RETURN OF INEQUALITY IN MODERN SOCIETY?
Trend in dispersion of life-satisfaction in EU-nations 1973-2001[i]

Ruut Veenhoven

Abstract
It is said that social inequality is returning in modern nations. This trend is seen to manifest in widening disparities in income in the late 20th century and attributed to neo-liberalism, globalization and immigration. This development is seen as a turn in the long-term trend towards a more civilized society.

This paper challenges the idea of rising inequality. It argues that the traditional indicators of inequality in nations fall short in several ways and cannot be meaningfully compared across time and nations. Instead it proposes to measure inequality in another way, not by differences in presumed chances for a good life, but by the dispersion of final outcomes of life.

Inequality in nations is measured by the difference between citizens in satisfaction with their life as a whole. Standard deviations of life-satisfaction in EU nations are compared over the years 1973-2001. It appears that the dispersion became smaller instead of larger. Comparison across nations shows also lower dispersion in the most modern nations.

So the trend towards greater equality seems to persist. If there is any truth in the theory that access to scare resources became more unequal, that tendency must have been compensated in some way, possibly by greater equality in personal capabilities.

1. INTRODUCTION

1.1 The issue: Return to greater inequality?
It is widely acknowledged that social inequality has lessened in Europe over the last centuries. Traditional caste distinctions of agrarian society were almost eliminated by industrialization and next the class differences of industrial society were much abated by the development of modern service society and the welfare state (e.g. Paulinski & Waters 1996). Discrimination of women and ethnic minorities also diminished spectacularly. This reduction of inequality is attributed to various long-term developments, such as technology, education and political mobilization (e.g. Kerr 1983). The change is generally seen as the gradual fulfillment of the main promise of the French revolution (egalité). Progress optimists see it even as part of an ongoing evolution towards a more civilized society.

Yet recent developments challenge the prospect of continuous egalization in advanced societies. Since the 1980s there is a growing concern about ´modern´ inequality, both in the political arena and among social scientists. This modern inequality is denoted by words as 'poverty' and 'social exclusion'. The trend is characterized by terms as 'polarization' and 'bi-partition' and is seen to give rise to a 'two-third society' in which a large minority is falling back ever more. One issue in this discourse is the persistence of old inequalities in modern

society, in particular the continuance of social class. A spokesman of that view is Marshall (1997). Another issue is the appearance of 'new' inequalities, such as between pensioners and young adults, and between settled citizens and new immigrants. Noll (1999) crisply reviewed that literature.

Modern inequality is attributed to modern developments, in particular to neo-liberalism and globalization, which are seen to be in the advantage of a professional elite but to involve most people in a 'race to the bottom'. These forces would also strip the welfare state and therefore make the downfall deeper. Immigration would also play a role, because it migrants enter society from the bottom and are an easy prey for exploitation (e.g. Sassen 1991, Wilterdink 1993). All this suggests that the development of social inequality follows a U-shaped pattern over time and that we have passed the most egalitarian phase in social evolution.

If true, that would be a severe blow to progress optimism. It would also be a testimonium paupertatis for social democracy. A return of inequality in modern society could further cause social turbulence in the long run and possibly revolutionary upheaval. For these reasons the prophets of new inequality call for timely counter-measures and at least conservation of the welfare state.

Before swallowing the medicine one should check the diagnosis. Is inequality on the return indeed? That is an empirical question. To answer that question we need a good measure of social inequality, preferably a comprehensive measure that allows comparison across nations and over time. Let's take a look at the available instruments.

1.2   Current indicators of social inequality in nations

Social inequality is typically conceived as *difference in access to scarce resources*. In sociological textbooks the most commonly mentioned scarce resources are 'income', 'power' and 'prestige'. These were central issues in recent emancipation movements of laborers and women. Recent notions of social exclusion add access to 'social relationships', which reflects primarily the concern of professional social workers.

Differences in ' access' to scarce resources are typically measured by being in 'command' of resources. That is: not by the assets one *could* have, but by the assets one actually *has*. The reason is obviously pragmatic, potential assets can hardly be measured. Still, this practice defines people who do not care about money, power or prestige as 'deprived', though they could have got these things if they had wanted.

Difference in command of resources is typically measured by difference in income. The reason is again pragmatic. It is difficult to quantify differences in power, prestige and intimate bonds, and certainly to follow change in these matters over time. Though income is the best measurable resource, comparison of income inequality over time is beset with methodological problems. As a result there is quite some divergence in estimates of the trend.

Though it is probably true that income disparities widened somewhat at the end of the 20th century (Goesling 2001, Ritakallio 2001), it is not established that this marks a wider return of social inequality.

Firstly income is not that scarce a resource at the end of the century as at the beginning, because the average income has tripled in this era. Secondly, it is not so sure that differences in power and prestige widened. There is also evidence of increasing empowerment of minorities and a shortening of the social prestige ladder. There is neither convincing proof of growing exclusion from social networks. The rising rate of single persons seems rather the result of increased network mobility, such as the emerging pattern of serial monogamy in marriage, and of diversification of life-styles.

A more basic reason to doubt these data is that this kind of indicators cannot demonstrate increasing inequality at all. Above I mentioned already three shortcomings: 1)

measuring command over resources instead of access, 2) focusing on income while neglecting other resources and 3) declining scarcity of income over time. At a more basic level one can question the concept of 'scarce resources' as such. Something is 'scarce' if many want it but few can have, e.g. the best place in theater or the biggest house in town. Yet not everything *wanted* is really *needed*. We can also live with a place on the third row of the theater and in an average house. So we do not bother about all inequalities, but only about inequalities that really matter. Therefore, measures of inequality should focus on differences in access to *relevant* resources. Since notions of relevance must draw on a theory of the good life, this links the issue of social inequality to quality of life research.

This introduces a classic problem into the measurement of inequality; the problem of defining what a good life is like. This problem is central in quality-of-life research. In that field the problem is mostly also left unresolved. By lack of a sound theory of what people really need, quality is typically conceived in terms of moral preference and political correctness. Like in the case of inequality measures, items in QOL-inventories are also selected on the basis of availability. Hence there are many different QOL-inventories and contents change over time. Even if uniform inventories are used there is still the problem that the same assets differ in relevance across time and nations. As noted above, income position is likely to have lost relevance in affluent society but good education may have become more crucial. Next to these problems of selection, there is the problem of aggregation. Current QOL-indexes add apples and oranges. Elsewhere I have discussed these problems in detail (Veenhoven 1996, 2000). Most of these also apply to current measures of inequality.

Some of these problems disappear when inequality is measured subjectively, at least when perceptions of relative deprivation are assessed (e.g. Bönke 2001). Yet that approach has its own problems. One problem is that such perceptions draw heavily on psychological conditions, for instance unhappy people may attribute their misery to social disadvantage. If so, a general decline of living conditions in a country will raise perceptions of relative deprivation, while objectively all citizens are deprived as much. Another problem is that individual perceptions depend on shared interpretations. So publicity about rising inequality can bring inequalities to the mind that was not noted earlier. Reversibly the same processes may block the awareness of growing inequality. This is what Marxists denote as 'false consciousness'.

1.3   An alternative measure of social inequality

Above we have seen that the current approach is measuring equality by differences in access to scarce resources, in other words, as difference in *life-chances*. The alternative is to measure social inequality by dispersion of *life-results*. Elsewhere I have elaborated that difference between chances (preconditions) for a good life and the actual outcomes of life and have shown that outcomes can be measured comprehensively by how long and happy people live (Veenhoven 2000). In this paper I transpose that insight in quality-of-life to the measurement of inequality and link up with the tradition of measuring inequality by differences in health and longevity (Kunst 1997, LeGrand 1987).

1.3.1 *Dispersion of life-satisfaction*

If we assume that access to relevant resources adds to a longer and happier life, then differences in access must reflect in differences in longevity and life-satisfaction. The greater such disparities in a society, the greater the dispersion in happy life-years among citizens. Differences in the number of years lived can be assessed only for generations that have died out, but differences in satisfaction with life can be timely assessed in surveys. Therefore this paper concentrates on dispersion in life-satisfaction.

Life-satisfaction can be measured by simply asking people how they feel about their life as a whole. This is common practice in quality-of-life surveys. There is good evidence

that such questions yield valid information (Saris & Scherpenzeel 1996, Veenhoven 1998). So, dispersion of life-satisfaction in a nation manifests in the distribution of responses in a general population sample and can be quantified by the standard deviation.

Accordingly, *I propose to measure social inequality in nations by the standard deviation of life-satisfaction*. Below we will see that this measure is quite appropriate for the question at hand and that good data on the matter are available.

1.3.2   *Suitability for the issue*

This indicator of inequality fits the above-mentioned demands for testing the theory that inequality is on the rise in modern society, it is a comprehensive measure and it is comparable across nations and over time. It also provides the desired orientation on relevant matters. Above all, this indicator has the beauty of simplicity.

Comprehensiveness

Life-satisfaction is an *overall* judgment of one's life-*as-a-whole*. So this measure needs no sum-scores and bypasses the problem of unknown utility and contextual variation in weights. One could object that that these tricky calculations are now made by the individual respondents. If so, these do so on the basis of better information than an investigator can dispose of, but probably respondents do not calculate their life-satisfaction at all. There is growing evidence that life-satisfaction is typically inferred from how one feels generally and that mood-level is linked to needs rather than to wants. Happiness seems to be a human outgrowth of an affective orientation system that preceded cognitive development (Veenhoven 1997, 2000).

