Anniversary fund of the Austrian National Bank, Project No. 14399: Living Conditions, quality of life, and subjective well-being in regions: A methodological pilot study with explorative interviewing and quantitative measurement

# The MODUL Study of Living Conditions. Technical Report.

# **Technical Report**

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# I. Introduction

This study was funded by the Jubiläumsfonds der Österreichischen Nationalbank, Project Number 14399. A first application was submitted in 2010 by the project leader but rejected with encouragement to resubmit for the next round of submissions. The resubmission – with clarifications as suggested by the reviewers – took place in January 2011 and was successful.

The principle idea behind this project was two-fold: on the one hand, a society should take care for the well-being of its citizen and therefore ask them on a regular basis whether they feel well. This need was seen by the project leader when working with official statistics; at least at that time, hardly any effort was taken in public reporting to assess psychological consequences of life circumstances. On the other hand, the few existing instruments did not seem satisfying. The project leader made the subjective experience of irrelevance to evaluate satisfaction data for which he himself does not exactly know what kind of happiness or satisfaction they express.

A principle lack in many quantitative approaches is that information is collected in a closed, quite inflexible system and in the wordings of scientists. Respondents are asked many questions, but that does not automatically mean that a voice is given to them. People are often prompted to check boxes, but they are seldom talked to. But this might be what societies should do to get the really relevant information.

The current project tries to integrate different ways of reasoning by means of a mixed-methods design including questionnaires, interviews and diaries on a large scale basis. To get a significant sample of interviews to get more than punctual information, the number should be much larger than usual in qualitative studies which is linked to substantial costs. At this place, I take the opportunity to emphasize the importance of public funding; without a research grant taking over the necessary financial effort, I would never have been able to implement a study like this.

## II. Background

## Political background

Unlike a few years before, the measurement of well-being, in particular of subjective well-being (SWB), can be considered an extremely "hot" topic. An understanding that classical GDP should not have the dominating role in national reporting it had for decades is visible infiltrating more and more public institutions. From personal experience, decision-makers who had never taken subjective measures serious, learned to accept them and use them for their own daily work.

The breakthrough seems to have been the – in the meantime – well-known Stiglitz report (Stiglitz, Sen & Fitoussi, 2009), among others written by the Nobel prize laureates Joseph Stiglitz and Amartya Sen, initiated by the former French president Sarkozy.

The European Commission reacted to those developments by its program Beyond GDP (to be found at <u>http://www.beyond-gdp.eu</u>), and also the OECD launched and propagates alternative systems of

describing the progress of societies (e.g., its publication "How's life", http://www.oecd.org/statistics/howslifemeasuringwell-being.htm, and the Your Better Life Index webpage, <u>http://www.oecd.org/statistics/betterlifeinitiativeyourbetterlifeindex.htm</u>, where countries may be compared by composite scores, the weights of which can be set individually by the user).

A couple of national initiatives rounds the picture, among them Great Britain, Australia, Italy with Enrico Giovannini as driving force, and some others. The Central Asian state Bhutan takes measures of subjective well-being as the official policy evaluation tool (in the meaning of Gross National Happiness instead of the Gross Domestic Product, Frey & Stutzer, 2007).

International happiness data bases are publicly available, large-scale questionnaire data can be freely downloaded and analyzed. Important sources of information are Eurofound's European Quality of Life Survey, the World Values Survey and the European Social Survey. A large amount of contributions to scientific journals or congresses is based on one of these sources.

Austria joined these initiatives and created a "Wie geht's Österreich" section on its webpage (http://www.statistik.at/web\_de/statistiken/wie\_gehts\_oesterreich/index.html), presenting a number of indicators from various sources, including the life satisfaction question from EU-SILC, the European Survey on Income and Living Conditions. There was also a press release, whereby the headline "78,7% der Bevölkerung zeigen hohe oder sehr hohe Lebenszufriedenheit" was widely announced, but in part critically commented as superficial or even interpreted as mere courtesy action towards the government. However, this shows that the validity of SWB measurement is not just an academic issue. Besides, Stutzer and Frey (2007) object to the idea to set the direct optimization of national average SWB as major economic or political intention.

There are also strong links to the sustainability movements (e.g. Austria's "Wachstum im Wandel", <u>www.wachstumimwandel.at</u>) since social sustainability (one of the three pillars environmental, social and economic sustainability) is strongly related to subjective well-being, as can be seen by nef's "Happy Planet Index" initiative (<u>http://www.happyplanetindex.org/</u>). The economic crisis is often seen as driving force for measurement concepts alternative to merely economically oriented indicators.

Simple SWB questions are already provided by some official instruments such as the European Survey of Income and Living Conditions (EU-SILC) and the European Quality of Life Questionnaire (EQLS).

## Scientific background

The research on subjective well-being (SWB) has seen four decades now (for an overview, cf. Diener et al., 1999), but measurement issues still leave some questions open. As an example, the well-known paradigm of the Easterlin (1973, 1974) Paradox is still being discussed controversially for methodological reasons (cf., e.g. Veenhoven & Hagerty, 2006). Its key message, no increase in happiness in spite of dramatic increases in material well-being, is doubted heavily by Stevenson and Wolfers (2008) who raise a lot of arguments against Easterlin's and his successors' approach of assessing SWB. The contradictory points of view have been orally presented on this year's ISQOL conference in Venice between Easterlin and Veenhoven, but without a final clarification. Some of the well-known problems concerning self-

ratings of happiness are momentary mood, uniqueness of the individual in perceiving life conditions, adaptation processes and comparison processes based on varying anchor levels. However, there is some common understanding that any kind of objectively measurable aspects of the quality of life (QoL) can only explain minor parts of the variance in SWB.

What cannot be doubted in the meantime is that SWB as measured has at least explanatory value for properties connected to SWB; the vast majority of construct validation studies establish reasonable relationships to material well-being, critical life events, social contacts, perceived attractiveness, ratings by other people and similar (Diener et al., 1999). However, the question remains what kind of information can be derived from overall subjective self-ratings and how it is related to domain-specific satisfactions or subdimensions of SWB. More sophisticated instruments have been developed in the meantime, ranging from multidimensional approaches (Ryff, 1989) to the Day Reconstruction Approach and the expensive Experience Sampling method where respondents are prompted by a computer to rate their current mood at some time points of a day (Kahnemann & Krueger, 2006).

