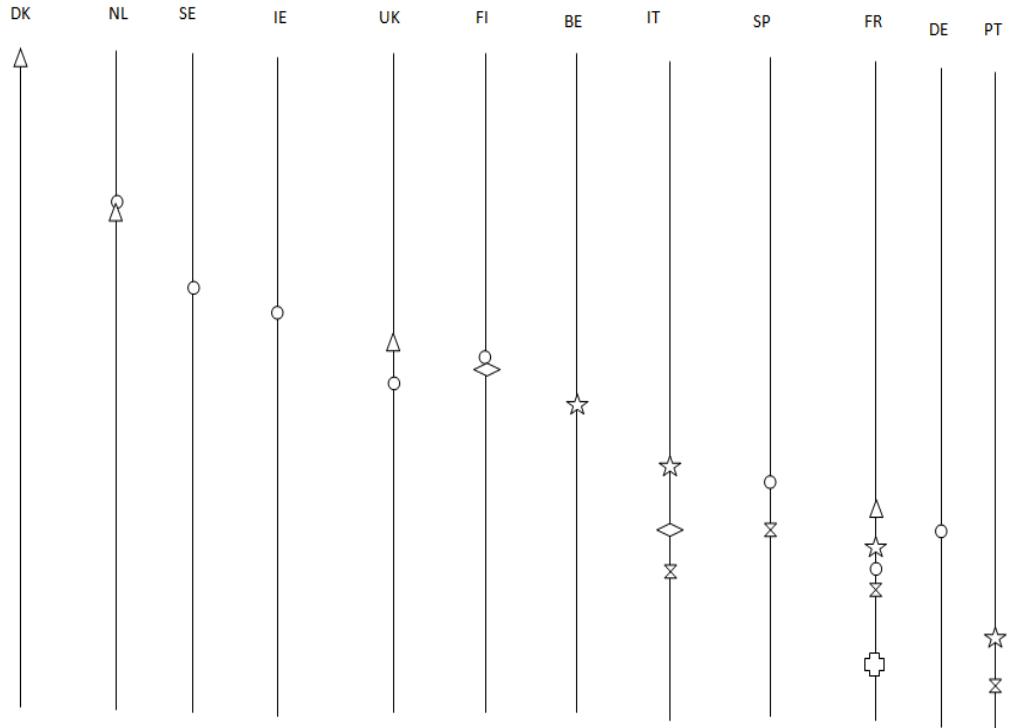
However, these differences in average happiness across European nations are due to other things than family type, some were presented in the previous chapters. The difference fit an earlier observed North-South difference in happiness, which has been attributed to variation in values (e.g. Inglehart, 1977) and governance quality (Ott, 2010). Possibly the correlation with family type is just a byproduct of such differences and has little effect on happiness by itself. Let’s have a closer look at this to see if these first impressions resist a finer analysis.

7.5.2. Comparison across regions within nations

Let us now look at the effects of the family types *within* nations. The regional level has several advantages, because, as we will see, it is often a better scale to observe variation in dominant family types. Second, it enables also to largely cancel out the national level effects. Policies are mostly enforced at a national level and regions are typically subjected to the same rules. Out of the 13 countries, 7 are either homogeneous in terms of family types (Belgium, Germany) or lacking of complete or comparable data (Finland, Ireland, Norway, Sweden, Switzerland) to be analyzed and cannot help us in the infranational comparisons. I will therefore base my analysis on 6 nations: France, Italy, the Netherlands, Portugal, Spain, the United Kingdom. They will help us in different ways and to different extent.

The ranking of happiness throughout nations per family types is presented in Figure 7.2. Details of happiness and family types for all countries are presented in Appendix. Happiness ranges from 2.65 (egalitarian nuclear in Portugal) to 3.62 (absolute nuclear in Denmark).

Figure 7.2: Average happiness ranking per dominant family type in 13 European nations around 2000



Dominant family type:

△ Absolute Nuclear

○ Stem Family

Communitarian

☆ Incomplete Stem Family

✗ Egalitarian Nuclear

◻ Egalitarian Nuclear+Communitarian

France

France is an interesting nation to compare family types, as it is the only

country that has all five family types, even if the communitarian type is mixed with the dominant egalitarian nuclear one. The pattern of difference in France fits largely with the above pattern of differences across nations. The happiest regions are Alsace, the Germanic-influenced region with its stem family model and the Celtic-influenced Brittany and Pays de la Loire, in which the absolute nuclear family type dominates. When gathering per family type, almost the same order withstands with the absolute nuclear model, present in the West of France first again, then the stem family model (complete and incomplete) and then the egalitarian nuclear.

What is striking in the French case and not visible at the European level is the fact that the regions that have a coexistence of two family models, that is egalitarian nuclear with communitarian influences (Limousin (2.71) and Auvergne (2.64)) are by far the unhappiest and are among the least happy regions of Western Europe. According to Todd(2011, p 409), the area that covers Limousin and Auvergne is the only ‘bi-local communitarian’ type in Europe and can also be seen as a hybrid type stuck between the egalitarian nuclear type of the Paris basin and the stem family from the Aquitaine basin. Maybe this particular hybridism of system is not favorable for happiness. An explanation could be that the coexistence of two family systems might lead to anomie, introduced by Durkheim (1897) in the context of coexisting religions for instance; co-existing families might lead to a similar effect. However, this observation could also be tempered as this coexistence can also be observed in the south eastern region of Provence-Alpes-Côte d’Azur; no major difference can be observed between the level of happiness of the region (2.81) and the average level of egalitarian nuclear families (2.80).

The difference between average happiness in egalitarian nuclear and absolute nuclear families (0.12) accounts for 40% of the total range of life satisfaction in France, i.e. the difference between Auvergne (2.64) and Alsace (2.96). The differences between stem family and egalitarian nuclear families (10%) and between incomplete stem family and egalitarian nuclear families (20%) are in between. The happiness pattern per family type in France is very close to the European one, and the aggregated trend is largely verified in the French case.