Comparability

Comparability across nations is less evident at first sight. There is much doubt about the universality of the concept and claims about over-report in western nations. Elsewhere I have refuted most of that criticism (Veenhoven 1997,1998). While the focus is here on *differences* in life-satisfaction within society rather than on the average level, much of the criticism does not apply. Even if the level of happiness is overstated in some nations, the difference within can still be comparable.

The question is rather whether there are cultural factors that differentially effect the dispersion of responses across nations. One such factor could be the tendency to present oneself as average and prefer the middle category of response scales. This tendency has been attributed to the Japanese (Iijima 1981) but that view is not supported by the data. Another distortion could be in cultural differences in aptness to exaggerate. Preference for extreme answers will inflate standard deviations of life-satisfaction. This source of bias could be a problem in comparisons across nations but would not affect comparison through time within nations.

Relevance

By focusing on life-satisfaction we avoid measuring inequality by disparity in access to resources that bear little relevance or are not equally relevant for everybody. There are good reasons to assume that life-satisfaction responds to things that really matter and that it incorporates idiosyncratic variations. Above I noted that life-satisfaction reflects gratification of needs rather than mere fulfillment of wants. In that respect this measure is also superior to subjective perceptions of deprivation. One may feel deprived about not sitting on the first row, but still feel good about life-as-a-whole, because failure of that want does not really interfere with a basic need.

Availability of data

Life-satisfaction is a current item in welfare surveys, so there is a lot of data on dispersion of life-satisfaction in nations. These data are readily available in the World Database of Happiness, which presents observed means and standard deviations of happiness in all general population studies ever held (Veenhoven 2001a). There are now data about all the rich nations and the former communist countries, but data on third world nations are very incomplete. Time-series data are available for the USA since 1945, for Japan since 1958 and for the EU-nations since 1973. This suffices to test the hypothesis under investigation.

1.4   Research questions

Now we have a new measure of inequality in nations, we can go on to specify how this indicator can be used in testing the theory of growing social inequality in modern society.

A preliminary test is to check whether the distribution of life-satisfaction tends to a bi-modal pattern. This is implied in notions of an emerging 'split' in society. Frequency distributions can be visually inspected for such a pattern.

The main test is to inspect whether standard deviations did increase over time. This can be checked by a correlational analysis in which size of the standard deviation is crossed with the year of observation. This test will be elaborated by partialling out a possible confounding factor, that is, increase in the level of happiness.

Lastly, the wider theory of modern inequality can also be tested by comparing dispersion of life-satisfaction across nations, in particular by comparing standard deviations in more and less advanced countries. The theory of the U curved time trend holds truth we can expect greater inequality in the most advanced nations in the 1990s.

2.   DATA

The analysis is based on the life-satisfaction item in the Eurobarometer survey, which reads as follows:

On the whole, how satisfied are you with the life you lead?
- very satisfied
- fairly satisfied
- not very satisfied
- not at all satisfied

The Eurobarometer survey is held twice a year in all EU member states and involves representative samples of the population aged 15 years and older. The regular sample size is about 1000 in each country. This survey program started in 1973 in the nine member states of that time: Belgium, Britain, Denmark, France, Ireland, Italy, Luxembourg, The Netherlands and West Germany. Greece joined in 1980, Portugal and Spain in 1985. Since 1990 the survey is also held in Austria, East Germany and Sweden. The life-satisfaction item was in the core-module from the beginning. In the years 1997, 1998 and 1999 life-satisfaction was assessed only once.

The responses to the question are given numerical values afterwards; 'very satisfied' is denoted as 4 and 'not at all satisfied' as 1. On that four-step scale, the standard deviation can maximally be 1,73 (if 50% scores '4' and the 50% '1') and minimally zero (100% of the responses in one response category).

Since the aim is to compare over a time I restrict to nations of which we have data over 10 years at least. This leaves us with 12 cases, 9 nations with a time-series of 23 years, one with a time-series of 16 years en two with a time-series of 11 years. Given some missing cases the total number of data points is 447. These data were taken from in the World Database of Happiness mentioned above.

Scheme 1
Patterns of dispersion

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Possible frequency distributions　　　　　　*Standard deviation*　　　　*Mean*

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Bi-modal

40 %	10 %	10 %	40 %
4	3	2	1
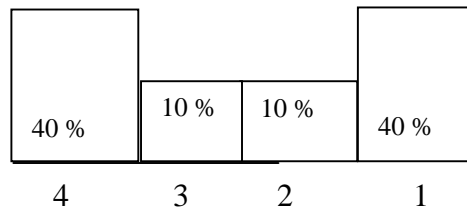
1,36　　　　　　　　　　2,5

Non-modal, flat

25%	25%	25%	25%
4	3	2	1

1,12　　　　　　　　　　2,5

Uni-modal, positively skewed

40%	30%	20%	10%
4	3	2	1
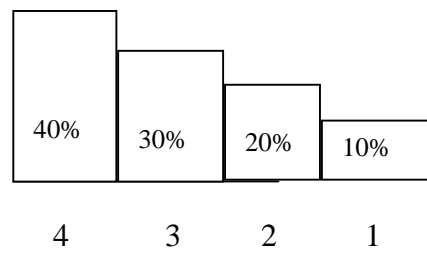
1　　　　　　　　　　　3

Uni-modal, negatively skewed

10%	20%	30%	40%
4	3	2	1
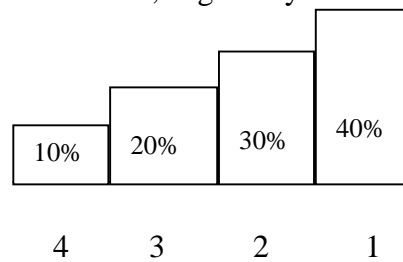
1　　　　　　　　　　　2

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3.   RESULTS

3.1   No bi-modal distributions at all
In theory the distribution of responses on this four-step response-scale could take five different shapes. These possible distributions are presented in **scheme 1.** In this data set, all observed distributions are of the same type, the positively skewed uni-modal distribution. Negatively skewed distributions are observed in other parts of the world (e.g. in Latin America) but not in contemporary Western Europe.

In this data set we found not any bi-modal distribution and neither a tendency towards such a pattern over time. In this light talk about 'split-society' appears to be mere rhetoric.

3.2   Standard-deviations diminished over time
Growing inequality is more likely to manifest in a flattening of the distribution, which will (also) manifest in a rise of standard deviations. As a first check, standard deviations were plotted against time for each nation separately. These plots are presented in **appendix 1**. For reasons of surveyability the schemes present the average standard deviation in each year (mean of observed SD in spring and fall survey [ii]). Visual inspection shows a decline in most cases. Standard deviations declined in ten of the thirteen nations, and in six of these the decline was statistically significant (p<.05). Standard deviations raised somewhat in three countries (France, East Germany and Ireland) but none of these ascents were significant.

In order to visualize the general pattern, the data are also presented in a joint plot. For that purpose the standard deviations of the different nations per year were combined in an average that was weighted by population size. The combination in an average is required to see the time-trend, which otherwise gets lost in the wide variation across nations. Weighting by population size is required to prevent distortion by little countries such as Luxembourg.

Scheme 2
Trends in dispersion of life satisfaction in the European Union

Without East Germany, Greece, Portugal, Spain
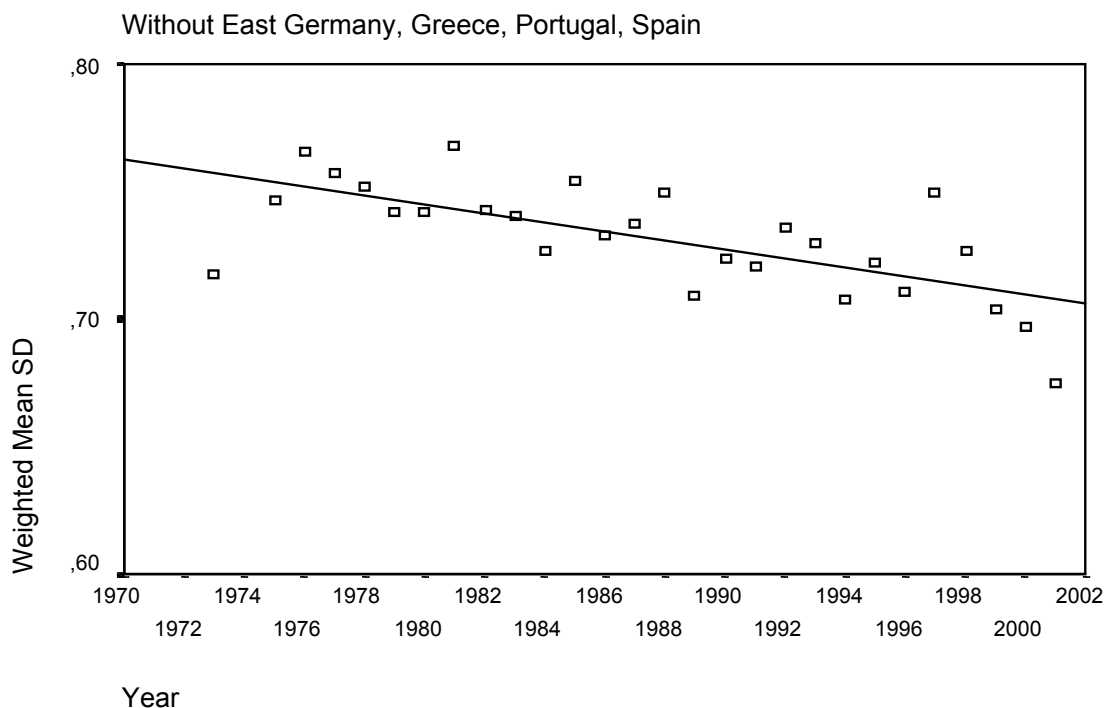
The result is presented on **scheme** 2. We there see a clear pattern of declining standard deviations, in other words, a growing equality in life-satisfaction. The unstandardized regression coefficient is -.00176, which means a yearly drop of inequality by 0,18%. The 95% confidence interval around that value ranges from -.001 to -.003. Since the value zero is not in that range, we can take it as read that inequality did *de*creased in Western Europe over these years. The decease is quite small however, if this trend would continue linearly, it would take about 50 years to reduce the standard deviation from its current level of 0.7 to 0.6. Another 300 years would be required to reduce the standard deviation to zero. Yet long-term development goes usually by small steps.