Quality of life is a multidimensional construct with many aspects and many possible influencing factors, and so is SWB which is considered as one of the components (for an overview, cf. Costanza et al., 2006). Well-known examples where even SWB has been decomposed into several aspects or dimensions in the literature are Ryff (1989), Sen's capability approach (for an overview, cf. Robeyns, 2005), or Veenhoven's 4 life satisfactions (Veenhoven, 2002). Diener (1984) defines SWB, which is often taken as the umbrella term for positive states, as the presence of positive feelings or emotions, the absence of negative ones, and a positive cognitive evaluation of one's life ("life satisfaction", involving a multitude of cognitive processes which underlie the individual evaluation of life circumstances). As an example, adaptation and expectation levels play a dominating role which has to be considered in the study as well. Focusing biases, distortions of evaluations by over-estimated details, could be relevant not only for the individual, but for whole regions, such as being forced to accept a waste-deposit in the outskirts after long trials to prevent it. Hot topics which will be particularly taken care of are time poverty and control over time, work-life-balance and the effects of consumption of goods on happiness. But there is not only a conceptual explosion regarding the different meanings of 'happiness' components, there is also one regarding the different stimuli to human emotions, especially the different domains of life which could create happiness or unhappiness, such as private life, business life, housing, income, etc. And the same is true for time, because SWB is known to change constantly, not only between longer periods of life but as well within a day. In the now classic Schwarz 1983 experiment, life satisfaction ratings could be influenced markedly just by letting respondents find a dime on a copying machine (cf. Schwarz & Strack, 1991), and probably everyone knows from self-observation how states such as being satisfied or optimistic can vary drastically within a few hours. Even the results of sporting competition may act as noticeable short-term factor.

The many different dimensions and levels of SWB create, at least theoretically, an extremely complex pattern of phenomena. For example, key driver for a particular respondent's lack of well-being could be an unrealistic expectation of self-actualization regarding the domain social contacts, whereby worsening takes place at the moment, moderated by adaptation processes and a response style towards social desirability. At the same time, because of individual targets and expectations, SWB can be a very subjective, individual or even idiosyncratic process; as another example, a highly successful musician could suffer from not being an infant prodigy any more. Retirement is seen as a relief by some people and as a catastrophe by others, as it is true for the dominance of routine jobs at the work place. Additionally, there will in general be multi-causality in the dependence of SWB on whatever predictors as well as multi- effect structures. The many possible effects of dismissals on private lives may serve as an illustration.

In the meantime, a variety of sophisticated SWB questionnaires exists such as Ryff's (1989) scales, the Oxford Happiness Questionnaire (Hills & Argyle, 2002), or the Satisfaction with Life Scale (Diener et al., 1985), furthermore the very comprehensive World Database of Happiness at http://www.worlddatabaseofhappiness.eur.nl and Martin Seligman's authentic happiness website http://www.authentichappiness.sas.upenn.edu. Furthermore, diary methods (Day Reconstruction Method, cf. Kahneman & Krueger, 2006) are applied for assessing evaluated time use (which is still not topic of the Austrian Time Use Survey). This allows for an estimation how much time is spent per day in pleasant or unpleasant mood.

However, methodological criticism to evaluate subjective mood by some sort of rating scales is still ongoing, see for example Angner (2005). But also at SWB conferences there are, from personal experience, frequently a few presentations questioning the validity of the standard survey approach. The arguments in the discussions typically range between the claim that there is, obviously, some construct validity, and the opposite position that basic questions about the actual meaning and anchoring of SWB items are still unsolved, and that the measurement instruments – as widely used – have hardly improved since the 50ies.

As an example, the European Social Survey data set (Round 3, 2006/06) provides a detailed quantitative picture regarding many variables which are connected to subjective well-being and happiness, and there are striking country-differences as well. In particular, there are markedly and significantly different response patterns regarding properties such as happiness or being bored (Table 1), but there is little evidence how exactly these differences have to be interpreted, to what problems of people they might allude, and much less what kind of policy interventions could address the underlying problems.

However, new approaches seem to detect potential for improvement, such as the usage of anchor vignettes (for a recent discussion, cf. Hopkins & King, 2010). But there is also some experience with qualitative interviewing on QoL, but above all in clinical studies (as one of many examples, cf. Schwartz & Spranger, 1999) or with focussed interests such as lay concepts of well-being (Ryff, 1989b) or the role of narrative identity (Bauer et al., 2008). Most recently, Petrovic (2010) dealt with SWB of social assistance recipients in Serbia, whereby the in-depth interviews revealed positive impacts on SWB due to public programs. Zahava and Gabriel (2004) found in their interviews with elderly people some – apart from family life and grand-children – policy-relevant aspects related to subjective well-being such as the importance of public transport, its suitability and the comfort of its buses for handicapped people. However, in-depth interviews regarding SWB are rarely applied in the context of subjective well-being and living conditions as linked to general SWB assessment.

		Cour	ntry								
	Austria	Switzerland	Germany	Denmark							
How often have you been happy last week?											
None or almost none of the time	6%	1%	4%	6%							
Some of the time	18%	17%	30%	22%							
Most of the time	45%	52%	49%	44%							
All or almost all of the time	31%	31%	17%	27%							
How often h	ave you felt	bored last week	?								
None or almost none of the time	68.3%	83.7%	73.9%	81.6%							
Some of the time	25.1%	14.2%	22.6%	16.0%							
Most of the time	4.8%	1.5%	2.7%	1.7%							
All or almost all of the time	1.7%	0.6%	0.8%	0.7%							

## **III. Targets of the Study**

Since the authors believe that the current quantitative inventory should be critically and fundamentally evaluated, they consider the involvement of explorative, qualitative techniques to be indispensible. Unlike surveys with clear-cut, pre-defined questions, explorative qualitative studies need an open approach, providing information which aspects or perspectives of SWB turn out to be relevant in the interviews. Afterwards, on the other hand, these experiences may be the basis for the construction of items involving quantitative ratings. SWB questions were also asked directly within explorative interviewing (towards the end of the session), so people could explain how they perceive the meaning of the question and in which way they come to quantitative responses. Approaches of this type have become popular under the umbrella term "cognitive testing" (for an overview, cf. Presser et al., 2004).

Methodologically, a distinction has to be made between spontaneous open responses and indications which are given only after prompting, be it in open-ended or standardized response format. In fact, one of the targets of this study is to provide an extensive database for investigating the probably complex relationships between living conditions and their probability to be named by respondents when asked in different ways.