Italy

Italy is the second country with the most diversity in family types with just the absolute nuclear family type missing. Happiness in the Italian family types reveals the same logic in terms of happiness with stem family ranking first, then communitarian and then egalitarian nuclear. The happiest part is the North-East, and particularly the agricultural region of Trentino (3.13), then come the communitarian central Italy, which according to Todd, coincides with the Etruscan occupation in pre-Roman times, and then the egalitarian nuclear, present in the North-West and in the South of Italy. This confirms the difference at the nation level and regions with dominant communitarian families are happier than regions with dominant egalitarian nuclear ones. The difference between (incomplete) stem families and egalitarian nuclear families (0.16) accounts for a substantial 42% of the total Italian difference, between Sardegna (2.75) and Trentino (3.13).

The Netherlands

The Netherlands do not show large differences in family models; the North, protestant is largely formed with absolute nuclear families while the south and east, more agricultural, is populated with stem families. There are no differences in happiness; in general, the Netherlands are very homogeneous in terms of happiness with a difference of only 0.12 between the unhappiest region (Groningen) and the happiest (Gelderland). Still, the Dutch case shows a reverse order compared to the aggregated order; the average level of happiness for regions dominated by stem families (3.41) is slightly higher than the average level of happiness for regions dominated by absolute nuclear families (3.37).

Portugal

In Portugal, the North of the country is populated with stem families, while the south the egalitarian nuclear pattern dominates. The former show a slightly higher level of happiness (2.69) compared with the latter (2.68), with the North and the Center being happier than the south and the Lisboan region. However, these results should be interpreted with care as this concerns only two regions in the North and two in the South, the other ones

being not identified in terms of family models. However, this is consistent with the European hierarchy.

Spain

Spain shows the same pattern as Portugal with stem families in the North showing a slightly higher level of happiness than egalitarian nuclear families in the South. The difference between the two sets of countries represents 35% of the total Spanish range given by the difference between Aragon (3.01) and Andalucía (2.75).

United Kingdom

United Kingdom is divided in two parts, a western part dominated by stem families and an eastern part dominated by absolute nuclear families. Happiness is relatively homogeneous (total range: +.19) compared with countries of similar populations such as France (total range: +.32) and Italy (+.38). Average happiness is slightly higher in regions where absolute nuclear families dominate (3.18) compared with regions where stem families dominate (3.12). The difference represents 25% of the total British range. The British trend confirms the wider one with a slightly higher level of absolute nuclear families in comparison with stem families.

7.5.3. Control for possible spuriousness

Is the difference in happiness really in family or is it in regional characteristics that happen to go with family such as agrarian business or income per head?

Economic prosperity?

Let's have a look at the regional wealth, as measured with disposable regional income. The family structures might just be a consequence of a certain level of development or wealth, and if so the difference in happiness could be a matter of wealth rather than family organization. For instance, the cohabitation of several generations might just be a consequence of an impossibility for the young generations to afford accommodation. However, if we look at the different countries, it appears not to be the case. France is relatively homogeneous in terms of income per head, but it seems

rather clear that happiness is not a consequence of difference in income as regions dominated by egalitarian nuclear families are the richest and the unhappiest, while absolute nuclear and incomplete stem families are the least wealthy and the happiest. Portugal follows the same pattern with the south being richer and unhappier, while the North is poorer and happier. Spain and Italy follow a different pattern as the unhappy regions, dominated by egalitarian nuclear families are also the poorest. All in, it means the conclusions are unlikely affected by income per head for Southern Europe.

In the Netherlands the income per head is the same in regions dominated by absolute nuclear families and by regions dominated by incomplete stem families. In the United Kingdom, regions dominated by absolute nuclear families are globally richer than regions dominated by incomplete stem families, even if, because of the difference in the aggregation level, we could not have the disposable income per head for all regions, so I made an average with the regions with available information.

A quantitative analysis confirms this view with adjusted means being the same as the unadjusted means in the different countries. See in the respective country tables in Appendix.

This confirms the fact that family types and prosperity or modernity seem to be uncorrelated. As Todd states in another co-written article, 'the various family cycles do not correspond very well to particular levels of cultural or economic development. Nuclear and stem cycles, in particular, appear among both very developed and very primitive groups.' (Sagart, Todd & Little 1992).

Agrarian economy?

We could imagine that another factor could be the agrarian share in each region that could affect the family type and Todd (1990) confirms this intuition: there is a link between agrarian system and family type. The farmer ownership is a fertile ground for stem family to flourish with the property inherited by the oldest son for instance. Large farms and egalitarian nuclear families mix well as the large farm is divided into independent sub-systems, even if it is far from being systematic as in England, absolute nuclear families flourish in large farms; however,

absolute nuclear families are more present in tenant farming with a relative independence of the farmer to the owner and of the children to the parents. Communitarian families seems to accommodate well in sharecropping cultures with the refusal of a monetary system and the possible constitution of large communities.

These differences of agriculture types can explain the differences in family type. Could the difference in happiness be a secondary effect of the agrarian share? Looking at Todd (1990), we can see that once again, the situation differs a lot depending on the countries. In France, the agrarian regions of the West and South-West are among the happiest, whereas the North and North-East, that has virtually no agriculture has the unhappiest regions. In Spain, the regions that have the least agrarian share are either among the happiest in the North of Spain or among the unhappiest with the South-West of Spain. Italy has its happiest regions in the North, which is the least agrarian part. The situations are thus very different from a country to another, but all in all, there seems to be no agriculture effect on the happiness of the inhabitants of the regions, at least not in the agrarian share of the people. Actually, the influence of agriculture on happiness might be more in the *type* of farming more than in the *importance* of the agrarian community. Ownership and relationships between owners and farmers might be more decisive than the share of the community in the regions. Therefore, agriculture would be more a factor of explanation than a bias in the analysis between happiness and family types.