3.2.1   *More so in Southern Europe*
Scheme 2 leaves out the three Medeteranian nations that entered the EU later: Greece, Portugal, Spain. We get a better view of the time-trend by considering these cases separately. Since these are all three South-European nations, I added the other South-European nation to this cluster, that is, Italy. As a contrast group I selected four typical North European nations (Britain, Denmark, West Germany and The Netherlands). For all these latter nations we have data since 1973.

The data are presented in **scheme** 3a and **3b.** In these schemes the fat trend-line in the middle represents the mean *level* of life-satisfaction item and the thin lines the *variation* around that mean. In **scheme** **3a** we can see that the level raised somewhat in the North-European nations between 1973 and 1996, and that the dispersion of life-satisfaction became slightly smaller. The homogenization around the mean is hardly visible however. In **scheme 3b** we see a similar pattern in South-Europe over the years 1985-1996. Yet the rise of the average level of life-satisfaction is less pronounced in this case, but the reduction in spread is better visible. Mind that the level of life-satisfaction is substantially lower in the South-European countries.

Scheme 3
Trend in life-satisfaction in Northern and Southern EU nations separately

4 North-European Countries 1973-2001

4 South-European Countries 1985-2001
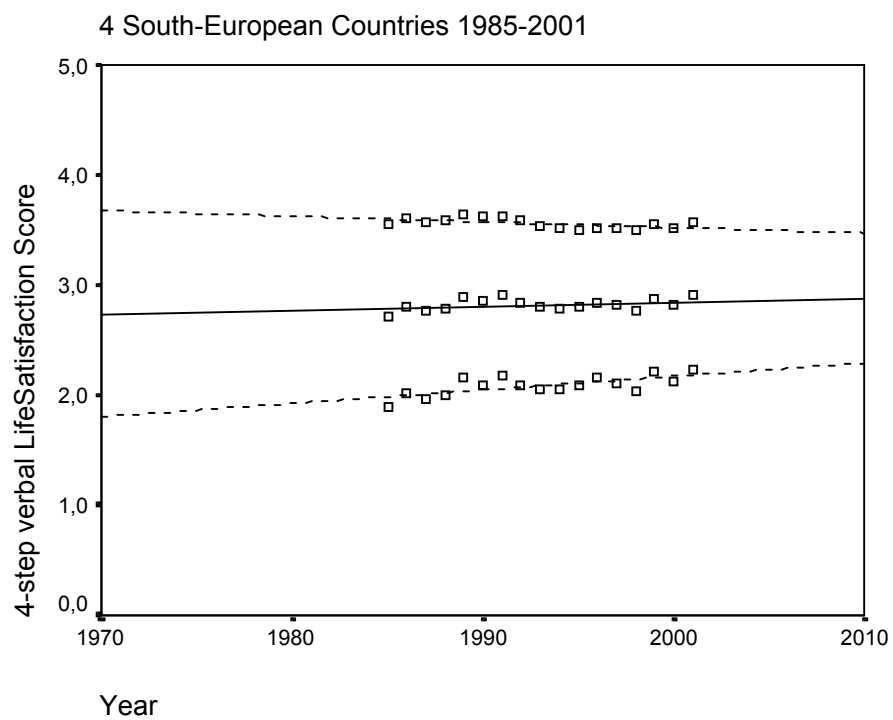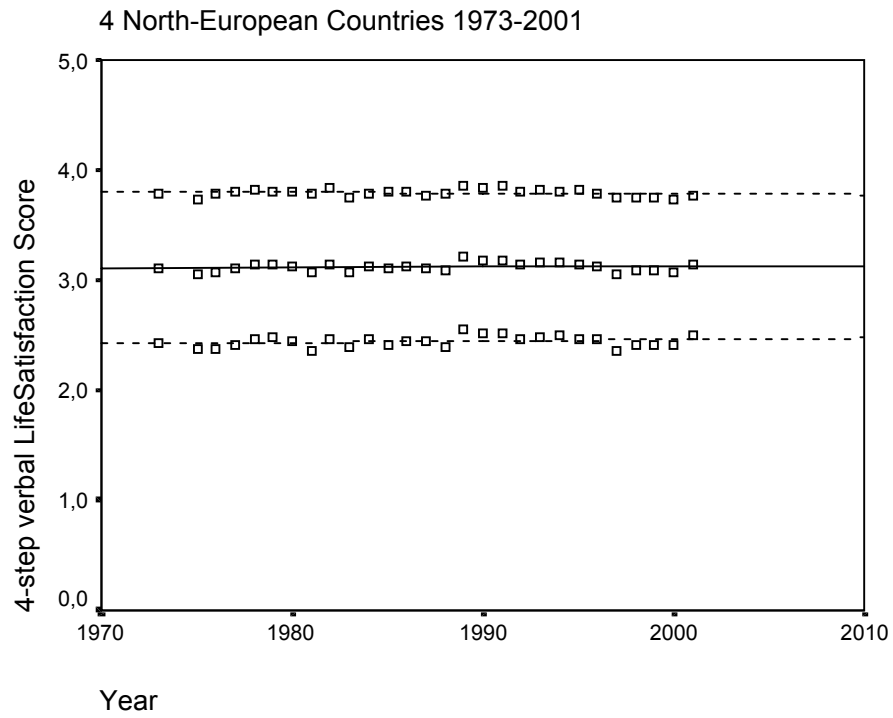
3.2.2 *Reduction dispersion not wholly attributable to rising average*

In **scheme 1** we have seen that the distribution of responses on this four-step response scale is typically skewed, the great majority of respondents choosing the 'very satisfied' or 'fairly satisfied' option. Further rises in the level of life-satisfaction will produce an even greater concentration in these response categories. As a result, standard deviations will be lower. There is of course also a reality link between level and dispersion. If all citizens in a country are 'very satisfied' the standard deviation is zero. The 4-step response scale used here could enhance this effect, because it provides only two gradations at the positive side. 10 step rating scales are less vulnerable for such distortion.

Looking back at **scheme 3** we can see that the reduction of spread in life-satisfaction is not just a matter of rising level. The average level rose hardly in the South-European nations, but dispersion fell considerably (**3b**). That reduction in dispersion was larger than in the North-European nations where life-satisfaction raised more and where the concentration in the top categories was already greater (**3a**).

Still the picture could be somewhat distorted by the rising average, possibly all the reduction in spread in North-European nations is due to the rising level. In order to estimate the pure trend of dispersion a partial correlation analysis was performed. Dispersion of life-satisfaction was correlated with year, while controlling average level of life-satisfaction. Since all the nations are included, the analysis limits to the years 1985-2001. The results are presented in **scheme 4**. The zero-order correlation confirms that dispersion of life-satisfaction is linked to level of life-satisfaction ($r = -.75$), and that the level has risen over these years ($r = +.56$). Yet we also see that the decline of dispersion was even stronger ($r = -.75$) and that statistical control of the rising level reduces the trend only marginally ($r_p = -.46$). Similar results were obtained when this analysis was performed on different sets of nations and different periods. See **appendix 4**.

Scheme 4
Partial correlation analysis of level, dispersion and year.
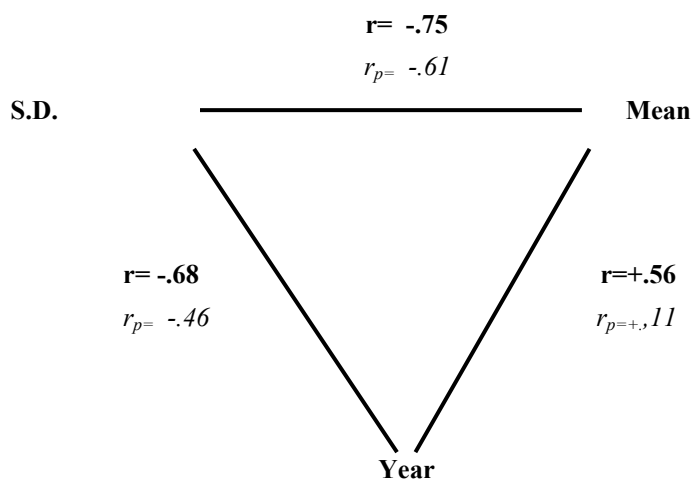
1973-2001, EU-members since 1973: Belgium, Denmark, France, West Germany, Ireland, Italy Luxembourg, Netherlands, and UK. Not included are nations that entered the EU later: East Germany, Greece, Portugal and Spain.