Though the measurement methodology for SWB provides well-established tools for assessing effects of living conditions, numerical classifications of SWB do not automatically result in interpretable results (as discussed above).

One of the general quality indicators of statistical results is timeliness; if policy makers should react on societal trends quickly, it is important to have current results. The European System of Social Statistics is designed in a way which tries to optimize timeliness of crucial indicators which are known already; however, it may take time till a certain currently relevant piece of information is assessed at all, starting from the awareness by single experts, extending to awareness by a broader part of the scientific or political community. A standard instrument for exploration could help to identify the need for new

indicators much faster and also accelerate the process of raising the attention of the scientific community as well as of policy makers.

The benefit should lie in a deeper understanding of the facts, as well by scientists as by politicians who operate on a local or a national level. Information collected by the interviews potentially lead directly to targeted interventions, or at least to increased awareness of problems. Consequently, the whole community could receive some benefit by giving a voice directly to some of its citizens. Finally, as Stutzer and Frey (2006) point out, the mere participation of citizens seems to act as a driver of SWB for itself, so that projects like this could help to increase the feeling of being heard and by that help to increase trust and social capital.

In fact, the study focuses on the following major goals:

Methodological:

- *Qualitative analysis of the quantitative responses (cognitive testing).* The questions currently applied shall be investigated deeply by qualitative interviews, where the respondents explain how they interpret the questions and what the real meaning of their responses to these questions is. The conclusions shall help to improve the item material as well as the interpretations of data collected by SWB questions.
- Construction of a methodology for evaluation regional living conditions. It is the author's opinion that the assessment framework for evaluating living conditions is not fully developed at the moment, especially on a regional level where location-specific influences may have large effects on the wealth of inhabitants. For example, influences such as social pressure to go for certain education, a mosquito plague or simply a commuting train arriving 10 minutes after the kindergarten closes will hardly be covered by life satisfaction questionnaires.

The aim is to come to conclusions how a best practice in evaluating regional living conditions could look like, and which mixture of qualitative and quantitative procedures should be the most telling one.

So the main focus of the research covered by the project will be data collection and first insights in the feasibility of the methodology and how to improve it. In principle, assessment of living conditions as described should serve the following purposes:

- *Evaluation of living conditions in certain target regions.* The environmental circumstances of the local population shall be investigated in the target regions and characteristic key features of the living there identified.
- Identify driving conditions of SWB dependent on the individual. Since there is much variation in the needs of individuals, any evaluation of living conditions has to consider the interaction between individual properties and goals and the environmental facts. Qualitative interviewing shall shed some light on the complex relationships and provide information going beyond the current knowledge.

- *Explain variability of SWB between regions.* In case substantial differences regarding SWB can be detected, multivariate quantitative analysis and qualitative interviewing will aim at identifying key driving factors governing SWB which are specific for certain regions.
- Derive recommendations for policy makers to increase the living conditions of citizens most effectively. Information useful for public governance shall be derived regarding methodology, to give inputs to the discussion how the Stiglitz report should be implemented, but also more generally to show how societies can evaluate the quality of life of its members. Concerning contents, much feedback from respondents is expected on what favors/threatens SWB and what kind of actions would be beneficial. The regional character of the assessment may help to find particular local factors which might be influenced on a small community level (such as discrepancies between opening hours of child care institutions and the schedule of commuting trains). One of the claims behind this study is that societies should assess satisfaction of their members on a regular basis, such as enterprises assess satisfaction of their customers.

From the results of the qualitative and quantitative information, much knowledge should be derived about influencing factors and the quality of life within regions. Examples for positive or negative influences could be the effect of economic situation or political interventions on the quality of life, of infrastructure, noise, social capital, crime rates, demographic structure, but also local associations, mentality of the people, dominant coping strategies or similar. The qualitative exploration should provide information especially on ambiguous facts, such as social ties which should be beneficial in general, but could also lead to an increase of social pressure and inner conflicts of non-conformist inhabitants. Recommendations for policy may be taken directly from the respondents' statements, but also indirectly after applying contents-analytic methods. This might be necessary for taking psychological strategies into account properly, for example defense mechanisms or social desirability ("I am fine, I have everything, so I won't complain").

As a fundamental ambition of this kind of research, the subjective style of questions tends to give a voice to people, especially to those who are hardly heard in everyday life, and supports the claim of living conditions *for people*; whatever seems relevant to them and whatever they want to articulate, it should be communicated to politicians and decision makers. Establishing screening systems as proposed might also drive policy to take care of citizens' feedback. Therefore, but not until the end of the project, feedback will be given to the local communities which, in part, supported this study.

In particular, this first phase of exploration shall respond to the following target questions:

- Can living conditions and subjective well-being be reliably assessed by a mixed-method approach? In which way can the different techniques particularly contribute to our knowledge on quality of life, and do they lead to significant information?
- Do certain wide-spread standard questions as used in official surveys provide valid information about well-being in Austria? Or is the impression created by them somewhat distorted, in particular too positive?
- Is it possible to compare quality of life on a regional level by the proposed methodology? Are the results non-trivial?

• Is it possible to derive relevant feedback for policy?

# **IV. The Project Implementation**

## **Organisational Framework**

## **Project core team**

The core team of the project consisted of two full-time members of MODUL University, Ivo Ponocny (leader) and Christian Weismayer. Additionally, two half-time employees (pre-docs) were hired for one year (17.10.2011 to 16.10.2012). Prof. Erich Kirchler and Ass. Prof. Thomas Slunecko (University of Vienna, Department for Psychology) acted as consultants (in particular referring to diaries and qualitative interviewing), as well as Elisabeth Ponocny-Seliger (Sigmund Freud Privatuniversität Vienna).

### Interviewers

Additionally, the following persons conducted pre-test interviews: Sabine Sedlacek, Christoph Wehe, Michael Mitterwallner, Anna Exel and Ivo Ponocny.

The following persons conducted main phase interviews: AUERSPERG Felicitas, DRACHSLER Stefanie, DRESSLER Stefan, EXEL Anna, GAVRIELOV Elvina, GLATZ Anja, EICHER Jasmina, KOGLER Carmen, SCHÖNFELDINGER Ralf, STRASSER Magdalena, STROSS Bernadette, and WENTSEIS Viktoria.