7.5.4. In sum:

1. Average happiness is higher in regions where the ‘absolute nuclear’ family type dominates than in the ‘egalitarian nuclear’ model
2. Average happiness in regions where the ‘stem family’ model dominates is systematically higher than regions where ‘egalitarian nuclear’ dominates
3. Average happiness is higher in regions dominated by a ‘stem family’ model than in regions that are communitarian or with a communitarian inflexion
4. Regions where ‘nuclear absolute’ and regions where stem family dominate have a comparable level of happiness

By combining these observations, we can draw the following conclusions:

1. Regions dominated by *inegalitarian* families have a level of well-being that is systematically higher than in regions with *egalitarian* families; horizontal freedom, the relative independence of kids towards each other, seems to be of primary importance.
2. As far as relationships between the generations are concerned, the link is way less obvious. In particular, the advantage of *absolute* nuclear families over *stem* families at the aggregated level does not resist a more local analysis: while the pattern observed at the aggregated level is maintained in the French case, the difference between the two family types is very small in the British case and even reversed in the Dutch case. Therefore, it is not possible to accept the observation made at the aggregated level. If *libertarian* relationships seem slightly more favorable than *authoritarian* at the aggregated level, the observation cannot be maintained at the regional level; the link between *vertical freedom*, the relative independence of children towards vis-à-vis parents, and happiness is almost non-existent. At the regional level, intergenerational freedom seems to have very little influence on people's happiness whereas intragenerational level seems to have a strong influence.

7.6. Discussion

So this exploration does reveal a consistent difference. Below I will consider a possible explanation and note some limitations.

7.6.1. Explanations

Why live people happier in areas where *absolute* nuclear family type dominates than in areas where the *egalitarian* nuclear family type prevails? Regions where *stem* families (*authoritarian* only) have levels of well-being that are systematically higher than in *communitarian* (*authoritarian* and *egalitarian*), which is the system that offers the least variance. In that context I will first review the evidence that freedom fosters happiness. Next I will consider why the *absolute* nuclear family pattern is most conducive to freedom and why the *egalitarian* type is not, and following the same logic why it is more present in the *stem* family than in the *communitarian* family.

Why has vertical freedom no impact on well-being?

It is a fairly intriguing fact; in the line of previous studies where the strong link between vertical freedom and happiness, for instance in companies, has been highlighted, we could have expected similar results among families, but as a matter of fact, the link is far from being obvious, and when it is present, it is fairly limited. How to explain this? Maybe the advantages and drawbacks between libertarian and authoritarian family balance each other. Maybe the gain in freedom is counterbalanced by a feeling of insecurity due to the weak bonds between generations; conversely, the feeling of security among authoritarian families may compensate a relative lack of freedom.

Why is horizontal freedom so important?

Among all the different facts, this is the clearer and most redundant pattern. At the aggregated level and at the regional level, regions dominated by the inegalitarian or non-egalitarian families are systematically happier than regions dominated by egalitarian families. Why is that? We see at the family level a pattern we have observed in Chapter 3, freedom, in all its form, whether it is actual (social, psychological, potential) or perceived, is one of the most important determinants of happiness. But then what type of freedom? Horizontal freedom seems to be a fertile ground for happiness to develop whereas this observation seems much less true for vertical freedom. How to explain this?

Forced equality reduces the freedom of parents and in a way reduces the chances of optimal allocation. It might be indeed more sensible to give the property and the goods to the child that is the most likely to make a good use of it instead of distributing them equally among kids that are unequally responsible. In many ways, forced equality reduces freedom, and this seems to be confirmed by this comparison between egalitarian and absolute nuclear families. This seems to be confirmed by the fact that ‘authority only’, present in stem families, seems to be higher than authority combined with equality (communitarian), as the examples of France and Italy show.

Is equality a brake to happiness? Whereas some equality might be morally desirable, it does not seem to pay off in terms of happiness, as it might not allow the best way to reach an ‘optimal allocation’. Another explanation is that in a system that values more equality, you depend less on yourself and more on the system; in other words, your locus of control is less internal than in the case of ‘freedom only’, where everything depends on you and your locus of control is purely internal. Focusing on income distribution in America, Oishi, Kesebir and Diener (2011) have shown that there was some link between income inequality and happiness among low income respondents, but not among high income respondents. They also showed that for low income respondents the link between income inequality and income was mediated by perceived unfairness. This article shows also that the correlation between equality and happiness is not as clear and positive as one could expect. Whereas this might sound selfish, this seems to be the best way to reach happiness. This might even question the ethics of happiness ‘is happiness ethical?’ This has been largely discussed by Veenhoven (2010). Maybe the angle brought by this article will add another light on this ongoing debate.

7.6.2. Limitations

This first exploration of the link between family type and happiness is probably not the last word. Future research should deal with the following limitations.

Level of analysis

When dealing with comparing levels of life satisfaction and another variable such as family types, an ideal approach would naturally go towards a multilevel analysis in order to confront a macro-level analysis with micro-level data, that is to say data at the individual level. Whereas this data exists for life satisfaction thanks to Eurobarometer, this data is not available for family types. The macro-analysis, comparing aggregated level with the regional level is therefore the best we can do.

Classification of family types

Despite the conclusions drawn from this study, a few restrictions can be observed; first, when talking about liberty and especially equality, it is not always easy to distinguish laws, practices and values. As Todd himself recognized by creating a fifth hybrid type in 1990 (incomplete stem family with practices not meeting laws) and by creating 16 family types in his later work, it is not always easy to classify every region with a single table. As for any taxonomy, we need to be aware that ‘liberty’ or ‘equality’ are not binary, i.e. ‘free’ or not ‘free’, ‘equal’ or ‘not equal’, but rather a continuum and that two regions with the same family type might present some variations in equality and freedom. This is a general limitation of any taxonomic work: too much complexity makes the comparison unpractical or even unfeasible whereas too much simplicity makes the conclusions less robust. I tried to work with an adequate level of complexity; this could naturally be discussed.

Confounding factors

In this study I checked two possible confounders, economic prosperity and agrarian share and none of them can explain the difference of happiness across regions. An anthropological approach could show that the type of culture has more to do than the agrarian share itself. In Chapter 5, I studied the link between the type of fishing/agrarian society and the current happiness of people; a future interesting work could be to look more into the link between the type of culture and the happiness of people.

Causality

Empirical research can show a statistical relationship, but often we can only guess about the causal factors behind. In this case I made an educated guess in terms of freedom. Though plausible, this will not be the only possible explanation.

7.7. Conclusion

Average happiness appears higher in European areas where the ‘absolute nuclear’ family type dominates, that is, families characterized by a relatively low level of family commitment and low emphasis on equality. On the opposite, there seems to be a lower level of happiness in regions

where egalitarian nuclear families dominate, as it is the case in France for instance. Regions dominated by families with a relative horizontal freedom present higher levels of reported well-being. Conversely, there seems to be no difference between regions dominated by families with and without vertical freedom.

