In this article, we analyse the life satisfaction of young adults and model its association with different life domains in South-East Finland and in North-West Russia. The cultural and societal differences of the regions are for example in the standard of living, social stratification, welfare systems and the distribution of well-being, which is supposed to create different patterns in the impacts of life domains on life satisfaction. The life satisfaction as a whole is analysed by quantile regression analysis, which makes it possible to compare the differences within countries and between countries in the quantiles of well-being. According to the results, Finnish society offers more diverse ways to improve life satisfaction than Russian society, which reflects the differences of the societies in institutional settings and equality. The results highlight the need maintain the equalitarian model in Finland especially in the regions which experience economic challenges. In Russia, more equal society could be created by the investments of public sector on social welfare.

Keywords: life satisfaction, life domains, young adults, quantile regression, Kymenlaakso, Leningrad region, St. Petersburg
Валдемар Калунки, Оlli Лехтонен, Ольга Бородкина, Валентина Самойлова

УДОВЛЕТВОРЕННОСТЬ ЖИЗНЬЮ МОЛОДЕЖИ ЮГО-ВОСТОЧНОЙ ФИНЛЯНДИИ И СЕВЕРО-ЗАПАДА РОССИИ 
(на примере Санкт-Петербурга и Ленинградской области)

1. Introduction

The subjective well-being (SWB) has gained a growing research attention in social sciences during the last decade. One reason for the interest is the fact that the research of subjective well-being gives an information about the preferences of people, which can be utilized in policy decisions (Kahneman & Krueger 2006; Wattson et al. 2010). One of the major research interests inside the field has been the differences between societies in SWB. For example, a welfare state is seen to support the life satisfaction of people by securing individuals against risks, easing everyday life, creating social equality and supporting social capital (Ervasti & Saari 2011). The major differences between the research regions of this study are in the standard of living, welfare systems and in the rapidity of societal change. Interesting question is whether these differences are reflected to the young adults SWB and what are the mechanism and structures behind societies to control differences in life satisfaction.

Regardless of the wide interest in the topic there are still major gaps and weaknesses’ concerning the research of young adult’s well-being. Firstly, the research of the impact of institutional settings on SWB is in an early stage (Ervasti & Saari 2011). Secondly, young adults have not got equally attention compared to other age groups in the researches of SWB (Proctor et al. 2009). The major part of the studies concerning the SWB of young adults is made in North-America (e.g. Huebner et al. 1998; Huebner et al. 2000), and cross-
cultural comparisons are rare (Proctor et al. 2009). Thirdly, the earlier studies of SWB have been carried out by traditional linear regression models and their applications which ignore the information contained satisfaction distributions (Diener et al. 1999).

The subjective well-being can be divided into affective and cognitive components (Diener 1984; Pavot & Diener 2009: 101). The cognitive component of subjective well-being can be researched by the concept of life satisfaction, in which individuals can evaluate their satisfaction with their life on whole or on different domains (Diener et al. 1985; Andrews & Withey 1976; Pavot & Diener 2009: 102). In this article, a cross-cultural comparison in the subjective well-being of young adults is analyzed primarily between the small-town regions of South-East Finland (Kymenlaakso) and the surrounding area of St. Petersburg, Leningrad region, in Russia. In addition, descriptive comparison between three regions is carried out: St. Petersburg, Leningrad region and Kymenlaakso. The task of the study is to examine the differences of the associations of eight life domains, material, health, achievements, social relationships, safety, community, future security and religion, on the general life satisfaction of young adults. We aim to answer on questions: How the associations of different life domains with the general life satisfaction vary within the Kymenlaakso and Russian regions (Saint-Petersburg and Leningrad region) in lower and higher quantiles, and what are the differences between study regions? Our aim is produce new understanding about the life satisfaction of young adults based on an empirical survey between the different societies. We expect that examining the impact of different life domains on life satisfaction we can shed light on institutional and cultural differences between the regions and get a view of pros and cons of both societies improving life satisfaction of young adults.

2. Characteristics of the study regions: Kymenlaakso, St. Petersburg and Leningrad region

The economical situation of the study regions differs significantly in terms of the absolute level of welfare, economic development, the equality of income distribution inside the region and the position of the regions in the welfare distribution inside the countries. One of the basic differences between Finland and Russia is in the distribution of welfare. The Finnish social security system has been based on developing universal services since 1950s (Karisto et al. 1999). The strong welfare state has an essential background for understanding the circumstances of an individual for example in the case of unemployment, although the social and economical inequality has risen since the economical recession of 1990’s (Julkunen 2006: 219–223), and young adults can be a vulnerable group in the Finnish social system (Kauppinen & Karvonen 2008). The universalistic and equalitarian welfare system of Finland has an aim to equalize the welfare differences in population, help individuals to adapt different kinds of shocks and life events and keep them as an active part of society (Heikkil et al. 2008; Saari 2010). The welfare system works as it is associated with high SWB (Anderson et al. 2009, 17).