All main phase interviewers hold at least a bachelor's degree in psychology, except for core team member Bernadette Stross who holds a Mag. (FH). The pretest interviewers were master candidates in psychology, except for Sabine Sedlacek who is employee of MODUL University. The recruiting of the interviewers was based on a call, spread along websites of University of Vienna and Sigmund Freud Privatuniversität Vienna, and by word of mouth. The call was launched in November 2011.

## Transcribers

Interviews and diaries had to be transcribed from audio files to word text; this work was done by master candidates in psychology from both universities: Alexandra Bauer, Sandra Draxler, Anna Exel, Jacqueline Freißlich, Klara Grünwald, Julia Kämpgen, Iris Klausner, Eva Klug, Angelika Mayer, Christina Pfleger, Sebastian Samad, Barbara Schein, Elisabeth Sohler, Christine Stökl, and also by Bernadette Stross and Stefan Dressler. Additionally, we were kindly supported through substantial voluntary work by Ms Erna Ferstel who also acted as an external rater.

### **External Raters**

The external rating of the interviews and diaries which was relevant for obtaining results which are going to be published in other media has been carried out by Elisabeth Baumann, Michela Bernold, Christina Dörr, Vanessa Feck, Anja Grah, Barbara Hahn, Monika Heimbach, Petra Zakall, Lukas Holovics, Sarah Krenn, Elisabeth Mayerweck, David Steidl, Gisela Stix, Markus Weninger, Alma Windsperger, Sandra Zetl.

## **Preparatory work**

Though the project officially started in mid October 2011, 9 of the pre-test interviews were carried out earlier (July 2011). The main aim was to collect experience about typical questions on subjective wellbeing by means of so-called cognitive testing (interviewing about the process of responding itself). It became immediately evident that standard items as applied in large scale surveys such as EU-SILC or the European Quality of Life Survey lead to severe validity problems. In particular, the following questions were tested (in German):

[Wie zufrieden sind Sie – alles in allem – mit Ihrem gegenwärtigen Leben?

0 äußerst unzufrieden 10 äußerst zufrieden]

All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means

extremely dissatisfied and 10 means extremely satisfied.

[Alles in allem betrachtet, was würden Sie sagen, wie glücklich sind Sie?

Äußerst unglücklich 0, äußerst glücklich 10]

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

Though short, this interview round (later supported by the results of the main interview phase) revealed a few weaknesses quite clearly:

- Different concepts of happiness and satisfaction: for some identical, for others *satisfaction* was considered a moderate form of happiness or an evaluation of tangible success in life only. Both interpretations are not consistent with an interpretation following the standard SWB concept.
- Social desirability: strong social norms were indicated by some interview partners, including explicit statements that one should not complain in general or at least not in a country like Austria.
- Suppression: prompting additional information often revealed contradictions to spontaneous claims that everything would be all right. In some cases, people preferred defensive, neutral statements about burdensome circumstances or rationalized them, which become obvious later in the interview.
- Respondents indicated that also major changes in quality of life would probably not be covered by these questions.
- Rating subjective happiness or life satisfaction was considered more difficult than describing
  particular consequences of life circumstances on the subjective feeling about life. Based on this
  evidence, the principle question turned into a major focus of our efforts HOW people can
  communicate about subjective life experiences at all. Finally, it was suspected that rating scales
  might create subjectivity (which number refers to what kind of emotional status) issues rather
  than master them.

• Starting with global life evaluations was felt to be a burden for the rest of the talk, because seemingly respondents tended to fit the later responses to the earlier evaluations in a consistent way.

The original intention to construct the quantitative questionnaire grounded on the interviews rather than starting from existing concepts in the scientific literature was strongly supported by those observations.

October to December was mainly dedicated to literature review and interviewer recruiting, which was an iterative procedure mapping the operative distance of available interviewers to a selection of interviewing locations meeting the target requirements. Literature review focused particularly on existing concepts of measuring quality of life, evaluating them regarding the targets of this study, and collect strengths and weaknesses of certain measurement approaches.

However, considering the evidence from the pretests, this review was less targeted to extract ready questionnaire items but to give a framework what kind of aspects should be covered by the interviews and the questionnaires. It was rather hoped that spontaneous verbalizations in the interviews would give innovative hints how to formulate questionnaire items which will lead to reliably interpretable responses.

Finally, it was decided that the following aspects should be contained in the interview guidelines (cf. Appendix A; for a socio-demographic sheet accompanying the interview, see Appendix B):

- A biographical narrative
- Evaluations of current and present life circumstances, formulation of subjective consequences
- Continuing mood and thoughts
- Actual situation: important areas, sources of SWB and resilience, influences on current mood, burdens
- Social comparisons and comparisons to previous life phases
- Comparisons between expectations/life goals and the life actually achieved
- Subjective concepts of happiness and satisfaction
- Taking over responsibility
- Expected future
- Meaning in life
- Options for change

The strategy was not to put too much emphasis on forced evaluative responses but – as long as possible – to wait for spontaneous evaluations and to observe which wording was used by respondents themselves. It was hoped that narratives in the respondent's own words could give a direction how to formulate better understandable questions.

## **Training of interviewers**

All interviewers were involved a training which included contacting per telephone, how to apply the interview guidelines and how to conduct the interview. Therefore, two alternative training days have been implemented on March 29<sup>th</sup> or 30<sup>th</sup> 2012, respectively. All interviewers participated in this one-day-training which took place at MODUL University Vienna.

## Sampling and study population

The sampling followed a 2-stage cluster design where municipalities are selected first and then inhabitants of the participating communities chosen. The selection of municipalities was a mixture of convenience sampling and theoretical sampling, convenience regarding accessibility for the interviewers (in particular with respect to travel costs), theoretical regarding variation regarding a number of key properties as described below. However, the resulting choice of municipalities is not claimed to be representative for Austria. It finally includes three large-town-locations (Loc3, Loc9, Loc10), two smaller towns (Loc8 and Loc1), and 4 more rural spots (Loc7, Loc5, Loc4, Loc6). In order to avoid futile ranking attempts, and in order to keep our promises to the participating communities, the names of the different municipalities are not shown.

## **Selection of communities**

## **Criteria overview**

Communities were selected on the basis of the following criteria (upon others: geographical location, settlement, resident – origin/citizenship, tourism, population density, population development, commuter, aging, economics, infrastructure – traffic, topography, diverse). Differences between the ten communities are given within the next few pages.