Appendix

Happiness and family types in France

	Life satisfaction	Family type	Average happiness per family type	Regional disposable income	Average regional income per family type	Adjusted means for happiness
Pays de la Loire	2.89	AN		10,230		
Bretagne	2.94	AN	2.92	10,229	10,229	2.92
Limousin	2.71	EN+C		10,535		
Auvergne	2.64	EN+C	2.67	10,556	10,450	2.67
Provence-Alpes-Côte d'Azur	2.81	EN		10,758		
Lorraine	2.77	EN		10,238		
Île de France (Paris)	2.83	EN		13,159		
Haute-Normandie	2.77	EN		10,610		
Corse	2.88	EN		9,012		
Champagne-Ardenne	2.76	EN		10,353		
Centre	2.78	EN		10,815		
Bourgogne	2.82	EN		10,890		
Basse-Normandie	2.79	EN		10,270		
Franche-Comté	2.80	EN	2.80	10,439	10,654	2.80
Poitou-Charentes	2.80	ISF		10,205		
Nord Pas de Calais	2.81	ISF		8,942		
Alsace	2.96	ISF	2.86	11,010	10,052	2.86
Rhône-Alpes	2.81	SF		10,970		
Picardie	2.76	SF		10,381		
Midi-Pyrénées	2.87	SF		10,204		

Languedoc-Roussillon	2.85	SF		9,716		
Aquitaine	2.84	SF	2.83	10,559	10,336	2.83

Happiness and family types in Italy

Regions	Life Satisfaction	Family types	Happiness per family type	Regional disposable income	Average regional income per family type	Adjusted means for happiness
Emilia Romagna	2.93	C		15,925		
Lazio	2.81	C		12,908		
Marche	2.92	C		12,642		
Molisee Abruzzi	2.88	C		10,309		
Toscana	2.89	C		13,566		
Umbria	2.88	C	2.89	12,500	12,975	2.90
Basilicata	2.79	EN		8,844		
Calabria	2.77	EN		8,146		
Campania	2.77	EN		8,161		
Liguria	2.90	EN		13,953		
Lombardia	2.98	EN		15,401		
Milano	2.95	EN				
Puglie	2.77	EN		8,642		
Sardegna	2.75	EN		9,100		
Sicilia	2.75	EN	2.83	8,430	10,084	2.82
Friuli. VeneziaGiulia	2.93	ISF		13,784		
Trentino	3.13	ISF				
Valle d'Aostae Piemonte	2.95	ISF		14,969		
Veneto	2.95	ISF	2.99	13,518	14,090	2.99

Happiness and family types in the Netherlands

Regions	Life Satisfaction	Family types	Happiness per family type	Regional disposable income	Average regional income per family type	Adjusted means for happiness
Friesland	3.41	NA		12,500		
Groningen	3.33	NA		12,700		
Noord-Holland	3.39	NA		15,200		
Utrecht	3.39	NA		15,200		
Zeeland	3.35	NA		13,000		
Zuid-Holland	3.37	NA	3.37	14,500	13,850	3.37
Drente	3.41	SF		14,000		
Gelderland	3.45	SF		14,000		
Limburg	3.36	SF				
Noord-Brabant	3.39	SF		14,400		
Overijssel	3.44	SF	3.41	13,000	13,850	3.42

Happiness and family types in Portugal

Regions	Life Satisfaction	Family types	Happiness per family type	Regional disposable income	Average regional income per family type	Adjusted means for happiness
Alentejo	2.69	EN		7,128		
Lisboa et Vale do Tejo	2.62	EN	2.65	9,001	8,064	2.68
Centro	2.70	ISF		6,902		
Norte	2.75	ISF	2.72	6,579	6,740	2.69
Acores	2.79	unknown				
Algarve	2.67	unknown				
Madeira	2.84	unknown				
Madeira	2.71	unknown				

Happiness and family types in Spain

Regions	Happiness	Family type	Happiness per family type	Regional disposable income	Average regional income per family type	Adjusted means for happiness
Andalucia	2.84	EN		6,989		
Baleares	2.92	EN		10,258		
Castilla Leon	2.96	EN		8,638		
Castilla-Mancha	2.92	EN		7,543		
Extremadura	2.94	EN		6,344		
La Rioja	2.91	EN		9,816		
Madrid	2.87	EN		10,217		
Murcia	2.85	EN		7,174		
Valenciano	2.90	EN	2.90	8,356	8,370	2.90
Aragon	3.01	SF		9,598		
Asturias	2.93	SF		8,182		
Cantabria	2.94	SF		8,657		
Cataluna	2.89	SF		10,184		
Galicia	2.97	SF		7,636		
Navarra	3.00	SF		10,715		
Pais Vasco	2.98	SF	2.96	10,482	9,350	2.96
Canarias	2.90	unknown		8,007		

Happiness and family types in the United Kingdom

Regions	Life Satisfaction	Family types	Happiness per family type	Regional disposable income	Average regional income per family type
Avon.Gloucestershire.Wiltshire	3.24	NA			
Bedfordshire.Hertfordshire	3.21	NA			
Berkshire.Buckinghamshire.Oxfordshire	3.20	NA			
Borders.Central.Fife.Lothian.Tayside	3.16	NA			
Cleveland.Durham	3.19	NA			
Dorset.Somerset	3.20	NA			
East Anglia	3.21	NA			
Essex	3.23	NA			
Grampian	3.24	NA			
Greater London	3.08	NA		14,110	
Hampshire.Isle of wight	3.18	NA		12,115	
Hereford and Worcester.Warwickshire	3.17	NA		12,146	
HumberSide	3.12	NA			
Isle of Wright	3.22	NA			
Kent	3.05	NA		11,910	
Leicestershire.Northamptonshire	3.21	NA		11,430	
North Yorkshire	3.19	NA		12,753	
Northumberland. Tyne and Wear	3.14	NA		10,182	
Schropshire.Staffordshire	3.11	NA		11,075	
South East Essex	3.19	NA			
South East Kent	3.16	NA			
South Yorkshire	3.06	NA			
South-East	3.23	NA			
Surrey.East/west Sussex	3.23	NA		13,870	
West Yorkshire	3.15	NA		10,698	
Cornwall.Devon	3.19	NA	3.18		12,029
Clwyd.Dyfed.Gwynedd.Powys	3.16	SF			

s			
Cumbria	3.20	SF	
Derbyshire.Nottinghamshire	3.12	SF	
Dumphries-Galloway.Strathclyde	3.08	SF	
Greater Manchester	3.11	SF	10,590
Gwent.Mid-S-W Glamorgan	3.09	SF	
Highlands.Islands	3.19	SF	
Lancashire	3.11	SF	10,585
Leinster Meath	3.07	SF	
Merseyside	3.08	SF	10,535
West Midlands	3.06	SF	10,138 10,462 3.12