Russia is a transition country, in which societal change is fast. There are a low subjective well-being, a weak social security system and large welfare differences between social groups in Russia (Veenhoven 2001; SSPTW 2010: 92–100, 258–263). In Russia, the SWB scores are lower than in other transition countries (Guriev & Zhuravskaya 2009), which has puzzled researchers (Saris 2001; Inglehart et al. 2008, 278; Veenhoven 2001). The economic change has been deep: income deviation in the country and dispersion across the regions increased dramatically from 1992 to 2003 (Solanko 2006).

In the Soviet Union the social protection system has been constructed on universalistic and equalitarian principles. In the Soviet system the social protection was an important
priority and the change in the system after the end of 1980s has increased the gap between the needs of people and the actual provision of services: only one sixth of Russians regarded social security system as effective and a slightly smaller portion was satisfied with the system (Mikhailova 2011: 7–8). The liberal trends of Russian social policy are reflected the practise of providing minimum social guarantees to ensure a minimum standard of living as defined by the limitations of the economy, rather than the real needs of people. During last years the much has been done to reform the legal framework and to create modern infrastructure of social services in Russia.

Those people who are not able to take care of themselves because of age, illness, unemployment or other such factors receive the support from the state. The current system of social services for the disabled, the poor, families with children are quite significant and diverse.

One fifth of the population had lower resources in 2006 than the subsistence minimum budget, while the top fifth of population earned almost half of the total amount of the monetary incomes (Sokolova 2010). Overcoming poverty was declared as one of the main priorities of social policy government in Russia. The official rate of poverty declined from year to year and in 2013 it was 10.8%. (Russian Federation. Federal State Statistics Service, 2015). However, it should be taken into account that the official poverty threshold is about a quarter below the perceived poverty line. In addition, official statistics do not take into account the so-called “deprived poor “ (due to illness, dependents and others.). Social networks provide for low-income strata daily routine support, which doesn’t produce qualitative change in life, while the social networks of more wealthy people provide support for gaining more money, access to officials, solving problems and getting a good job (Tikhonova 2011: 37–38).

Both study regions have been orientated to industrial production, but the regional division of labour has disfavoured especially Kymenlaakso region. Kymenlaakso was hit harder by the downturn than most other regions in Finland because of its export-orientated industry (KTK 2011). GDP per inhabitant was in 2008 86 per cent from the national average (MKP 2011). The youth unemployment of Kymenlaakso had the strongest provincial increase in Finland from 2008 (12,1 %) to 2009 (19,1 %) (Sotkanet 2011). In addition, youth unemployment (18–24 years old) has been above the national average from 1991 to 2010 (ibid). Kymenlaakso had also the biggest provincial loss of inhabitants in Finland because of internal migration in 2008 (Kaarna 2009: 18). However, the slide of population was just 0,1 per cent in 2010, from the 182 000 inhabitants of Kymenlaakso (MKP 2011). In a study of rural areas of Finland, outmigration of young adults was associated with lower life satisfaction of staying young adults, but unemployment, poorer education, a lack of social support, passive coping strategies and pessimism were mainly mediators for the association (Ek et al. 2008). The result can be applicable to Kymenlaakso, because the region has been among the five regions of Finland in which the absolute amount of employed and 18–64 year old persons have declined since the 1970s (Myrskylä 2009). The recent downturn and maturing industrial cycle of forest industries have meant the loss of traditional paths to industrial jobs and higher unemployment for the region. However, the welfare state, which helps individuals to adapt, may have softened negative impacts of the recession on young adults.

At least those young adults of Leningrad region who has succeeded in their life have experienced different side of globalization. During the last decade, the economic development has favoured some parts of the Leningrad region. However, the standard of living has been low and welfare system weak, compared to Finland. The unemployment rate of Leningrad region has long been among the lowest in Russia (Heininen et al. 2007: 28), which...
reflect the economic position of the region as one of the most developed areas of Russia (Kosonen et al. 2011, 20). The region had 1.632 million inhabitants in 2008 and the decrease of population has been 2.6 percent from 1990 (Rosstat 2011). But currently there is a trend of increasing population and January 1, 2014 in Leningrad region population 1,763,924 people including: the urban population — 1144718 people and rural population 619,206 people. (http://lenobl.ru/about/populate). Leningrad region has benefitted its location near St. Petersburg and between the EU and other parts of Russia, which has supported diverse economic structure and foreign investments (CEMAT 2010; CEMAT 2011; Heininen et al. 2007, 30). The growth of industrial production of the region was clearly above the Russian average from 2000 to 2007 (CEMAT 2005, 1; CEMAT 2007b, 1). The region is also recovered well from the downturn, and some of its sectors have been relatively resistant for the recession due to home market effect (CEMAT 2011).