Settlement: Heterogeneity in terms of high and low congested areas

Residents - origin/citizenship: Heterogeneity in terms of the number of migrants/minorities

**Tourism:** Heterogeneity in terms of strong and weak touristic areas. Criteria: tourism density (number of touristic overnights by certain period and resident).

Population density: Heterogeneity in terms of high and low population density.

**Population development:** Heterogeneity in terms of areas with increasing vs. decreasing population (birth and migration balance included).

Commuter:Heterogeneity in terms of economically weak vs. strong areas.Commuter balance(http://www.statistik.at/blickgem/vz\_erlaeuterungen.pdf)andout-commuter(http://www.statistik.at/blickgem/vz\_erlaeuterungen.pdf).out-commuter

**Aging:** Heterogeneity in terms of skewed demographic developments like aging and the resulting labor force participation rate.

**Economics:** Economically strong and weak performing areas.

Infrastructure – traffic: Heterogeneity in terms of transpLoc/traffic infrastructure. Airports in Austria:Wien,Salzburg,Innsbruck,Graz,Linz,Klagenfurt(http://de.wikipedia.org/wiki/ListederVerkehrsflugh%C3%A4fenin%C3%96sterreich); Infrastructure– traffic (highway)

**Topography:** Heterogeneity in terms of closeness to mountain terrain, nature, altitude, temperature differences...

### Divers

As usual, anonymity and fully confidential treatment of all collected data were guaranteed. Furthermore, the interviewer had to indicate that the respondent can refuse to respond any question. For participation, an incentive of EUR 50 was paid per interview and of EUR 20 per diary completely filled in. For taking part in a focus group, again a compensation of EUR 20 was paid.

## **Recruiting of participants**

The 50 pre-test interviews were recruited by convenience sampling; their aim was to explore properties and feasibility of planned interview or questionnaire items. 9 of them have already been carried out in July 2011, before the official start of the project, the rest between March and May 2012.

Within the selected municipalities, the target was a simple random sample of participants. The necessary address lists were either purchased address lists from Avarto, telephone books, or administrative lists of the local communities (in case we were authorized to run the study in the name of the community). Based on the pre-test result, the interview guidelines have been formulated.

Local authorities were contacted in any case, in order to get a support letter. This was successful in 8 communities, only in Loc6 and Loc8 it was not possible to agree on that.

For the interviews, 100 persons have been sent a letter with an announcement of the study, if available the support letter and information (including web links) about the interviewer and the project team. After sufficient time for this letter to reach the potential respondents, the interviewers called them per telephone and tried to get the permission for an interview and, if yes, to arrange a date. In most cases respondents preferred to have the interviews at their home places. The acceptance rate was quite different for different locations, between 10% and 50%. Since it was much easier to reach willingness by word-of-mouth than by phone calls, it was decided not to recruit all partners by telephone but to contact all persons to whom a letter has been sent, interview the volunteers but get the additional necessary addresses by personal recommendation until 50 interview participants had been found. From a theoretical perspective, random sampling of all participants can be argued to be superior, on the other hand – an apart from economical arguments – self selection bias was believed to be reduced: the

threshold not to participate seemed to be much smaller on the basis of word-of-mouth recommendations. In all locations, 50 interview participations could be reached. The interviews took place between April and August 2012. In Loc1, the initial interviewer had to withdraw after 20 interviews for personal reasons, in Loc4 2 interviews stayed left temporarily; all missing interviews were made up by the end of October. Typical duration of an interview was between 45 minutes and one hour, dependent on the talkativeness of the respondent; in exceptional cases, interviews took less, down to a minimum of 18 minutes.

The incentive to participate was 50 Euro. For another 20 Euro, each respondent was offered to fill in a diary (see Chapter V) which was constructed following the EU time use survey and the diary from the study of Kirchler (1986). Reporting slots were periods of half an hour; the respondents had to fill in, for a whole week, among others about their activities, the locations, other people present and how they felt. Additionally, an open response was provided why the respondents felt like that.

On the basis of the interview contacts, also group discussions were launched with group sizes between 4 and 11 participants. There have been two per location: one focussing on the quality of life compared to other places, and another one about the results from the interviews and the questionnaires, in particular how they might be explained. The group discussions took place between July and beginning of November 2012, due to personal reasons they have been postponed to the end of November in Loc2.

Based on literature review but mainly on interviewing results a questionnaire was constructed and sent out to 500 addresses per location (first round). However, in three municipalities, the questionnaire was added to a community newspaper (Loc1) or distributed directly by the community (Loc4, Loc5). An online version of the survey was provided as well. Since Loc1 was the first partner where the survey was launched, the experiences there were used for minor amendments. Participants were offered to take part in a lottery in which 500 Euro could be won. Drawing was in the third week of July. After three weeks, a reminder was sent out (except for Loc1 where the respondents have not been addressed directly but via the municipality newspaper).

Generally, the completion rate was very dissatisfying (cf. the following chapter). But those questionnaires, however, which have been sent back, were obviously filled in carefully and completely. As a consequence, an additional letter of acknowledgement was sent to the interview partners, offering them online participation in the survey as well. Finally, a second round of the questionnaire was launched to increase the number of questionnaires, with the drawing on November 20<sup>th</sup> 2012.

Altogether, a total of 1432 questionnaires is available at the moment.

Since, by the logic of the process, the interviews had to precede the construction of the questionnaire, it is not possible in general to have interview, diary and questionnaire on the same subjects. However, for 75 of the latest interviews the questionnaire was already available and the interview/diary study participants volunteered to fill in the questionnaire as well, so that there is information from all three sources.

## **Completion of the questionnaire survey**

Table 1 gives an overview over the number of questionnaire per target community, whereby online is treated as an extra category (with possibly particularly large self-selection bias).

Community	Number of Questionnaires
Loc1	313
Loc9	61
Loc10	76
Loc3	71
Loc2	58
Loc8	83
Loc4	75
Loc5	59
Loc7	63
Loc6	22
further communities	14
online	537
Sum	1,432

Though there is a considerable number of participants, the completion rate is very low. Per municipality, 500 households were addressed in the first round, and another even larger number in the second round (dependent on the completion in the first round). For Loc1, the questionnaire was launched in the community's newspaper, Loc4 and Loc5 households have been contacted via communality communication; as a consequence, every household was addressed there, but especially for Loc1 it is unclear how many of the 11000 households noticed the survey at all. Therefore, a final completion rate is hard to calculate. In total, it can be computed to be slightly more than 5 % on average.