Chapter 8: Concluding remarks and future work

8.1. Summary

Outline

This dissertation is about geographical variations of happiness. The concept of happiness used, unless explicitly stated otherwise, is that of life satisfaction, that is the extent to which respondents say they are satisfied with the lives they lead. I also look at the two *components* of happiness: the first is *affective* and refers to how one feels most of the time and the second is *cognitive* and refers to how well off one thinks he or she is in comparison to ingrained standards.

The study is divided into two parts. The first part is about *cross-national patterns of happiness*. It provides a brief overview of a) the different combinations of the two components of happiness (affective, cognitive), and b) the various distributions of individual ratings in different countries. The second part is about *relative happiness in France*. Here I compare average levels of happiness in France with levels in other countries.

Cross-national patterns of happiness

Differences in the combination of the components of happiness

In assessing how much we like the life we live, we draw on two sources of information: how well we feel most of the time and to what extent life brings us what we want from it. The sub- appraisals are referred to as 'components' of happiness: an affective component called 'hedonic level' and a cognitive component called 'contentment'. These components do not necessarily parallel and I assess how they coincide in 133 nations. I identify large geographical clusters within which there is consistency in the way people answer questions about affective and cognitive appraisals of life; these are the Islamic nations, Africa, ex-communist nations, Asia, Latin

America and developed nations. Scores on both components are low in Islamic nations, medium in Asia and high in developed nations. Other geographical clusters show dissonant combinations, such as Latin America where a high affective appraisal combines with a medium cognitive appraisal. I compared this clustering with those in the literature (Inglehart, Nadoulek, Huntington) and I find similarities and differences for each, that I go on to discuss.

Differences in response patterns

Comparing happiness across countries, I found that two countries with equal average values can vary greatly in the distribution of individual ratings. One of the differences is the percentage of respondents who answer by giving the maximum score of 10, which is in some cases much higher than the percentage of respondents who answer 9. I call this the *10-excess phenomenon*. This pattern is particularly visible in Latin American and in Islamic nations, and is not as present in developed nations. It does not give information on the relatively low average life satisfaction in France. Analyses of the phenomenon seem to suggest that a cultural effect is involved: moderation in expressing one's thoughts and feelings is not equally valued in all countries and cultures.

Exploring the relative unhappiness in France

French people report being relatively less happy than one would expect given their high objective standard of living. The different cross-sectional studies reported in this dissertation seem to indicate that freedom can explain that observation.

Aspects of freedom

Several aspects of freedom are considered in this dissertation. A first distinction is between *actual freedom*, i.e. the opportunities to choose and *perceived freedom*, i.e. the actors' views of these opportunities. Secondly, actual freedom can be broken down into three sub-types of freedom, as defined by Bay: *social freedom*, i.e. the absence of external constraints to choose, *psychological freedom*, i.e. inner capabilities to choose, and *potential freedom*, i.e. awareness of possibilities. French people report that

they feel substantially less free than people in other developed nations. They also score relatively low on indicators of psychological freedom, i.e. self-esteem and perceived fate control. This finding was particularly clear in the case study of the differences between France and Finland. The two countries were comparable in terms of social and potential freedom, but they were very different in terms of psychological freedom. Once this was established, the next step was to explore the reasons for the lower level of psychological freedom in France.

Participatory teaching

I then looked at socialization practices and analyzed data on teaching practices in different nations. I focused on *participatory teaching*, a pedagogic practice that involves children actively. Participatory teaching dominates in Scandinavia but is uncommon in France, where education is mostly top-down. Prevalence of participatory teaching has little to do with teenagers' happiness, but appears to be strongly related to average happiness of adults. Participatory teaching seems to foster psychological freedom in the long term, better preparing future adults to make choices and helping them to build a sense of mastery. Within the group of prosperous countries, participatory teaching is least developed in France. Whereas education spending in France is comparable to or higher than in other developed nations, the prevailing vertical, top-down pedagogy in France seems to be related to adults' unhappiness.

Hierarchy

Another possible reason for the relatively low level of happiness in France is the relatively great 'power distance' in work organizations. As the social freedom of actors is reduced in a top-down hierarchy, their happiness seems to decline. *Homo hierarchicus* is less happy than *homo aequalis* and the former type is still dominant in France. This corresponds to a wider European pattern: the difference between the level of hierarchy 'as it is' and 'as it should be' is larger in Latin Europe than in Northern Europe.

Family systems

What is surprising in this context is that the positive relationships between freedom and happiness observed at the organizational and educational levels are far from being obvious at the family level. The picture is different when considering intergenerational freedom (libertarian/authoritarian relationships between parents and children) and intragenerational freedom (egalitarian/inegalitarian relationships among the siblings). The libertarian model that seems to dominate at the family level in most French regions does not seem to improve the level of happiness. Intergenerational freedom has little influence on the level of happiness. A possible explanation is that the benefits and drawbacks of an authoritarian relationship offset each other. Authoritarian family types may result in a denser family network than libertarian family types and may thus be more conducive to happiness. At the intragenerational level, the egalitarian family type is linked with a lower level of happiness compared with inegalitarian family type. It may be concluded from these results that not every form of freedom enhances happiness: different types of freedom have different relationships with happiness.

Concluding remarks

The French example is instructive on many levels as it illustrates a wider Latin European pattern with a fairly strong hierarchy, which is also observed in countries such as Italy or Spain. Organizations in those two countries are roughly as vertically structured as in France, although social and potential freedom are higher in France than in those two nations. However, the top-down nature of French teaching practices is stronger, which seems to reduce happiness by restricting psychological freedom. The hierarchy of French society, in combination with its internalization in the psyche of French people through education and later through hierarchical relationships in professional organizations, seems to be the largest limiting factor for happiness.