Incomes have been 25% lower in Leningrad region than in St. Petersburg regardless rapid increase (Heininen et al. 2007), but the difference may be partially evened in purchasing power by the high living cost of St. Petersburg (RSTP 2011). In summary, the relative position of the region is among the best in Russia, but the weaknesses of social welfare and other institutions can be supposed to sustain social inequality between people or show different strategies to improve life satisfaction compared to Kymenlaakso. It must be also remembered that the economic situation differs significantly between the cities of Leningrad region (CEMAT 2011). An age group, which have probably benefitted from the positive development of the best areas, is young adults. However, the lack of strong welfare state has not made possible equal distribution of well-being, which makes it difficult to estimate the effect of development on the life satisfaction of young adults in general.

St. Petersburg represent a region, in which the standard of living is higher than in Leningrad region but lower than in Kymenlaakso. Although St. Petersburg is one of the wealthiest regions in Russia (Korhonen et al. 2013), the difference between the region and Finnish Kymenlaakso is still remarkable. Average monthly incomes were 25,961 rubles or 640 euros in St. Petersburg at the beginning of 2011 (CEMAT 2011), while average incomes in Kymenlaakso were 2,912 euros in 2010 (Statistics Finland 2012a). Purchasing power corrected incomes, based on national level GDP correction multipliers (Statistics Finland 2012b), are 1,235 euros in St. Petersburg and 2,271 euros in Kymenlaakso. The impact of these differences on well-being is affected by more unequal distribution of incomes in St. Petersburg. In Russia, the increase of income has an impact on life satisfaction, even if the change of income is taken account (Schyns 2001). However, the adaptation to new income level takes two years: after two year from the change of income, there is no more an effect on life satisfaction.

In addition to differences in the welfare systems and the standard of living, there are relevant similarities in the study regions. The regions are culturally and geographically relatively near each other, which makes them suitable for cross-cultural comparison (see Tucker et al. 2006). The main research regions, South-East Finland and Leningrad region, represent also either mid-level or low level standard of living in their countries, in which large socio-economic differences are not as deep as in the metropolis areas of the countries. From the perspective of comparison theory, in which the life satisfaction is affected also by the assessment of individuals in relation to the situation of others (Diener 1984; Wood 1996), the relative homogeneity of the regions supports the comparability of the regions.

3. Empirical data and methods

The article is based on a survey data gathered from 16 to 29 year olds young adults in South-East Finland by phone interviews and St. Petersburg by street interviews in the first-
half of 2011. The number of respondents was 1400 in Kymenlaakso region in Finland and 1000 in St. Petersburg in Russia and 700 in Leningrad region. For the data gathering, the quotas of age groups, gender and the place of residence was calculated based on demographic data. Also sampling was based on the population register of Finland. The place of residence was either the 18 districts of St. Petersburg or 18 areas of Leningrad region or the municipalities of Kymenlaakso region in Finland. The quotas for the Leningrad region included Vyborg, Priozersk, Boksitokorsk, Volosovo, Volkhov, Vsevolozhsk, Gatshina, Kingisepp, Kirishi, Kirovsk, Lodeynoye Pole, Lomonosov, Luga, Podporozhye, Slantsy, Tikhvin, Tosno and Sonovyi Bor districts. The street interviews of all the regions were based on the quotas, were carried out in public places like transport stations, main streets, fuel stations and shopping centres. The respondents were selected by random interval sampling, in other words by picking up for example every 5th, 6th or 7th person (depending on the popularity of place) for the interview. The data is gathered from the towns of the Leningrad region, which means that rural areas are not represented equally in the data.

3.1 Measures of life satisfaction and life domains

The dependent variable is life satisfaction as a whole, which was measured by the following question: Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole? In interviews respondents were asked to evaluate using the scale from 0 to 10 their satisfaction. We use this variable because in the cross-cultural studies, general life satisfaction is more suitable measurement than summing up global life satisfaction from different domain satisfactions (Diener et al. 1985; Tucker et al. 2006). The eight domains of life was used to explain life satisfaction as whole. The questions of domain specific life satisfaction (PWI) were modified a little in order to make it suitable to Finland’s and specially Russian’s cultural context and language. The questions asked were the following: 1) How satisfied are you with the things you have? Like the amount of money, your things or other belongings? (standard of living), 2) How satisfied are you with your health? (health), 3) How satisfied are you with the things you want to be good at? (achievement of life), 4) How satisfied are you with getting on with the people you know? (personal relationships), 5) How satisfied are you with how safe you feel? (safety), 6) How happy are you with groups away from your home, whom you hope to care about you? (feeling part of community), 7) How satisfied are you with what may happen to you later on in your life? (future security), and 8) How satisfied are you with religion? (religion). The scale of these questions varied also from 0 to 10.