# V. First Preliminary Results

## Characterization of regions by quantitative questionnaires and diaries

## **Diaries**

More than 300 diaries were printed and handed over to volunteers. One part of them were people already contacted through the interviewee selection and therefore interview partners and, the other part consisted of volunteers contacted in the course of the interviews. Each diary is identical to the one that can be found below. Entries for seven days were provided. Each day contains fields for the calendar date, an overall day satisfaction evaluation, and two other questions including a rough categorization of the day itself. After one week filling out each day, which was split up into half-hours intervals through a whole week, the volunteers sent back the completed diaries by post mailing.

	Datum		Tagesbewertung	War dieser Ta				Falls es ein	freier Tag (Wochenende, dienst-, schulfrei,)
			"1 sehr zufrieden"	(bitte ankreuze				ungewöhnlicher	war/bin krank
	Tag Monat Ja		"10 sehr unzufrieden"		🔲 ein ungewöhnlic	her Taj	8	Tag war, warum?	war/bin verreist
Tag	Monat	Jahr							eus anderen Gründen:
						_		1.6411	
U	Uhrzeit		Aktivität hlafen, einkaufen, arbeiten,)	Wo bin ich? (zu Hause, im Kino,)	Wer ist noch dabei? (niemand, Partnerin, Kinder, Kolleginnen,	(niemand, Partnerin,		<b>ch fühle mich:</b> "1 sehr gut" 0 sehr schlecht"	Beschreiben Sie, warum Sie sich so fühlen. (Was hat dieses Gefühl ausgelöst?)
0	0:00-0:30								
0	0:30-1:00								
1	1:00-1:30								
1	1:30-2:00								
2	2:00-2:30								
2	2:30-3:00								
3	8:00-3:30								
3	3:30-4:00								
4	4:00-4:30								
4	4:30-5:00								
5	5:00-5:30								
5	5:30-6:00								
6	5:00-6:30								
6	5:30-7:00								
7	7:00-7:30								
7	7:30-8:00								
8	8:00-8:30								
8	8:30-9:00								
5	9:00-9:30								
9:	30-10:00								
10:	00-10:30								
10:	30-11:00								
11:	00-11:30								
11:	30-12:00								

Uhrzeit	Aktivität (schlafen, einkaufen, arbeiten,)	Wo bin ich? (zu Hause, im Kino,)	Wer ist noch dabei? (niemand, Partnerin, Kinder, Kolleginnen,)	G	Ich fühle mich: ,1 sehr gut" 10 sehr schlecht"	Beschreiben Sie, warum Sie sich so fühlen. (Was hat dieses Gefühl ausgelöst?)
12:00-12:30						
12:30-13:00						
13:00-13:30						
13:30-14:00						
14:00-14:30						
14:30-15:00						
15:00-15:30						
15:30-16:00						
16:00-16:30						
16:30-17:00						
17:00-17:30						
17:30-18:00						
18:00-18:30						
18:30-19:00						
19:00-19:30						
19:30-20:00						
20:00-20:30						
20:30-21:00						
21:00-21:30						
21:30-22:00						
22:00-22:30						
22:30-23:00						
23:00-23:30						
23:30-24:00						

To be able to analyze the diaries in an electronic way by making use of computational software, each day was transcribed one-to-one into a separate .xls-sheet leading to one .xls-file per person with seven .xls-sheets. Five additional columns were added to every column of the original printed version to the time frame part of each single diary day. They were inserted to capture the span of activities,

evaluations, etc. and will later on allow for automated replacement of missing values when originally coded as broader spans through multiple half-hour time spans by the volunteers.

On the following pages, the results are based on the first part of the diaries already transcribed when the analysis at hand were conducted. Diaries collected from eight different communities out of the ten mentioned above are included (not included yet: Loc1 and Loc7). This leads to an overall number of 212 diaries or 1,484 single days.

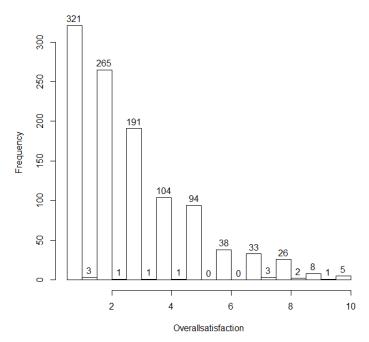
Community	# diaries
Loc2	37
Loc3	27
Loc4	10
Loc5	35
Loc6	28
Loc8	13
Loc9	33
Loc10	29
Sum	212

First results concentrate on the satisfaction evaluation of the overall day measured on a scale from "1 - very satisfied" to "10 - very dissatisfied". 186 respondents evaluated at least one day of the whole week. In the table below all seven days of the week and the original evaluations are cross-tabulated. Cells show the absolute number of evaluations. Most evaluations can be found for the categories 1 (321) and 2 (265), the highly satisfied end of the scale.

day of the week	1	1.5	2	2.5	3	3.5	4	4.5	5	6	7	7.5	8	8.5	9	9.5	10
Sunday	59	0	36	0	20	0	10	1	6	4	4	0	2	0	0	1	0
Monday	33	1	34	0	23	0	24	0	19	4	7	2	3	0	1	0	0
Tuesday	45	0	41	0	37	0	14	0	15	4	5	1	4	0	2	0	1
Wednesday	36	0	34	0	35	0	10	0	20	4	5	0	4	0	1	0	1
Thursday	47	0	38	0	27	0	16	0	7	8	2	0	4	1	2	0	1
Friday	41	1	46	1	26	1	13	0	20	8	4	0	7	0	1	0	1
Saturday	60	1	36	0	23	0	17	0	7	6	6	0	2	1	1	0	1
Sum	321	3	265	1	191	1	104	1	94	38	33	3	26	2	8	1	5

The histogram mentioned below visualizes the absolute sums of the table above. It is skewed to the right as most of the respondents evaluated their days very positively. The abscissa is broken up into steps of 0.5.

#### Histogram of overall daily satisfaction

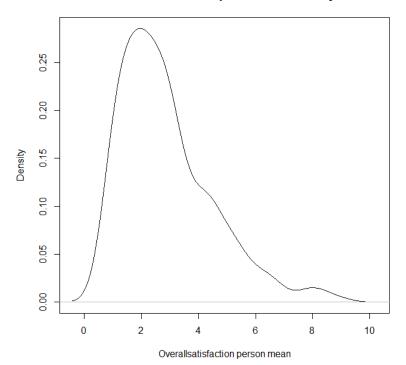


Furthermore, another two diagrams, namely a histogram and a density plot of mean values of the evaluation of the overall satisfaction through a whole week of these 186 respondents illustrate this problem. The former one uses absolute frequencies of mean values of the overall week evaluations of each single person, the latter one a density curve with an area under the curve that equals one.