8.2. Challenges for future research

Singling out cause and effect

Reverse causality is often an issue in correlational research and in cross-sectional studies in particular. In this study, I have mainly considered happiness as the effect of freedom, ignoring the effects of happiness on freedom. However, there are several ways happiness could influence freedom.

As Lyubomirsky et al. (2005) showed, happiness among individuals leads to pro-social behaviors, such as engaging in social interactions or volunteering work. Therefore, it is not too far-fetched to imagine that happiness could lead to more political freedom, freedom of expression or freedom of sexuality, in other words to more *social freedom* (cf. Chapter 4).

As for *potential freedom* (cf. Chapter 4), individuals with positive affects may be more aware of their environment, as implied by the ‘broaden-and-build’ theory (Frederickson 2004), according to which positive emotions broaden the thought-actions repertoire, and thus increase one’s abilities to process new information and seize opportunities.

Finally, as far as *psychological freedom* (cf. Chapter 4) is concerned, we can consider that self-esteem, which is a part of psychological freedom, develops throughout life, whereas it takes years before children get a clear conception of happiness. In that sense, it is likely that psychological freedom precedes happiness or unhappiness. Naturally, they might later reinforce each other, with happier people feeling more confident.

All in all, the relationship between average happiness in nations and freedom is likely to be bi-directional. It is as yet not possible to assess exactly the relative strengths of these effects and their variation across time and place.

Beyond the limitation of the present research

Several limitations of this research have been highlighted in sub-section 1.6.4. In order to tackle the shortcomings present in the current research, more sophisticated analysis can be performed once more systematic data are present. As the global surveys are being repeated, there is a good chance that we will be able to look back at these findings in the near future. Alternatively, qualitative analysis may also reveal more nuance in what people mean when responding to survey questions.

Beyond the nation state

Happiness is multi-layered and complex and it can be studied at various levels, i.e. global, national, regional, family, community and personal. Until now, the national scale has been the most widely studied, probably because of the importance of nation-states during the 19th and 20th centuries and the predominance of these units for studying the lives of people. Strong barriers have been erected between nation-states, which have developed senses of national identity and provided collective self-enhancing narratives for their citizens. Happiness and identity are intimately connected; therefore, looking at national levels of happiness makes sense as people still define themselves as citizens of a nation. One might wonder about the weight of nationhood for citizens of the future. The national part of identity may be eroded by the 'global' and the 'local'. If citizens' identities are less determined by national ties in future, there might be a rising interest in studying happiness either on a larger scale (i.e. in settings with a common institutional or cultural background such as the European Union or Latin America) or on a smaller scale (such as a neighborhood or a specific city).

Policy relevance

Why do we study self-reported happiness? One of the reasons is to find ways to create greater well-being for a greater number of people. Several ways to improve well-being have been identified, but the implementation of this knowledge still lags. Therefore, another challenge of happiness studies is to impact policy making. To achieve this, happiness research must make a few points clear: the benefits of designing policies following a happiness agenda should be well understood, research tools should be understandable to the general public and there should be strong scientific consensus as to the value of these tools and the results obtained from the research. Arriving at this consensus should involve the entire community of happiness research -- sociologists, economists, psychologists and anthropologists among other disciplines. Placing happiness on the political agenda is partly the responsibility of scientists, but associations, think tanks and civil action to educate politicians are also necessary to push this issue onto the political agenda. An obvious first step is to make sure clear indicators such as life

satisfaction are available to policy makers, as these are in principle just as easy to use and readable as GDP.

Resolving competing views

Our understanding of happiness has dramatically increased in recent decades, and is improving almost daily as the empirical research in this field flourishes. Empirical research has resolved several theoretical discussions, such as whether happiness is relative (e.g. Veenhoven 1991) and whether happiness is bound to a personal ‘set point’ around which environmental conditions cause only temporary variations (e.g. Headey 1993). Still, there are open issues which future empirical research must settle. One such issue is whether happiness is self-destructive. Though it is now clear that happiness tends to positively affect human functioning, there is still the possibility of adverse effects, which relates to the question of how much happiness is too much. Another open issue is how happiness relates to moral behavior, i.e. does happiness make us morally better?

Overcoming disciplinary isolation

When looking at the overlap in research between psychology, economics and sociology, it is clear that each field contributes in its own way to this cross-disciplinary topic of happiness. Psychology set the foundation to make happiness a scientific field and economics has followed. Surprisingly only a few sociologists (such as Veenhoven) have pursued studying happiness from a sociological perspective. In general, both sociologists and anthropologists have been reluctant to enter the field and to construct a ‘sociology of happiness’ and an ‘anthropology of happiness’, a phenomenon Veenhoven accurately describes as a ‘blind eye for happiness’. However, as Bartram has written, “building on existing findings, sociologists would be well-placed to clarify the social context of happiness, as against an individualist orientation more common in other disciplines, as well as the unintended consequences of policy initiatives and happiness discourses”, and further, “...avoiding a direct engagement might weaken our ability to influence the public discourses that affect policy outcomes and other processes that actually determine well-being”. Pointing to current concerns, Bartram concludes that “...these concerns are better

treated as reasons to engage with the field rather than to shun it; indeed sociologists might be well placed to redress certain shortcomings in happiness research" (Bartram 2011, p 4).

I would push Bartram's advice a bit further; I think that sociology and anthropology are necessary to reflect upon the existing body of research at several levels. In addition to a field that is dominated by economists and psychologists and that primarily looks through the prism of the individual, sociology is the appropriate discipline to bring some reflexivity. If the field of happiness studies is currently largely bi-dimensional, I feel the field would gain a lot from adding a third dimension from sociology. In particular, reflexivity is needed to make sure that the tools we are using and the body of research we are building are robust and are used in proper context. Also, that we do not miss unforeseen consequences.