3.2 Quantile regression model

Most of the earlier studies have been based on conventional regression analysis (e.g. Abbott & Sapsford 2006) or logit models (e.g. Hayo 2007; Hayo & Seifert 2003). What has been neglected so far is the information that is contained in satisfaction distributions. Ordinary least squares regression techniques give one picture of the data focusing to the conditional mean and therefore analysis is implicitly interested in the satisfaction of the average person. This analysis hides the information about quantiles where the satisfaction might crucially differ from the average. Quantile regression provides an equally convenient method for estimating models for conditional quantile functions (Koenker & Hallock 2001), and thus it can help us to obtain a more complete picture of the factors affecting individual well-being. While conventional regressions focus to summary the averages of the distributions, quantile regressions are able to describe the entire conditional distribution of the dependent variable.
In studying subjective well-being, the average effects might underestimate or overestimate the impact of explanatory variables. A focus on the average is therefore unsuitable for the analysis of complex interactions of variables in distributions containing heterogeneous individuals as unequal variation implies that there is more than a single slope describing the relationship between a response variable and predictor variables (Cade & Noon 2003). The quantile regression model explaining life satisfaction as whole, first introduced in the seminal contribution by Koenker and Basset (1978), can be written as

\[ y_{it} = x_{it}' \beta_{\theta} + u_{\theta y} \quad \text{with} \quad \text{Quant}_{\theta}(y_{it} | x_{it}) = x_{it}' \beta_{\theta} \]  

where \( y_{it} \) is the dependent variable (satisfaction to life as whole), \( x \) is a vector of regressors, \( \beta \) is the vector of parameters to be estimated, and \( u \) is a vector of residuals. The explanatory variables included the 8 items of the PWI scale described in previous section (Cummins 2003; International Wellbeing Group 2006; Wills 2009). In the equation \( \text{Quant}_{\theta}(y_{it} | x_{it}) \) denotes the \( \theta \)th conditional quantile of \( y_{it} \) given \( x_{it} \). The \( \theta \)th regression quantile, \( 0 < \theta < 1 \), solves the following problem:

\[
\min_{\beta} \frac{1}{n} \left( \sum_{i,t: y_{it} \geq x_{it}' \beta} \theta | y_{it} - x_{it}' \beta | + \sum_{i,t: y_{it} < x_{it}' \beta} (1 - \theta) | y_{it} - x_{it}' \beta | \right) \quad \text{with} \quad \rho_{\theta}(u_{\theta it}) = \begin{cases} \theta u_{\theta it} & \text{if} \quad u_{\theta it} \geq 0 \\ (\theta - 1) u_{\theta it} & \text{if} \quad u_{\theta it} < 0 \end{cases} 
\]  

Equation 2 is solved by linear programming methods.

The regression coefficients of the quantile regression describe the impact of the explanatory variables to the subjective well-being. The differences between study regions are tested with permutation test (Legendre & Legendre 1998). To illustrate the basic idea of a permutation test, suppose we have two groups A and B whose regression coefficients are \( \beta_{A,i} \) and \( \beta_{B,i} \), and we want to test, at 5% significance level, whether there is a difference between the impacts of regression coefficients to the life satisfaction as whole. Let \( n_A \) and \( n_B \) be the sample sizes corresponding to each group. The idea of the permutation test is to determine whether the observed difference between regression coefficients is large enough to reject the null hypothesis \( H_0 \) that the two groups have identical probability distribution. In the stages the permutation test was done as follows:

1. Calculate difference in observed regression coefficients.
2. Pool the observation of groups A and B.
3. Estimate the regression model for both groups separately.
4. Calculate the difference of the sample regression coefficients and save result.
5. Repeat stages 3 and 4 for m times.
6. Calculate the p-value for observed difference by using the exact distribution of possible differences.

There are some limitations in this research which should take into account when interpreting the results. One major risk in this kind of research concerns social desirability of life satisfaction in different cultural context. Finland represents high and Russia low life satisfaction regions, which indicate also differences in desirability of life satisfaction. There
is a tendency toward the expression of rather negative than positive affects in Russia (Lyubomirsky 1997) which may have an impact on comparability of the life satisfaction between the regions.

4. Results

4.1 Life satisfaction in St. Petersburg, Kymenlaakso and Leningrad region

Summary statistics on Table 1 shows differences between study regions in the life satisfaction and its domains. The comparison shows that the both Russian regions have significantly lower life satisfaction as whole than Kymenlaakso region in Finland. The result