#### Frequency ю 0 0 נ Г Overallsatisfaction - person mean

#### Histogram of person means for overallsatisfaction

Overallsatisfaction person mean density

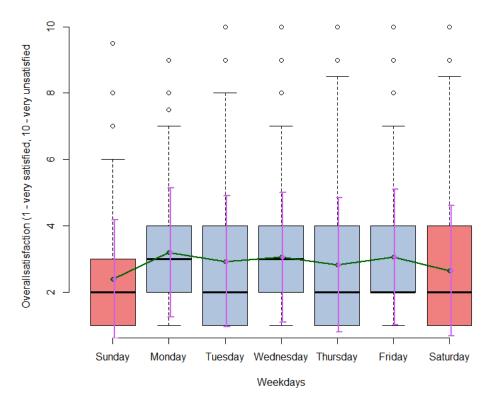


The overall mean values of all respondents of each single day are listed in the table below together with the standard deviation. The latter reveals insight into the homogeneity of single day evaluations. One can see that Sunday is evaluated best, Saturday takes the second place. Therefore, not a big surprise, respondents experience highest satisfaction on the weekend and lower satisfaction during the rest of the week.

Day of the Week	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Mean	2.398601	3.201987	2.931953	3.06	2.833333	3.067647	2.652174
Standard Deviation	1.777757	1.934924	1.969209	1.953245	2.021268	2.036606	1.966948

The graph below shows box plots of the original absolute overall day satisfaction. The days of the weekend are light coral colored and the rest of the week light steel blue. Median values are illustrated using thick black lines. They are situated in the middle or the lower end of the boxes. On Monday and Wednesday they reach a value of three, for the rest of the week a value of two. As might be expected, Monday is rated the most unfavorable day. This acts as another indication of worse evaluations during the week. Remarkably, there is no evaluation on Monday of "10 – very dissatisfied". Again it does not come as a surprise that there is no such evaluation on Sunday. The green line gives the overall day means and the medium orchid colored error bars the standard deviations of the respective days from the table above.

#### Overall satisfaction through a whole week



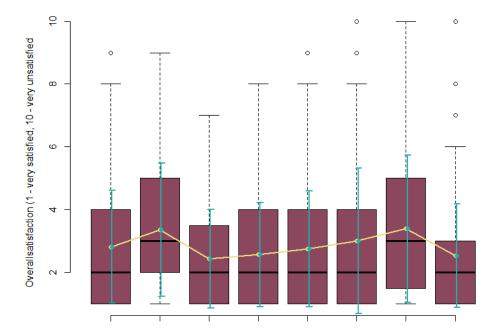
In the table below, communities and evaluations are cross-tabulated instead of the seven weekdays. The cells contain the original absolute number of evaluations of a specific satisfaction category and community.

Community	1	1.5	2	2.5	3	3.5	4	4.5	5	6	7	7.5	8	8.5	9	9.5	10
Loc2	54	0	45	0	37	0	14	1	23	4	6	1	2	0	1	0	0
Loc3	25	0	45	0	27	0	10	0	12	12	8	0	8	0	1	0	0
Loc4	23	0	8	0	10	0	9	0	2	2	1	0	0	0	0	0	0
Loc5	61	0	51	0	25	0	20	0	13	9	4	0	1	0	0	0	0
Loc6	57	0	33	0	22	0	17	0	20	6	4	0	2	0	1	0	0
Loc8	23	0	18	1	14	1	7	0	4	0	2	0	2	0	4	0	1
Loc9	42	3	37	0	29	0	20	0	13	7	9	2	9	2	1	1	2
Loc10	44	0	53	0	33	0	11	0	13	1	1	0	2	0	0	0	2
Sum	329	3	290	1	197	1	108	1	100	41	35	3	26	2	8	1	5

Overall mean values of all evaluations of each single community are listed in the table below together with the standard deviation. Loc4 – located in a rural area - is evaluated best and Loc10 – an urban area – takes the second place. Lowest satisfaction values are found in Loc3 and the Loc9. Standard deviations again reveal insights into the homogeneity vs. heterogeneity of the overall satisfaction within the specific communities.

Community	Loc2	Loc3	Loc4	Loc5	Loc6	Loc8	Loc9	Loc10
mean	2.81383	3.358108	2.436364	2.570652	2.753086	3	3.389831	2.54375
standard								
deviation	1.792713	2.112516	1.572491	1.658035	1.851847	2.32	2.342907	1.64774

The graph mentioned below shows box plots of the original overall community satisfaction values. Medium values for Loc3 and the Loc9 are three, for the rest of the communities two. The light golden colored line gives the overall community means and the sea green colored error bars the standard deviations of the respective communities from the table above. An eye-catching result is the worst evaluation of Loc4. But this result has to be taken with care as just ten respondents are included in this calculation.



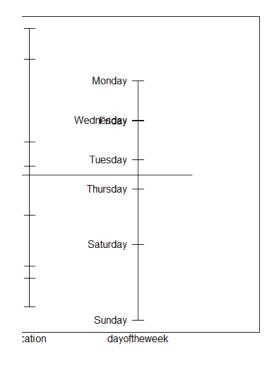
#### **Overall satisfaction of different locations**

The two tables below reveal insight into the day-community relationship. The first table gives mean values of the various weekdays for each community and the second table the same cross tabulation but this time the cells contain standard deviations.

mean	Loc2	Loc3	Loc4	Loc5	Loc6	Loc8	Loc9	Loc10
Sunday	2.5	3.388889	1.333333	2.36	2	2.333333	2.833333	1.647059
Monday	3.145833	4.071429	2.428571	2.521739	3.208333	3.181818	3.8	3
Tuesday	2.925926	2.666667	3.285714	2.444444	3.380952	3.285714	3.611111	2.28
Wednesday	3.391304	3.130435	2.875	2.36	3.047619	3.363636	3.809524	2.555556
Thursday	2.92	3.4375	2.222222	2.695652	2.384615	2.909091	3.104167	2.894737
Friday	2.88	3.75	2.7	2.807692	2.809524	3.333333	3.370968	2.84
Saturday	2.666667	2.75	2	2.541667	2.48	2.222222	3.178571	2.608696