The voice of happiness studies has a tremendous potential to be heard in classical research and in the outside world, but only if properly structured -- that is with a sound scientific basis and strengthened by interdisciplinary debate, in which more sociologists are included. If the field of sociology was more significantly engaged in the field of happiness studies, both happiness studies and sociology would benefit. Happiness studies would gain in terms of reflexivity and sociology would be able to expand its research domain.

Morin (1984) states that there is a need to move towards more complexity, i.e. to manage to embrace diversity in unity. What does that mean in the field of happiness? While it is important to recognize the universality of happiness as a feeling, we need to embrace the difference of social-cultural structures that relate to happiness, both positively and negatively. This means we will need to de-partition the different fields that historically founded the science of happiness, i.e. psychology, economics, sociology and the other fields, and generate systematic communication between these fields in order to use the strength of each discipline and to tackle their shortcomings. This concatenation of interdisciplinary work urgently needs to find a concrete place in the broad academic world. To achieve this, economists, psychologists, sociologists, anthropologists, philosophers and historians need to communicate on those issues.

Unfortunately, the walls between the disciplines undermine the quality of the work that is being done in the science of happiness.

I see happiness as a particularly suitable candidate for creative co-operation between researchers from different disciplines and I believe that the current dynamic around the topic of happiness can be converted into a powerful force to lower these barriers.

My future research

For scientific, epistemological, and philosophical reasons, I feel the work on response factors and the 10-excess, presented in Chapter 3, needs to be continued. Scholars working on happiness need to be able to show that they understand measures of happiness in order to generate a consensus around their findings and to make them compelling. This implies a better understanding of differences such as cultural measurement specificities. I plan to keep on working on the distributions of self-reported happiness responses in countries to better understand the diversity of responses across nations and regions, which is one of the blind spots of happiness studies in my view. There are a few specific aspects that need to be pursued: 1) Different response patterns seem to be related to a different appreciation of moderation versus exuberance. If cultural bias seems to play a modest role overall (some cultural ways of responding are highlighted in Chapter 3), some further work is needed to understand better these influences. 2) Measurement problems: what does it mean when a respondent chooses a particular happiness score? Some improvement has been achieved recently (de Jonge 2015), but more work is required in this field in order to know more precisely what people mean when they rate their happiness. 3) Statistical issues: if cultural effects are to be corrected, such as by the corrections applied in Chapter 3, more refined analyses are required.

To identify exactly what the 10-excess is will probably require some field analysis and some interviews in order to know what people have in mind when they answer '10'. The work done in Chapter 3 excludes some hypotheses, but it is still unclear exactly what makes people lean more towards the '10' than the '9' in some areas compared to some others. Are we facing a bias *stricto sensu* or a mere response effect? Directly linked to this question is the possible correction of bias that one might want to

implement. If the distributions contain a bias, a correction might be desirable. An obvious question is what type of correction? I have come up with one solution in Chapter 3, but it can certainly be improved if deemed necessary. Finally, when looking at the distribution in Chapter 3, other biases seem to be involved: the '0 effect' and '5 effect' to name two. In the years to come I will investigate this further because I feel it will contribute to the field of happiness studies.

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Dutch summary

Geografie van geluk

Een vergelijkende studie met focus op Frankrijk

Dit proefschrift gaat over geografische verschillen in geluk. Tenzij explicet anders aangegeven, wordt 'geluk' gedefinieerd als de mate waarin mensen zeggen tevreden te zijn met het leven dat zij leiden. Ik onderscheid twee *componenten* van geluk. De eerste is *affectief* en betreft de mate waarin iemand zich overwegend prettig voelt. De tweede is *cognitief* en betreft de mate waarin iemand zijn verlangens verwezenlijkt ziet.

Het onderzoek is in twee delen opgedeeld. Het eerste deel bestudeert trans-nationale gelukspatronen. Dit deel geeft een kort overzicht van a) de verschillende combinaties van de twee componenten van geluk (affectief en cognitief) en b) de verschillen in verdeling van individuele scores in verschillende landen. Het tweede deel gaat over het relatief lage niveau van geluk in Frankrijk. In dit deel vergelijk ik het gemiddelde geluksniveau in Frankrijk met dat in andere landen.

Transnationale gelukspatronen

Verschillen in de combinaties van de gelukscomponenten tussen landen

Bij beoordeling van ons leven als geheel gebruiken we twee bronnen van informatie: hoe goed we ons het grootste deel van de tijd voelen en in hoeverre het leven ons brengt wat we ons wensen. Deze sub-evaluaties worden de 'componenten' van geluk genoemd: een affectieve component, die het 'hedonische niveau' (of stemming) wordt genoemd, en een cognitieve component die 'tevredenheid' wordt genoemd. Deze componenten gaan niet altijd samen en ik onderzoek de mate van correspondentie in 133 landen. Daarbij worden verschillende patronen zichtbaar in grote geografische clusters van landen: de Islamitische landen, Afrika, voormalige communistische landen, Azië, Latijns-Amerika en ontwikkelde landen. In een aantal geografische clusters zie ik

overeenkomstige scores op beide componenten: in Islamitische landen laag op beide, in Azië gemiddeld op beide en in ontwikkelde landen hoog op beide. In andere geografische groepen zie ik juist verschillende scores op beide componenten: in Latijns-Amerika bijvoorbeeld hoog op affectieve beoordeling en gemiddeld op cognitieve beoordeling. Een vergelijking van deze resultaten met de literatuur (Inglehart, Nadoulek, Huntington) levert zowel overeenkomsten als verschillen op.

Verschillen in verdeling van geluk binnen landen

Bij het vergelijken van geluk tussen verschillende landen, blijkt dat twee landen met dezelfde gemiddelde waarde zeer grote verschillen kunnen vertonen in de verdeling van individuele scores. Eén van de verschillen is het percentage respondenten dat de maximum score van 10 geeft. Dit is in sommige gevallen veel hoger dan het aantal respondenten dat 9 scoort. Dit ‘10-excess’ fenomeen komt vooral voor in Latijns-Amerika en in Islamitische landen, en veel minder in ontwikkelde landen. Het geeft geen verklaring voor relatief lage levensvoldoening in Frankrijk. Er lijkt sprake van een cultureel verschil: matiging in de uiting van gevoelens en gedachten wordt niet in alle landen in gelijke mate gewaardeerd.