### Summary of statistics of the variables

(Kymenlaakso n=1370, St. Petersburg n=899, Leningrad region n=581). Asterisks after life domains indicate significance levels of the t-tests between Kymenlaakso and St. Petersburg and x-marks between Kymenlaakso and Leningrad region. * and x p < 0.05, ** and xx p < 0.01, *** and xxx p < 0.001.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Region</th>
<th>Mean</th>
<th>SD</th>
<th>p10</th>
<th>p25</th>
<th>P50</th>
<th>P75</th>
<th>p90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction as whole</td>
<td>Kymenlaakso</td>
<td>7.97</td>
<td>1.25</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>6.76</td>
<td>1.92</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>6.90</td>
<td>1.74</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Standard of living</td>
<td>Kymenlaakso</td>
<td>7.41</td>
<td>1.77</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>5.59</td>
<td>2.43</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>5.48</td>
<td>2.44</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Personal health</td>
<td>Kymenlaakso</td>
<td>8.25</td>
<td>1.56</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>7.32</td>
<td>2.40</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>8.05</td>
<td>2.06</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Achievement in life</td>
<td>Kymenlaakso</td>
<td>7.87</td>
<td>1.31</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>7.18</td>
<td>2.11</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>7.50</td>
<td>1.97</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Personal relationships</td>
<td>Kymenlaakso</td>
<td>8.60</td>
<td>1.18</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>7.66</td>
<td>2.02</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>8.19</td>
<td>1.89</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Personal safety</td>
<td>Kymenlaakso</td>
<td>8.68</td>
<td>1.26</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>6.62</td>
<td>2.49</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>7.18</td>
<td>2.49</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Sense of community</td>
<td>Kymenlaakso</td>
<td>7.94</td>
<td>1.39</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>7.83</td>
<td>1.97</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>8.12</td>
<td>1.94</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Future security</td>
<td>Kymenlaakso</td>
<td>7.76</td>
<td>1.38</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>7.19</td>
<td>2.00</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>7.32</td>
<td>2.16</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Religion</td>
<td>Kymenlaakso</td>
<td>6.62</td>
<td>2.58</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>St. Petersburg</td>
<td>5.89</td>
<td>2.87</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Leningrad region</td>
<td>6.31</td>
<td>3.16</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 1
is in line with earlier studies, according to which life satisfaction in Finland is among the highest and in Russia among the lowest in Europe (Fahey et al 2005; Anderson et al. 2009; Veenhoven 2001). Young adults has in Finnish Kymenlaakso region higher satisfaction than in Russia in all domains but in the sense of community. The result indicates that young adults can somewhat compensate lower material well-being by higher sense of community. High standard deviations indicate the greater inequality of SWB in Russian society in all of the domains. In this respect, the statistics support earlier findings where satisfaction varies considerably between people, across different domains of life and across time in Russia much more than in Western Democracies (Saris 2001).

It is a surprise that young adults have higher life satisfaction in Leningrad region than in St. Petersburg. The differences in life satisfaction between the two regions in Russia is at the lowest quantile, which indicates that the inequality, which is more typical for metropolis areas than small town regions, may create mainly the difference. However, the result is not repeated in satisfaction with standard of living, but all other immaterial life domains such as health, achievements, relationships, safety, community, security and religion. For young adults, challenges and competition in work and education is probably significantly tougher in St. Petersburg than in Leningrad regions. The part of the age group has also moved to St. Petersburg, which increases the challenges for finding own place in society. These age group and region specific factors may explain, why economically weaker regions represent higher life satisfaction compare to St. Petersburg.

Interesting fact is that the satisfaction with health, personal relationships and community is better at the upper quartile of Leningrad region than in Kymenlaakso and the satisfaction with achievements and the future security is higher at the top decile. It seems that the subjective benefits of the development of Leningrad region is directed to the top decile in material sense and to the top quartile in social sense. This can be explained by social and regional inequality.

4.2 Regression results

Regression analysis was performed only for Kymenlaakso and Leningrad regions because similar characteristics of the regions make it easier to compare the regression results. The result from OLS regression revealed major differences between the regions (Table 2). The domains affecting life satisfaction were diverse for the young adults of Kymenlaakso, but fewer for the young adults of Leningrad region. In Finland, the impacts of the future security and the standard of living were the strongest, but also all other domains except religion were significant (Table 2). In Leningrad region, the life satisfaction was explained by the variables measuring standard of living, health, future security and religion. Partly, these reminds findings from previous study since those have reported that other important influences are being in good health, feeling in control of one’s life, having strong personal support and trusting people (Abbott & Sapsford 2006). The biggest differences between the countries were at the future security and health where the regression coefficients were higher in Kymenlaakso than in Leningrad region. With religion the association with life satisfaction was higher in Leningrad region (Table 2).

Results indicate that there are adaptation in Leningrad region especially in the standard of living, in which impact is relatively weak for a region having a low welfare. Religion can work as one route to compensate the weakness of standard of living. However, the material wellbeing still is the major explainer for life satisfaction in Leningrad region like it has been also in earlier studies (Abbott & Sapsford 2006). This is not the case in Kymenlaakso region, in which future security has the strongest impact on SWB. A weak impact of material
wellbeing in Finland is in line with other studies: material factors have lower effect on SWB in the countries, which have high welfare (Andersson et al. 2009).

The main results of our article are based on quantile regression model. Table 3 shows the results of quantile regression and offers new understanding about the structures and mechanisms behind the differences in the conditional distributions of life satisfaction as whole.