3.2.3 *Similar trend in Japan and USA*

A look in the World Database of Happiness reveals that standard deviations of life-satisfaction have also diminished in Japan (life-satisfaction item 1958-1992) and in the USA (happiness item 1946-1996). So this is not just a local European pattern, but also a wider concomitant of modernization.

3.3   Dispersion lowest in most modern nations

Next to the above comparison trough time, I also compared across nations. Since the theory of modern inequality sees growing differences in society as a result of social evolution, it would predict greater dispersion of life-satisfaction in the most advanced nations.

For a first global check look again at **scheme** 3. By all standards, the North-European nations in **scheme** 3a are more advanced than the South-European nations in **scheme** 3b. Yet in 1985 the dispersion of life-satisfaction was somewhat smaller in the former nations (SD = 0,4) than in the latter (SD =0,7), which is contrary to the hypothesis. In 1996 the dispersion was about these same in North and South Europe, which does not fit the theory either, in particularly not since the South-European nations had gone trough a modernization spurt. The only piece of support for the prediction is in the linear extrapolation of the trend to the future, which suggests that Southern dispersion will soon dip under northern dispersion.

A limitation of this comparison is that it is about only eight countries and that the difference in social development between these nations is not too great. We get a better view on the link between modernity and inequality in life-satisfaction if we consider a larger and more varied set of nations. Such a data set is provided by the 1990 wave of the World Value Survey. This survey was held in 43 nations and the questionnaire involved a question on life-satisfaction. The question reads: All things considered, how satisfied are you with your life as a whole now? Answers were recorded on a ten step numerical scale, ranging from 'satisfied' (10) to 'dissatisfied' (1). Standard deviations are again found in the World Database of Happiness.

Simple correlational analysis shows that dispersion of life-satisfaction is negatively related to all indicators of modernity. Dispersion is substantially lower in the economically most affluent ($r = -.81$) and the politically freest nations ($r = -.60$). Standard deviations are also consistently lower in the most individualized nations ($r = -.41$). Inspection of the scattergrams does not reveal any U shaped pattern. The relationships are quite linear, differences in life-satisfaction being smallest in the most modern nations. Elsewhere this analysis is reported in more detail (Veenhoven 2001b).

4.   DISCUSSION

The purpose of this paper was to check the notion that social inequality is on the return in modern society. The data used here clearly contradict that idea and show in fact the reverse. Disparities in life-satisfaction became smaller instead of larger. In that respect, modernization still goes hand in hand with egalization. Below I will consider some possible mechanisms.

4.1   Possible explanations

There are three major explanations for the sizable differences in average *level* of life-satisfaction across nations: comparison theory, folklore theory and livability theory (Veenhoven 1995). How would these theories interpret the newly observed reduction in *dispersion* of life-satisfaction?

4.1.1 *Comparison theory*

Comparison theory sees life-satisfaction as the discrepancy between notions of how life should be and perceptions of how it actually is. The smaller the gap between ideal and reality, the more satisfied one would be. Notions of how life should be are presumed to derive from different sources, what significant others have (social comparison), what one is used to (adaptation theory), what one anticipated (expectation theory) and what is deemed reasonable (equity theory). Much of this thought is combined in Michalos (1985) Multiple Discrepancy Theory. A common assumption in this tradition is that ideals adapt to reality in the long run and that happiness is therefore essentially relative.

If it is assumed that ideals adapt to reality, the theory cannot explain any lasting change in life-satisfaction all. The average level in a country will then always oscillate around zero, and the dispersion will dwell in the range of human tolerance for dissonance.

Once this assumption is dropped, there are many explanations. One possible account is that both ideals and reality conditions have homogenized in modern consumer society and that the size of the gaps became more alike across segments of society. A reversed explanation could be that individualization involves diversification of ideals and lifestyles, which reduces the number of 'misfits' (Veenhoven 1999:176/7).

4.1.2 *Folklore theory*

Folklore theory depicts differences in life-satisfaction across nations as a matter of national character and expects therefore little relationship with the quality of society. Habitual cynics remain dissatisfied, even if living conditions improve. In this view, differences in life-satisfaction must stem from sub-cultural variation.

Reduction of dispersion of happiness must then be attributed to cultural unification. That explanation fits with the view that modernization tends to draw subcultures into the main stream of society. The optimist variant of that view is that pockets of traditional backwardness are opened; a cynical variant is Ritzers's (2000) theory of the 'MacDonaldization' of society. This explanation does not fit so well with notions of growing cultural diversification and individualization in western society.

4.1.3 *Livability theory*

This theory holds that life-satisfaction depends on the degree to which living conditions fit human needs. It sees satisfaction as a, primarily affective, reaction linked with gratification of needs that were essential in human evolution. In this view low life-satisfaction in a country means that society is not successful in meeting human needs. This latter theory fits best with current thinking about inequality. Elsewhere I have shown that livability theory provides the best explanation for the observed difference in level of happiness (Veenhoven 1995, 1997). Since a good theory must explain both differences in level and dispersion of happiness I hold this explanation for the most plausible one.

Seen in this light, the observed reduction in dispersion of life-satisfaction can be explained in two ways: first by greater equality in social *chances* and second by greater equality in personal *abilities*.

More equal opportunities?

If life-satisfaction depends on the degree to which living conditions fit human needs, differences in life-satisfaction can be explained by disparity in access to such conditions. This brings us back to the notion of differential access to scarce resources, which I reformulated as access to 'relevant resources'. Access to relevant resources is partly a matter of opportunity and opportunities are mostly not equal for all members of society. As noted in the introduction of this paper it is commonly believed that this inequality in opportunities has widened over the last decade, in particular income chances. Now we have seen that

differences in life-satisfaction diminished, we must consider the reverse, that is, that inequality in opportunities diminished. The question is then which opportunities have become more equal.

Several possibilities come to mind. Firstly the social ladder seems to have shortened; status differences have become less pervasive and as a consequence respect has become less scarce a commodity. This reflects in the rising self esteem in modern society. Secondly several minorities have successfully pressed for equal opportunities during the last decade, in particular women, handicapped people, homosexuals, colored people and the elderly. Politics of empowerment seem to have worked. Thirdly, ongoing individualization and life-style differentiation have created a greater diversity of opportunity structures. It will be difficult to quantify these developments but it is quite plausible that these changes to greater equality outbalanced the small increases in income inequality we can observe.

More equal abilities?
Commonly access is seen in terms of rights and opportunities linked to social positions. Access is then a matter of distributional justice, which depends on the structure of society. Yet access depends also on personal capabilities, such as understanding and perseverance. Personal wisdom is especially crucial where access to 'relevant' resources is concerned, because that requires insight into what one really needs. Seen in this light, the reduction of inequality in life-satisfaction can also be explained by growing ability to deal with the problems of life. The more able people are, the more of them will gratify their needs and hence get more satisfied with their life. Such rise in life-satisfaction affects dispersion in two ways, firstly by a reduction at the bottom and secondly by a concentration at the top of the happiness distributions. Both changes have happened.

Why could life-ability have increased in Western Europe over the last decade? Again several possibilities come to mind. One possibility is that opportunities for personality development have improved, pedagogy came to focus more on autonomy, formal education extended and modernized in several aspects and the period of youth was lengthened, which provides more opportunity for experimentation. Another possible reason is the progress in treatment of mental problems. Both psychotherapy and psycho-pharmacy have improved very much, and may be responsible for the considerable reduction of the percentage 'very dissatisfied' in the general population. If so, one could denounce the observed egalitarization as mind control. The easy rebuttal of that argument is that the phenomenon cannot be fully explained in that way, e.g. because only part of the dissatisfied are depressive. A more basic retort is that the greater availability of treatment is a typical case of more equal access to relevant resources. Why sniff at general access to anti-depressives while bemoaning inequalities in access to heart-surgery?

4.2   Compatibility with evidence of modern deprivation
Still, the idea of growing inequality in modern society does not come from the blue. There are indeed indications of widening gaps in some life-chances. Incomes increased less at the bottom of the income distribution than at the top and there are also reports about a widening class differences in educational achievement. Moreover there are also signs of growing disparities in outcomes of life. In West Germany, the poor got less happy between 1988 and 1998, both absolutely and relatively (Bulmahn 2000: 423). Likewise some investigators have observed growing class difference in health and life expectancy (Kunst et. al. 2001). How can that be reconciled with the observed egalitarization of life-satisfaction?

4.2.1 Fit with disparities in chances

One answer was already mentioned in the introduction of this paper. Not all differences hurt only differences in access to relevant resources matter. So, the newly emerged disparities are probably not essential for need gratification. Since these disparities concern mostly money matters, that is quite probable. Income differences hardly matter in affluent society. Though most people would like more money, they don't really need it. Hence relative income hardly affects happiness in rich nations (Veenhoven 1999, Schyns 2001).

The other answer links up with the above-mentioned hypothesis that citizens have become more able in dealing with the problems of life. If that is true, this may have compensated possible declines in distributional justice in some fields, but that this effect.

4.2.2 Fit with difference in outcomes

The reports of widening disparities in life-outcomes are more problematic at first sight. Still there are several possible explanations.

A methodic explanation could be that these reports reflect mere blimps in hectic development rather than the main trend. In the trend plots we have seen that there was also lot of variation in standard deviations of life-satisfaction and that differences have widened temporarily in some cases. Since inequality is a hot issue, this can give rise to selective reporting.