Verkenning van de relatieve ongelukkigheid in Frankrijk

Fransen zijn relatief minder gelukkig dan wat men zou verwachten op grond van hun hoge objectieve levensstandaard. De verschillende deelstudies uit dit proefschrift wijzen er op dat vrijheid hier deels verantwoordelijk voor is.

Aspecten van vrijheid

In dit proefschrift komen verschillende aspecten van vrijheid aan de orde. Een eerste onderscheid wordt gemaakt tussen *werkelijke vrijheid* (de mogelijkheden om keuzes te maken), en de *beleefde vrijheid* (hoe iemand tegen deze mogelijkheden aankijkt). Volgens Bay kan werkelijke vrijheid onderverdeeld worden in drie categorieën: *sociale vrijheid* (de afwezigheid van externe belemmeringen in het maken van keuzes), *psychologische vrijheid* (innerlijke capaciteit om te kiezen), en *potentiële vrijheid* (het

bewustzijn van de mogelijkheden). Fransen geven aan zich beduidend minder vrij te voelen dan mensen in andere ontwikkelde landen. Fransen scoren ook relatief laag op indicatoren van psychologische vrijheid (zelfvertrouwen en beleefde controle over hun lot). Dit kwam vooral naar voren in de case-study naar de verschillen tussen Frankrijk en Finland. Deze twee landen scoren vergelijkbaar op sociale en potentiële vrijheid, maar zeer verschillend op psychologische vrijheid. Nadat dit vastgesteld was, is verkend wat de redenen van de lage score op psychologische vrijheid in Frankrijk zijn.

Participatief onderwijs

Bij die verkenning is gekeken naar socialisatie in verschillende landen en in het bijzonder naar participatief onderwijs, een pedagogische benadering die kinderen actief betrekt bij het onderwijs. Participatief onderwijs overweegt in Scandinavië, maar is minder gebruikelijk in Frankrijk. In Frankrijk is het onderwijs voornamelijk éénrichtingsverkeer. Hoewel van weinig invloed op het geluk van tieners, lijkt participatief onderwijs wel sterk gerelateerd aan het gemiddelde geluk van volwassenen. Participatief onderwijs lijkt op de lange termijn psychologische vrijheid te kweken. Het bereidt toekomstige volwassenen beter voor op het maken van keuzes en helpt hen een gevoel van beheersing te ontwikkelen. Binnen de groep welvarende landen is participatief onderwijs in Frankrijk het minst ontwikkeld. Hoewel in Frankrijk relatief minstens evenveel geld wordt uitgegeven aan onderwijs als in andere ontwikkelde landen, lijkt het gebruikelijke éénrichtingsverkeer onderwijs in Frankrijk gerelateerd te zijn aan het ongeluk van de volwassenen.

Hiërarchie

Een andere mogelijke reden voor het relatief lage geluksniveau in Frankrijk is de relatief grote machtsafstand op de werkvloer. Deze beperking van sociale vrijheid lijkt mede verantwoordelijk voor het lagere geluk. *Homo hierarchicus* is minder gelukkig dan *homo aequalis*, en de eerste is in Frankrijk nog steeds het meest voorkomend. Dit komt overeen met een breder Europees patroon: het verschil in hiërarchisch niveau 'zoals het is' en 'zoals het zou moeten zijn' is groter in Zuid Europa dan in Noord Europa.

Gezinstypen

Anders dan ik op grond van het bovenstaande verwachtte, blijkt het libertaire gezinsmodel, dat in Frankrijk lijkt te overheersen, het geluksniveau niet te verhogen. De resultaten van dit onderzoek duiden er op dat vrijheid tussen generaties weinig invloed heeft op het geluksniveau. Een mogelijke verklaring is dat de voor- en nadelen van een hechte familieband elkaar opheffen. We kunnen uit deze resultaten concluderen dat niet alle vormen van vrijheid geluk bevorderen: verschillende soorten vrijheid beïnvloeden geluk op verschillende manieren.

Conclusie

Het Franse voorbeeld is op veel niveaus leerzaam omdat het een breder Zuid-Europees patroon illustreert met een vrij sterke hiërarchie. In landen zoals Italië en Spanje zijn organisaties ongeveer net zo verticaal gestructureerd als in Frankrijk, hoewel sociale en potentiële vrijheid in Frankrijk groter zijn. Aan de andere kant heeft Frankrijk een strikter éénrichtingsverkeer in het onderwijsysteem, wat geluk lijkt te verminderen door psychologische vrijheid te belemmeren. Van de verschillende aspecten van vrijheid die onderzocht zijn, lijkt de onderwijsmethode een belangrijke bijdrage te leveren aan de verklaring van de verschillen in geluk. De hiërarchie van de Franse samenleving, in combinatie met de internalisering in de Franse psyche via het onderwijs en later via hiërarchische relaties op de werkvloer, lijkt grootste limiterende factor voor geluk te zijn.

About the author

Gaël Brulé is a graduate in environmental engineering from INSA Rouen and KTH Stockholm. He has worked in the field of sustainable development academically in various international universities (INSA, KTH, USC, TU Delft) and professionally in Dutch and French organizations. In 2010, he co-founded Atelier CMJN, an architecture firm dedicated to sustainable development and well-being. He started his PhD dissertation in October 2010 at the University Erasmus of Rotterdam. He is, since 2011, the scientific director of Fabrique Spinoza (Spinoza Factory), a Paris-based think tank that promotes well-being for citizens through field actions and awareness raising among citizens and politicians. Since 2015, he is research fellow at the Sodexo Institute for Quality of Life, an internal think tank of the group looking at quality of life from theoretical, cross-cultural and methodological perspectives.

This dissertation is about geographical variations of happiness. Happiness is used in the sense of overall life satisfaction as well as its cognitive (how well off one thinks one is in comparison to ingrained standards) and affective (how one feels most of the time) components. The study is divided into two parts. The first part is about cross-national patterns of happiness. It provides a brief overview of the different combinations of the two components of happiness and of the various distributions of individual ratings in different countries. The second part is about relative unhappiness in France. It argues that freedom, both objective and subjective, partly explains that observation. The biggest limiting factor in happiness seems to be the hierarchy of French society and its internalization in the psyche of French people through education and later through hierarchical relationships in professional organizations.



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