Estimated coefficients show that there were no significant differences between Kymenlaakso and Leningrad region in the impact of the standard of living on life satisfaction (Figure 2). In Kymenlaakso the association of living standard with life satisfaction decline from the bottom to the up which is in line with earlier studies showing the saturated association between living standard and life satisfaction (Easterlin 1995). The lack of large differences between the countries indicates that, regardless the higher standard deviation, improving the standard of living for the lowest quantiles of well-being is not more effective way to improve SWB in Leningrad region than in Kymenlaakso. There must be adaptation to the weaknesses of material situation in Leningrad region, which explains why the impact of material well-being is about the same level in objectively wealthier Finnish region than poorer Russian region. In earlier studies, lower aspiration levels in rural areas have been utilized in the comparisons of cities and rural areas in order to explain mixed results of objective measures and subjective satisfaction with material well-being (Hayo 2007). In addition regardless of absolute income gains of the Leningrad region (CEMAT 2007a, 5), rapidly developing society can cause frustration to the upwardly mobile individuals because the reference point runs also upward (Graham & Pettinato 2001; Selezneva 2011).

The other main findings of the quantile regression are related to the health, achievements of life, future security and religion. In Kymenlaakso, the health is significantly associated with life satisfaction in every quantile (Table 3). The differences between quantiles in Finland show that health is a one of the most effective way of improving life satisfaction of young adults. In Leningrad region the health is not associated with life satisfaction at all (Table 3) which indicate that health is not a determinant for life satisfaction. Interesting finding is that in the top quantiles the difference between regions is significant showing that

<table>
<thead>
<tr>
<th>Variables</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kymenlaakso</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.284 *** (5.324)</td>
</tr>
<tr>
<td>Standard of living</td>
<td>0.190 *** (11.820)</td>
</tr>
<tr>
<td>Health</td>
<td>0.138 *** (7.263)</td>
</tr>
<tr>
<td>Achievement of life</td>
<td>0.067 ** (2.754)</td>
</tr>
<tr>
<td>Personal relationships</td>
<td>0.078 ** (2.885)</td>
</tr>
<tr>
<td>Safety</td>
<td>0.079 ** (3.259)</td>
</tr>
<tr>
<td>Feeling part of community</td>
<td>0.078 *** (3.314)</td>
</tr>
<tr>
<td>Future security</td>
<td>0.205 *** (8.901)</td>
</tr>
<tr>
<td>Religion</td>
<td>0.003 (0.331)</td>
</tr>
</tbody>
</table>

t statistics in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001
### Table 3

#### Quantile regression table

**Kymenlaakso**

<table>
<thead>
<tr>
<th>Variable</th>
<th>q10</th>
<th>q25</th>
<th>q50</th>
<th>Q75</th>
<th>q90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.719** (-2.918)</td>
<td>0.378 (0.909)</td>
<td>1.328** (3.430)</td>
<td>2.765*** (8.995)</td>
<td>3.956** (10.726)</td>
</tr>
<tr>
<td>Standard of living</td>
<td>0.249*** (6.099)</td>
<td>0.196** (7.304)</td>
<td>0.189** (10.052)</td>
<td>0.148** (5.766)</td>
<td>0.077** (2.597)</td>
</tr>
<tr>
<td>Health</td>
<td>0.218*** (4.239)</td>
<td>0.145** (5.452)</td>
<td>0.083** (3.259)</td>
<td>0.0925** (4.003)</td>
<td>0.102** (3.632)</td>
</tr>
<tr>
<td>Achievement of life</td>
<td>0.057 (1.032)</td>
<td>0.088** (2.844)</td>
<td>0.137** (5.428)</td>
<td>0.083* (2.523)</td>
<td>0.068 (1.577)</td>
</tr>
<tr>
<td>Personal relationships</td>
<td>0.060 (0.794)</td>
<td>0.088* (2.307)</td>
<td>0.091* (2.456)</td>
<td>0.081 (1.924)</td>
<td>0.075 (1.646)</td>
</tr>
<tr>
<td>Safety</td>
<td>0.025 (0.355)</td>
<td>0.022 (0.649)</td>
<td>0.070* (2.525)</td>
<td>0.073* (2.563)</td>
<td>0.140*** (3.341)</td>
</tr>
<tr>
<td>Feeling part of community</td>
<td>0.151* (2.040)</td>
<td>0.101 (2.923)</td>
<td>0.075* (2.518)</td>
<td>0.071 (1.804)</td>
<td>0.001 (0.022)</td>
</tr>
<tr>
<td>Future security</td>
<td>0.289*** (4.172)</td>
<td>0.272** (7.234)</td>
<td>0.200** (6.453)</td>
<td>0.170** (5.499)</td>
<td>0.150** (3.567)</td>
</tr>
<tr>
<td>Religion</td>
<td>0.044 (1.639)</td>
<td>-0.012 (-0.884)</td>
<td>0.001 (0.049)</td>
<td>-0.001 (-0.058)</td>
<td>0.002 (0.148)</td>
</tr>
</tbody>
</table>