A substantive explanation could be that people get ever more satisfied in modern society (which reduces the standard deviation), but that the dwindling number of dissatisfied gets concentrated at the bottom of the social ladder. That could be due to the fact that social mobility became more dependent on psychological characteristics that are closely linked with life-satisfaction, such as assertiveness, energy and self-control. Yet this explanation implies that the correlation between life-satisfaction and social prestige must have grown over time, but such a development is not visible in the available data (World Database of Happiness, Catalog of Correlates, Subject code S 9). So, if this effect exists at all, it must be small in size or numbers.

5. CONCLUSION

Social inequality in nations can be measured by the dispersion of life-satisfaction. Application of that indicator reveals a trend towards greater equality. The standard deviation of life-satisfaction has decreased in de EU nations over the years 1973-2001. This suggests that the long-term trend toward greater equality is still going on.
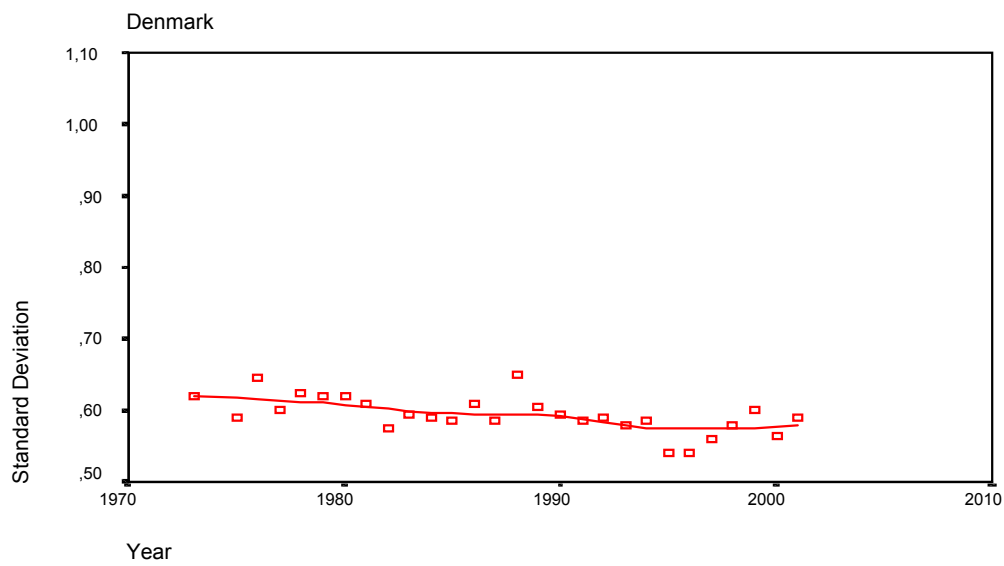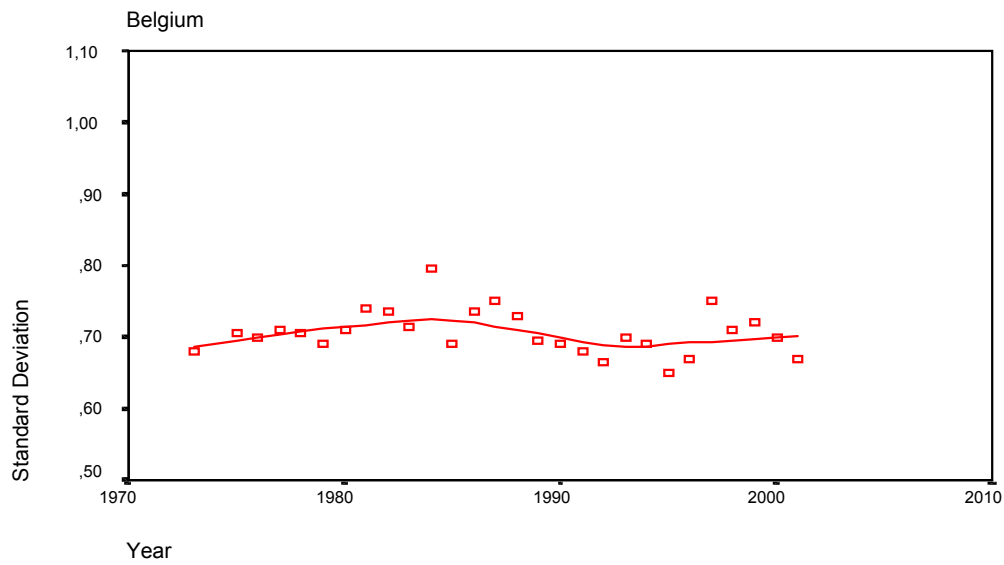
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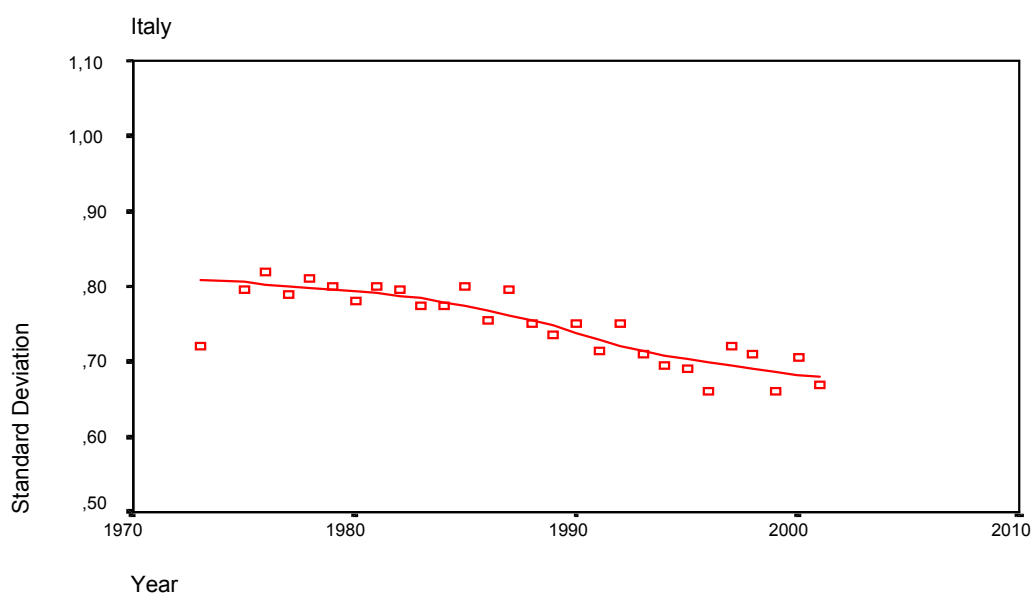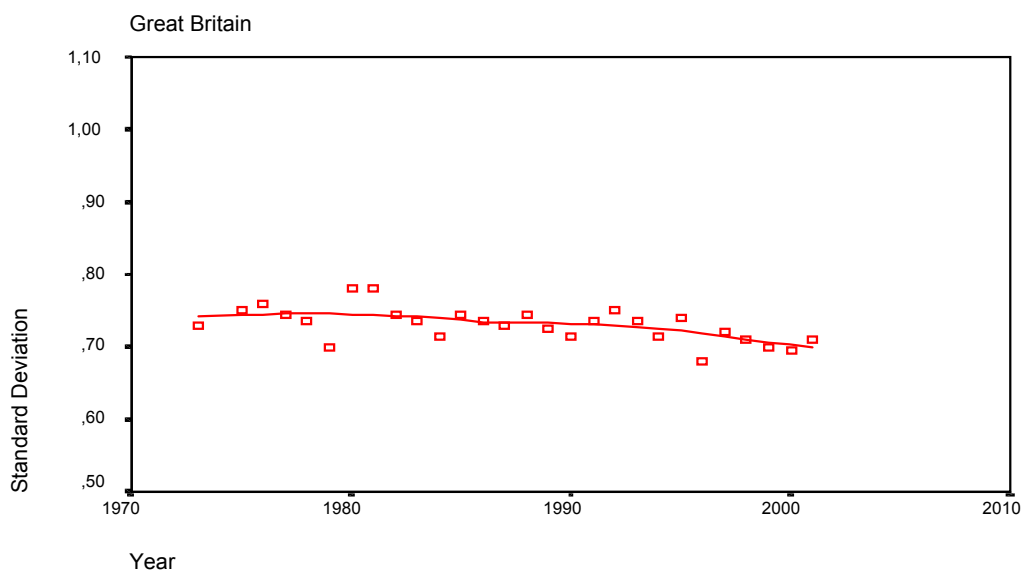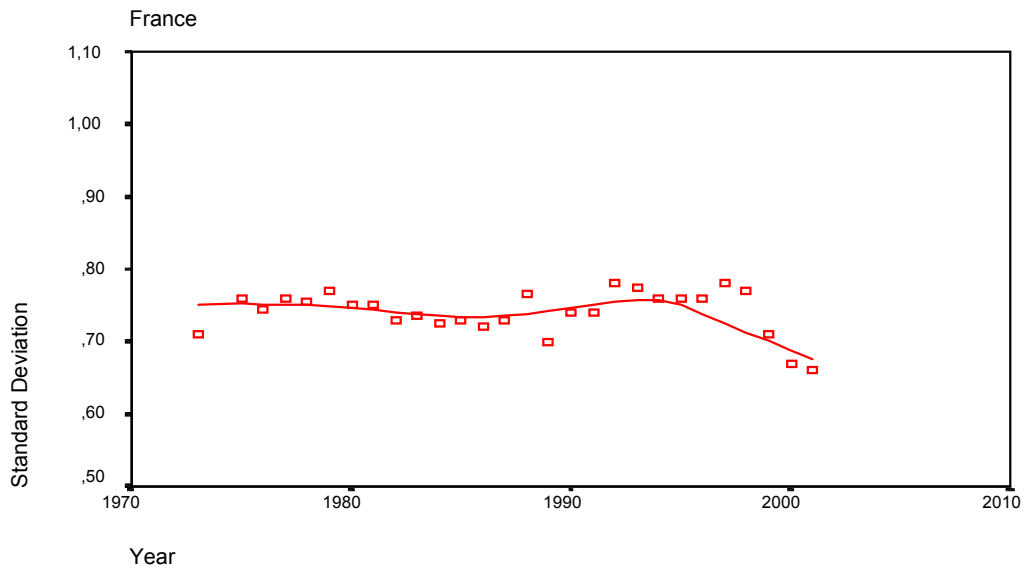*The death of class*
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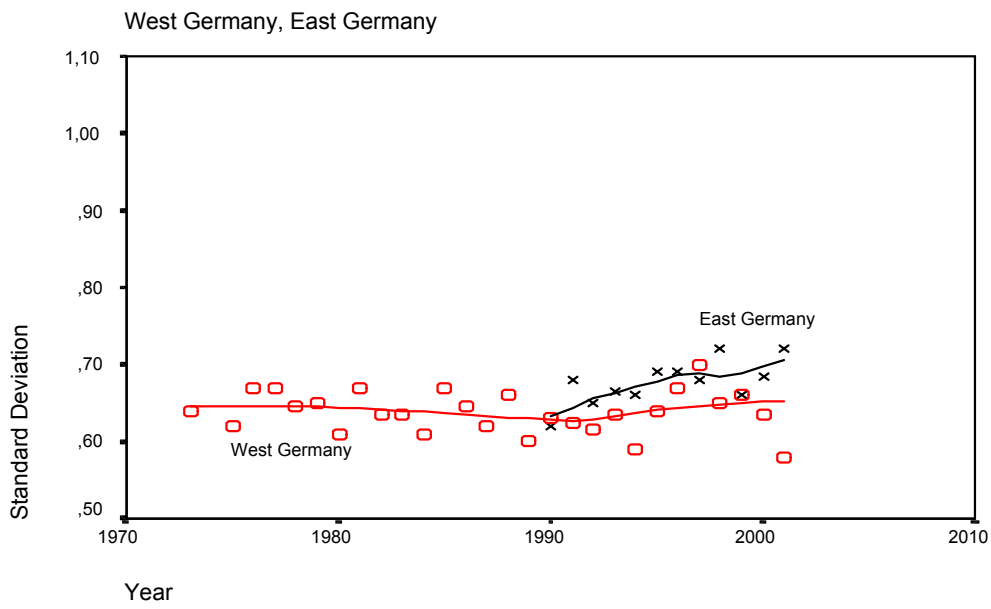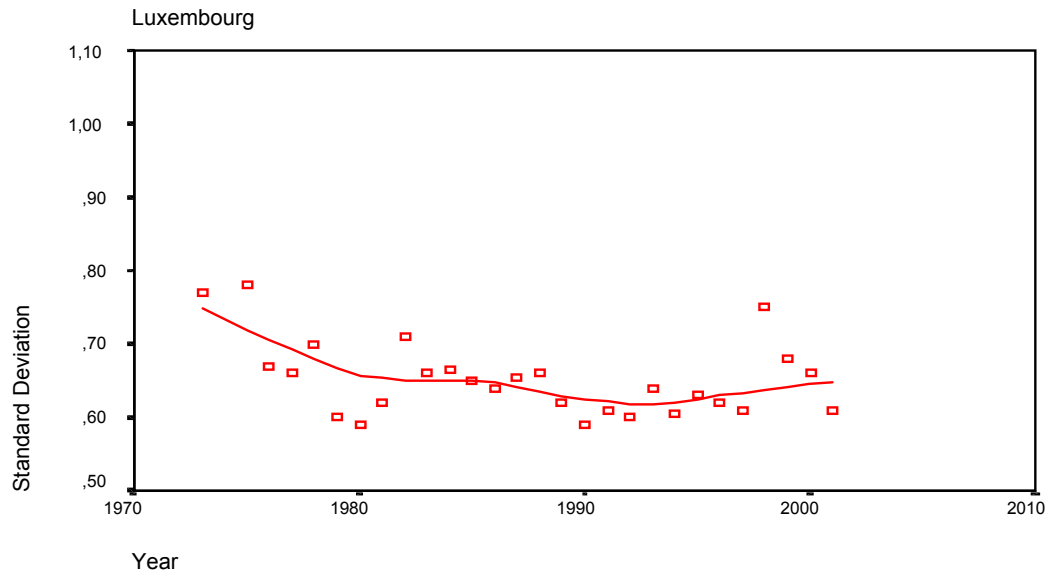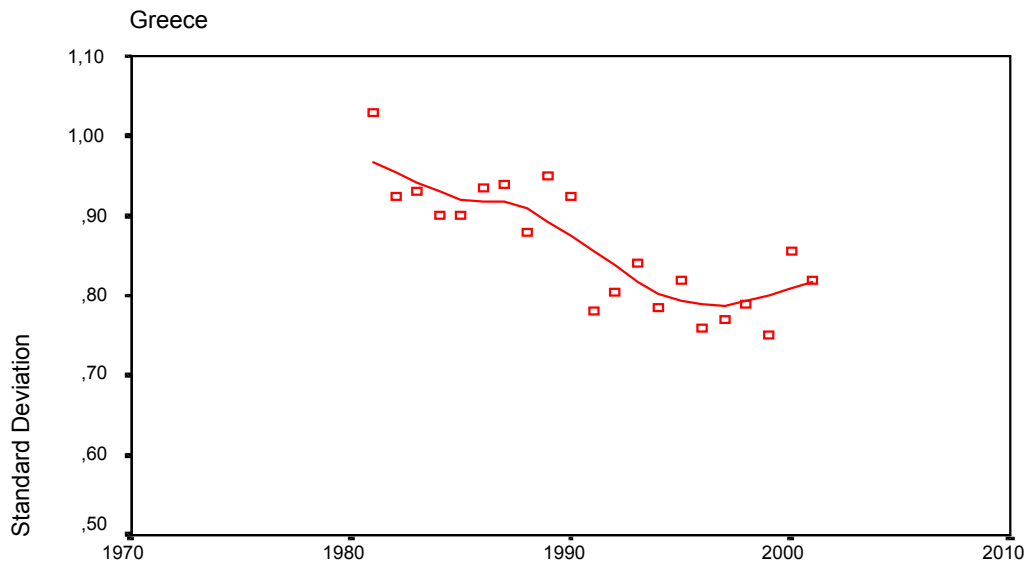Oratie Utrecht University, Wolters Noordhof, Groningen