**Leningrad region**

<table>
<thead>
<tr>
<th>Variable</th>
<th>q10</th>
<th>q25</th>
<th>q50</th>
<th>Q75</th>
<th>q90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.565** (2.692)</td>
<td>1.608 (3.191)</td>
<td>1.957** (4.795)</td>
<td>3.152*** (8.029)</td>
<td>4.781*** (5.913)</td>
</tr>
<tr>
<td>Standard of living</td>
<td>0.220*** (3.726)</td>
<td>0.174** (3.417)</td>
<td>0.159** (4.078)</td>
<td>0.206*** (6.332)</td>
<td>0.159*** (3.341)</td>
</tr>
<tr>
<td>Health</td>
<td>0.083 (1.100)</td>
<td>0.075 (1.007)</td>
<td>0.103 (1.573)</td>
<td>-0.008 (-0.157)</td>
<td>-0.010 (-0.155)</td>
</tr>
<tr>
<td>Achievement of life</td>
<td>-0.025 (-0.298)</td>
<td>0.111 (1.274)</td>
<td>-0.012 (-0.189)</td>
<td>0.149* (2.514)</td>
<td>0.298*** (3.514)</td>
</tr>
<tr>
<td>Personal relationships</td>
<td>0.089 (0.932)</td>
<td>0.030 (0.363)</td>
<td>0.150* (2.402)</td>
<td>0.149 (1.834)</td>
<td>0.138 (1.360)</td>
</tr>
<tr>
<td>Safety</td>
<td>0.077 (1.609)</td>
<td>0.121 (2.506)</td>
<td>0.065 (1.827)</td>
<td>0.010 (1.92)</td>
<td>-0.070 (-0.923)</td>
</tr>
<tr>
<td>Feeling part of community</td>
<td>0.021 (0.279)</td>
<td>-0.009 (-0.128)</td>
<td>-0.009 (-0.172)</td>
<td>-0.029 (-0.461)</td>
<td>-0.077 (-0.695)</td>
</tr>
<tr>
<td>Future security</td>
<td>0.049 (0.659)</td>
<td>0.080 (1.543)</td>
<td>0.171 (2.843)</td>
<td>0.117* (2.224)</td>
<td>0.070 (0.788)</td>
</tr>
<tr>
<td>Religion</td>
<td>-0.007 (-0.190)</td>
<td>0.063 (2.079)</td>
<td>0.08** (3.073)</td>
<td>0.091*** (3.826)</td>
<td>0.063 (1.494)</td>
</tr>
</tbody>
</table>

T statistics in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001
in Kymenlaakso the health is a resource for achieving higher life satisfaction but in Lenin-
grad region the life satisfaction is not dependent from the health (Figure 2).

The meaning of subjective achievements on life satisfaction was highlighted in Lenin-
grad region (Table 3), because in 75 and 90 percent quantiles it had statistically significant
association with life satisfaction. Achievements of life are connected with standard of living
since the low incomes, constricted resources and poverty can limit the possibilities to the

Figure 2. Estimated regression coefficients in 10, 25, 50, 75 and 90 percent quantiles
in Kymenlaakso (solid line) and in Leningrad region (dashed line).
Significant differences (p<0.05) between study regions are indicated by raster.
In the permutation test m was set to 1000
self-fulfilment, and therefore weaken also the subjective well-being (Fahey et al. 2005, 41; Layard 2005, 30–31; Luhmann et al. 2011). In Kymenlaakso the achievement of life, explained life satisfaction in 25, 50 and 75 percent quantiles (Table 3). Results underline differences between the societies as it emphasize the competitiveness in Russia and equalising welfare state in Finland. Most of the life domains are associated with life satisfaction in 25, 50 and 75 percent quantiles in Finland offering various paths for equalising the differences whereas in Leningrad region these associations are missing (Table 3). One example of this is shown in the Figure 2. Association of achievement of life on life satisfaction is higher in the 90 percent quantile in Leningrad region that in Kymenlaakso whereas in 50 percent quantile the difference between regions is opposite.

This same inclusive feature was found also in the future security in Kymenlaakso but not in Leningrad region as future security produced life satisfaction only for 50 and 75 percent quantiles (Table 3). The result indicates the differences in the equality of people between the societies. In Leningrad region, there is no option to gain life satisfaction at the 10 and 25 percent quantiles as the problems of everyday life and life in general may be too unstable for future planning. In Kymenlaakso the future security has highest association on life satisfaction in the 10 and 25 percent quantiles indicating that society contains mechanism for inclusion which declines standard deviation in life satisfaction. These differences between the countries were also statistically significant (Figure 2) because the regression coefficients are significantly lower in 10 and 25 percent quantiles in Leningrad than in Kymenlaakso. The reasons for this are probably related to the weaknesses of societal institutions which do not guarantee sufficiently stable rules and norms (Gudkov 2011), and to a low level of trust to public institutions among young adults (Borodkina, Samoylova & Kallunki 2013: 107). Feeling part of the community strengthens this inclusiveness because it doesn’t have association with life satisfaction in Leningrad region but has it in Kymenlaakso favouring people in the weakest position (Table 3).