APPENDIX 1
Trends in dispersion of life-satisfaction in EU-nations 1973-1996
Plots of separate nations

Belgium

Denmark

France

Great Britain

Italy

Luxembourg

West Germany, East Germany

Greece

Year

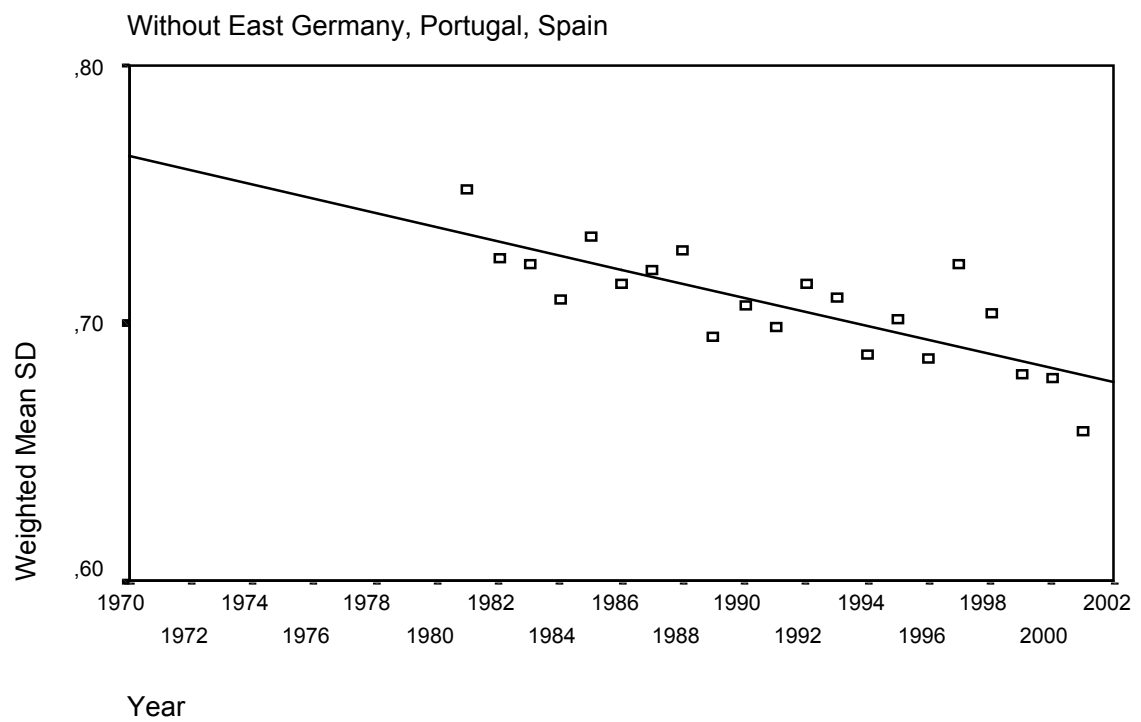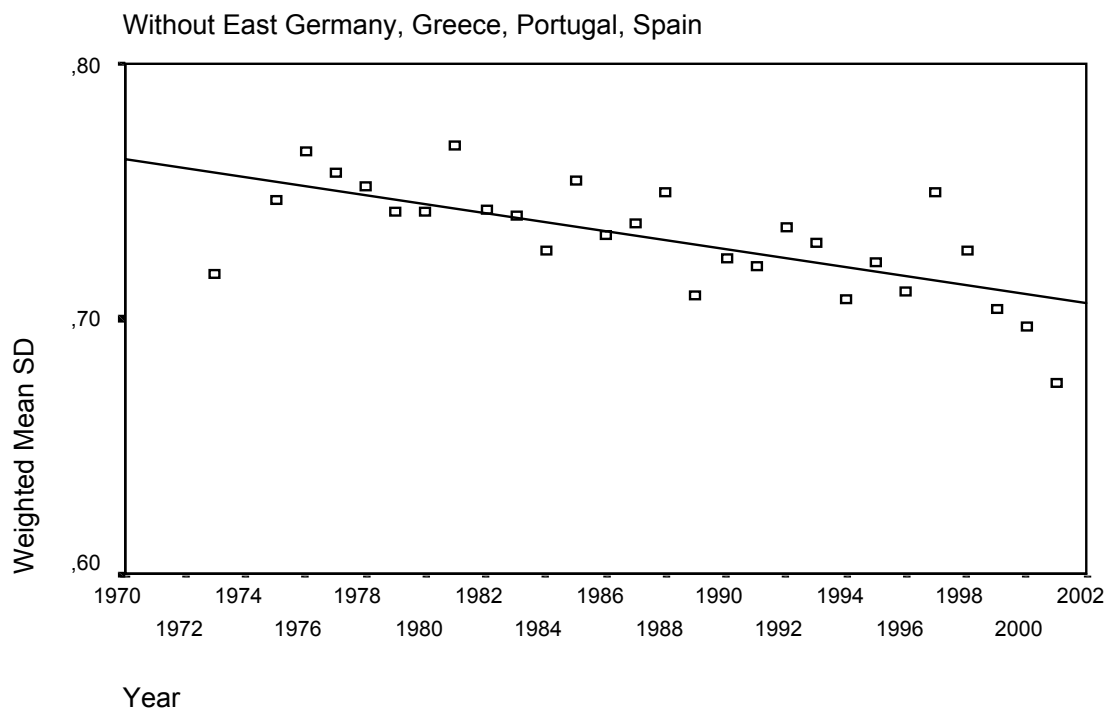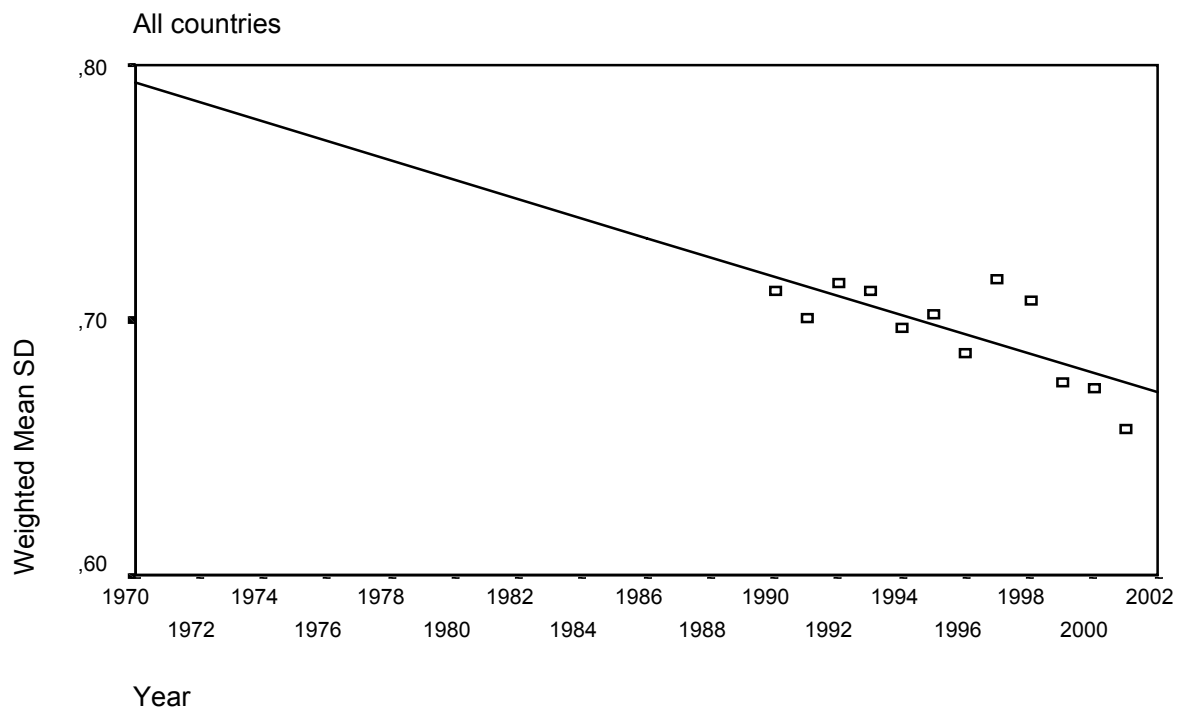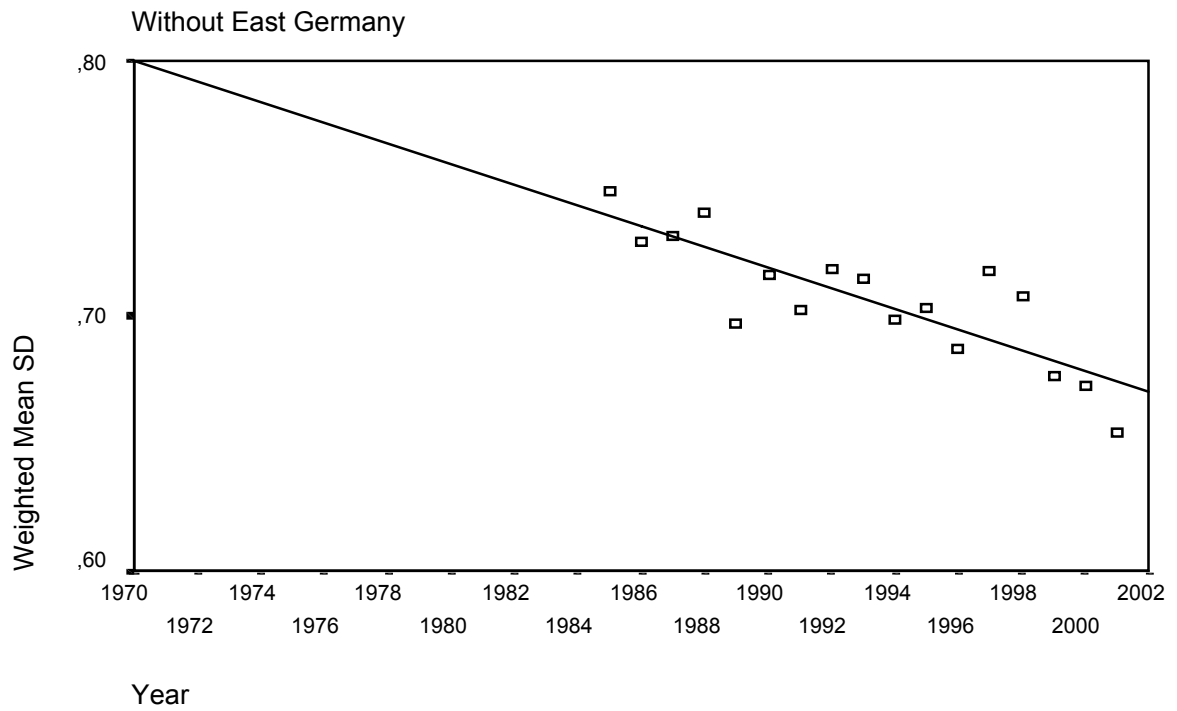Portugal