The religion was associated with life satisfaction in the Leningrad region in 25, 50 and 75 percent quantiles but not in Kymenlaakso (Table 3). Apart from the 10 percent quantile the differences between regions are significant (Figure 2). These findings support understanding of the religion in the field of psychology of religion for helping individuals to cope, either positively or negatively, with different kind of life situation (Pargament & Ano 2004). From this perspective, the impact of religion in Leningrad region can be explained by the challenging living conditions of the region, which support the role of religion as a part of coping process. The church has a negligible impact on young people, so the majority of respondents do not perceive the church as a source of support. Trust to the church is associated with the idea of religion as an important value in life (r =, 388 ***) and religious activities (r =, 364 ***)

The church can have an impact on young people, but this effect is restricted by only the religious community.

5. Discussion and conclusions

The results revealed major differences between the Kymenlaakso and Nortw-West Russian regions how life satisfaction as whole can be improved among young adults. In Kymenlaakso the future security, the standard of living and the health are the most effective ways to improve the life satisfaction of those young adults who are in a weak position in 10 and 25 percent quantiles, but also all other domains except safety and religion are effective. Accordingly, the standard of living was effective in Leningrad region, but only safety and religion, which were ineffective in Kymenlaakso, were the other domains which had an impact on the life satisfaction of poor young adults (25 percent quantile).
In Kymenlaakso the distribution of life satisfaction as whole was narrow and this characteristic was explained by equalitarian welfare model. In Kymenlaakso the life satisfaction was supported more diverse ways, which reflects higher standard of living but also wider institutional support structure and mechanisms of the society. These factors support especially young adults in the 10, 25 and 50 percent quantiles prohibiting exclusion from the society. In Leningrad region the society was not as inclusive and the position of unsatisfied young adults was more problematic. Because the inclusive mechanisms of the society were weaker the life satisfaction distribution was also wider in Leningrad region. However, the religion was significantly associated with life satisfaction indicating an adaptation of young adults by immaterial factors of religion to the challenging life environment.

In addition to highlighting the standard of living, the result showed the meaning of institutional settings for life satisfaction. The societal structures like welfare system and cultural assumption behind the Finnish equalitarian model or Russian market-driven development produce different ways to control life satisfaction. According to the results, the downturn of Kymenlaakso has not challenged the subjective well-being of young adults and diversity in the sources of subjective well-being. Accordingly, it can be said that the positive impact of market forces on the economy of Leningrad region have not changed the challenges caused by social inequality. This can be seen in low life satisfaction, strong standard deviations of the domains but also fewer effective domains in order to improve life satisfaction. More detailed further research could be made, because the social development of Leningrad region is territorially differentiated, which means that there are wealthy zones in near St. Petersburg and in successful local centres leaning on industrial plants and problematic zones, in which the incomes can be about 20 to 25 percent from the wealthy zone (CEMAT 2007a, 6). In addition, it must be taken account that the results of this study does not concern the rural areas of Leningrad region, which are especially in the eastern part of the region suffering out-migration of young people (ibid).

The research produced a new understanding of the life satisfaction of young adults by cross-cultural comparison and quantile regression. The cross-cultural perspective offered a view to the societies of divergent histories like the development of welfare system in Finland and the transition from the Soviet system to market economy in Russia. These differences prolong also different historical experiences of young adults in a more equal Finnish and unequal Russian societies. The divergent societal structures of the regions can be seen also as different paths from the bottom of well-being to life satisfaction. For this study, quantile regression offered also possibility to understand how life satisfaction can be improved at different levels of well-being in Finland and Russia. Thus it deepened the traditional research of life satisfaction by the perspective of different strata of the societies, which is a central issue for the understanding of the subjective level experience in a wide societal perspective. For policy decision, the results highlight the need to maintain equalizing structures in Finland especially in the regions which experience economic challenges. The satisfaction with standard of living and hope for a better future are important for the life satisfaction of young adults. In Russia, more equal society should be created by the investments of public sector on social welfare which would support the cohesion of society and more diverse routes to improve well-being for lower strata.

References


Borodkina O. I., Samoylova V. A., Kallunki V. Problemy sortzial’nogo isklucheniya / vklucheniya molodezhi (na materiale sortziologicheskogo issledovaniya v Sankt-Peterburge i Leningradskoy oblasti) [Problems of social exclusion / inclusion of youth (based on sociological surveys in the St. Petersburg and Leningrad region], Zhurnal sotsiologii i sotsialnoy antropologii [Journal of Sociology and Social Anthropology], 2013, XVI(1), pp. 100–110.