Year

Spain

Year

Ireland
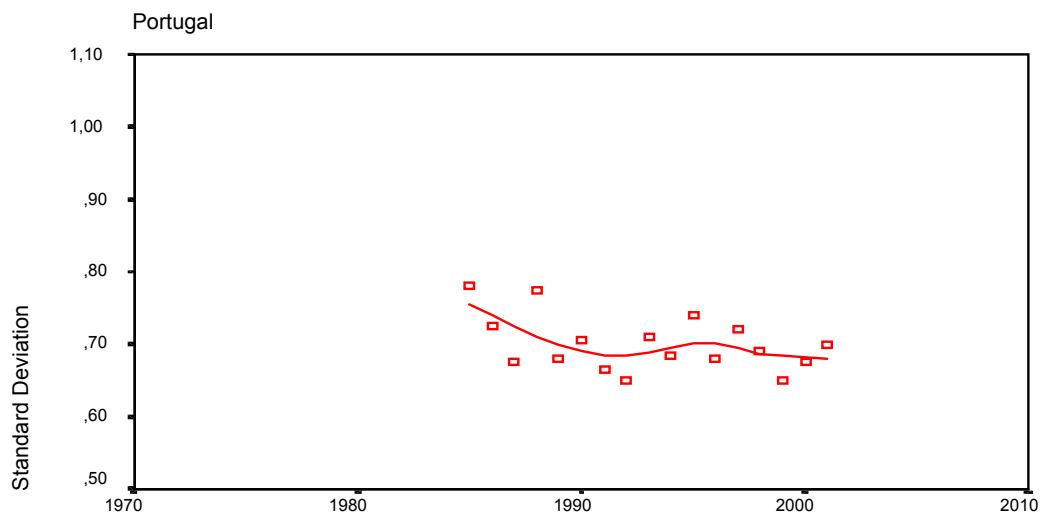
APPENDIX 2

Trends in dispersion of life-satisfaction in EU-nations 1973-2001
Correlations SD-Year by country

Country	*Period*	*Correlation SD-year*		*Correlation SD-Mean*		*Correlation SD-year Mean partialled out*	
		r	*p<*	*r*	*p<*	*r_p*	*p<*
Belgium	73-01	-.20	.318	-.48	**.010**	-.65	**.000**
Denmark	73-01	-.60	**.001**	-.78	**.000**	-.01	.944
France	73-01	-19	.346	-.79	**.000**	+.16	.408
Germany-E	90-01	+.69	.013	-.64	**.025**	+.62	.043
Germany-W	73-01	-.12	.544	-.43	**.024**	-.15	.460
Great Britain	73-01	-.58	**.001**	-.12	.532	-.58	**.001**
Greece	86-01	-.80	**.000**	+.37	.097	-.77	**.000**
Ireland	80-01	-.39	**.040**	-.74	**.000**	-.60	.074
Italy	73-01	-.81	**.000**	-.84	**.000**	-.35	.859
Luxembourg	73-01	-.38	.055	-.75	**.000**	+.03	.391
Netherlands	73-01	-.31	.105	-..55	**.002**	-.17	.033
Portugal	85-01	-.42	.094	-.76	**.000**	-.53	**.000**
Spain	85-01	-.90	**.000**	-.37	.143	-.94	**.000**
EU-average[1]	90-01	-.73	**.007**	-.38	.219	-.96	**.000**
EU-average[2]	85-01	-.83	**.000**	-.57	**.016**	-.93	**.000**
EU-average[3]	81-01	-.79	**.000**	-.65	**.001**	-.79	**.000**
EU-average[4]	73-01	-.68	**.000**	-.75	**.000**	-.46	**.015**

APPENDIX 3
Trends in dispersion of life satisfaction in EU-nations

Without East Germany, Greece, Portugal, Spain

Without East Germany, Portugal, Spain

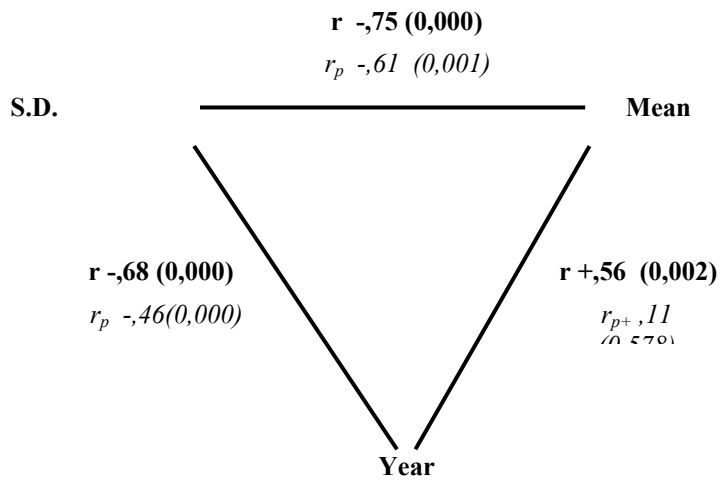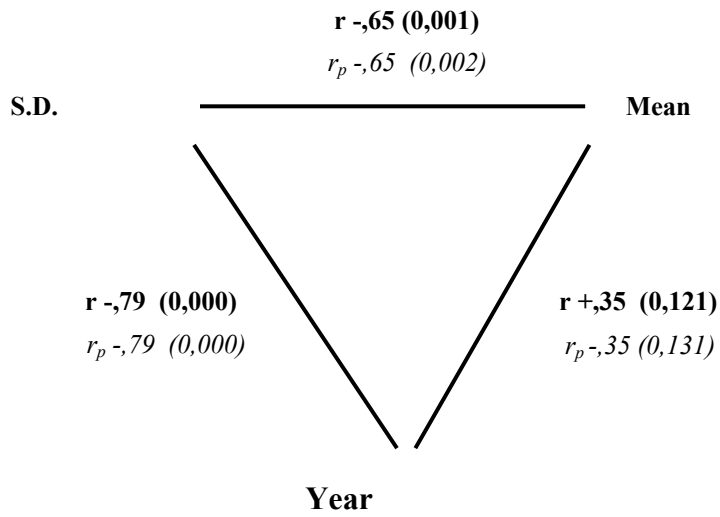Without East Germany

All countries

APPENDIX 4
Partial correlation analysis of level, dispersion and year

1973-2001, all countries, East Germany, Greece, Portugal and Spain excluded

r -,75 (0,000)

r_p -,61 (0,001)

S.D. ———————————————— **Mean**

r -,68 (0,000)   **r +,56 (0,002)**

r_p -,46(0,000)   *r_{p+} ,11*
                                             (0,578)

Year

1981-2001, all countries, East Germany, Portugal and Spain excluded

r -,65 (0,001)

r_p -,65 (0,002)

S.D. ———————————————— **Mean**

r -,79 (0,000)   **r +,35 (0,121)**

r_p -,79 (0,000)   *r_p -,35 (0,131)*

Year

1985-2001, all countries, East Germany excluded

r -,57 (0,016)

r_p *-,85 (0,000)*

S.D. ——————————————— Mean

r -,83 (0,000)   **r+ ,13 (0,623)**

r_p *-,93 (0,000)* r_p *-,76 (0,001)*

Year

1990-2001, all countries

r -,38 (0,219)

r_p *-,92 (0,000)*

S.D. ——————————————— Mean

r -,73 (0,007)   **r -,30 (0,339)**

r_p *-,96 (0,000)* r_p *-,92 (0,000)*

Year
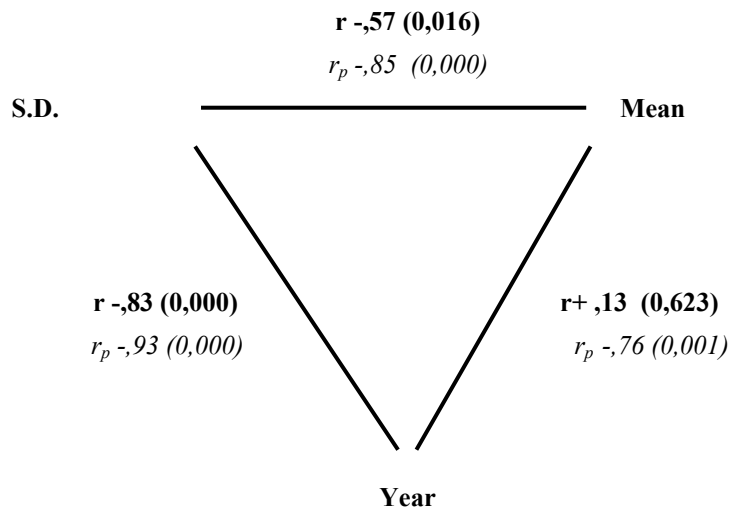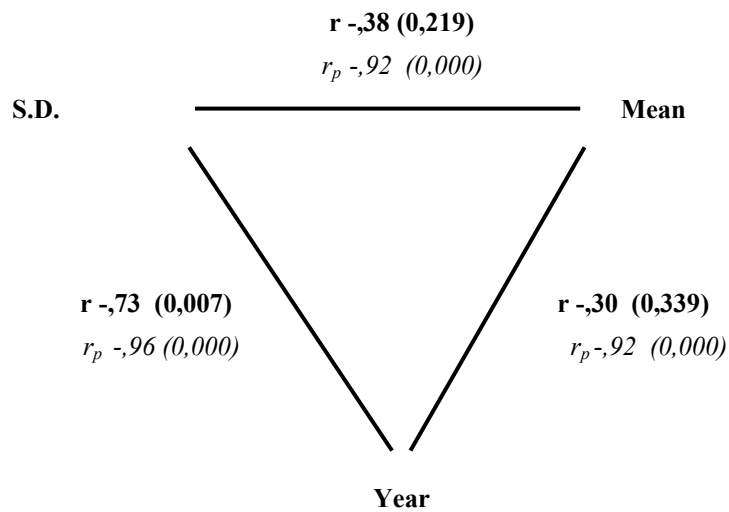
NOTES

[i] An earlier version of this paper was published in German in Glatzer, W., Habich, R. & Mayer, K-U. (Eds.) Sozialer Wandel und gesellschaftliche Dauerbeobachtung, Festschrift fuer Wolfgang Zapf, Leske + Budrich, Opladen, Germany, 2002, pp. 273-294

[ii] In the years 1997, 1998 and 1999 life-satisfaction was assessed only once.