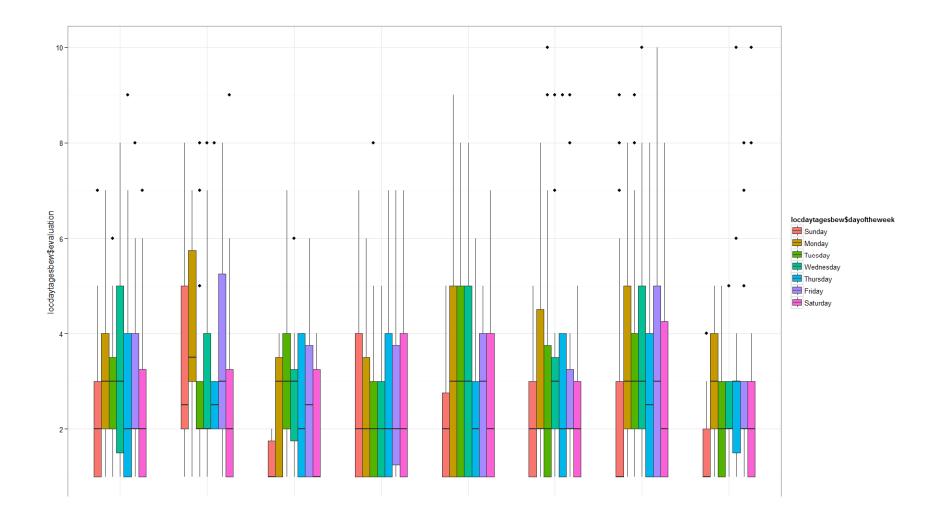
Standard deviation	Loc2	Loc3	Loc4	Loc5	Loc6	Loc8	Loc9	Loc10
Sunday	1.848423	2.118237	0.5163978	1.551344	1.023533	1.322876	2.661453	0.8617697
Monday	1.677726	2.129077	1.3972763	1.503619	2.358687	2.136267	2.231405	1.4770979
Tuesday	1.542374	1.879716	2.0586635	1.694637	2.246691	3.123818	2.13187	1.2083046
Wednesday	2.083248	1.984127	1.6420806	1.380821	2.01187	2.500909	2.400397	1.3382263
Thursday	2.1	2.308499	1.3944334	2.032347	1.525173	2.385563	2.216436	2.1575381
Friday	1.877942	2.336777	1.8287822	1.83345	1.536849	2.579053	2.428881	1.8411953
Saturday	1.736229	2.173404	1.4142136	1.744037	1.782321	1.394433	2.454076	2.2102886

For a quick location and day comparison purpose the diagram below together lists mean values of the seven weekdays and mean values of the eight communities. Spans between evaluations of different communities and weekdays can be used for cross comparisons.

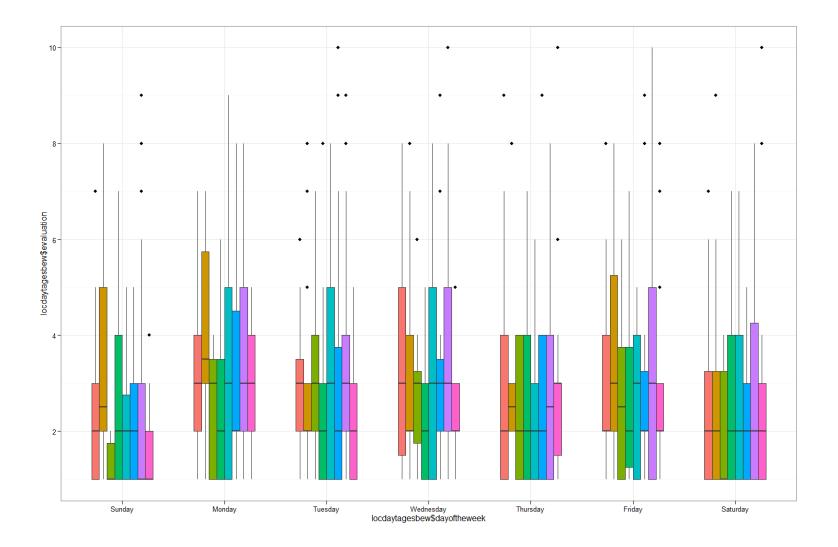


Factors

On the next two pages, cross comparisons between communities and weekdays are visualized using the original day evaluations. Unfortunately because of the high disaggregation level the additional information is somehow limited.



However, better insights will be possible as soon as all diaries are transcribed and imported. Results are expected to become more stable. At the moment of visualization a few dozen diaries were out for transcription into electronic format (.xls-files).



#### Questionnaire

On the next four pages the last version of the printed questionnaire can be found. The online questionnaire, which is still online (webpage: <u>http://survey.modul.ac.at/lq/</u>) and contributes to the collection of further datasets, is not attached as it contains 26 webpages and the content is the same as that of the printed version, anyhow.

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	ontaktmöglichkeit für Benachrichtigung (nur wenn ilnahme an der Verlosung erwünscht; z.B. Tel. Nr., mail oder Postadresse)				
AmKahlenberg 1, 1190 Wien E-mail: <u>ivo.ponocny@modul.ac.at</u> Tel.: +43-1-3203555-410					
Teil 1: Allgemeine Informationen zu Ihrer Per					
Heutiges Datum (TT.MM.JJJJ):	Derzeitige Uhrzeit: ca:				
Geschlecht: männlich weiblich	Alter: Jahre Postleitzahl:				
Ich wohne in Österreich: immer schon					
Familienstand: ledig Lebensgemeinse Wie viele Personen wohnen in Ihrem Haushalt	chaft				
Haben Sie (leibliche, adoptierte bzw. Pflege-) H Welche der Kinder leben in Ihrem Haushalt? Pflegen Sie Angehörige oder Bekannte?	] keine 🗌 alle Anzahl:				
Abgeschlossene Ausbildung(en): (Mehrfach         keine       Meisterprüfung/A         Pflichtschule       Matura         Berufsbildende Schule       Bachelor         Lehre       Magister/Master	VerkmeisterIn Doktor/PHD Sonstiges: Fachrichtung(en):				
─────────────────────────────────────	eitssuchend SchülerIn senz-/Zivildiener StudentIn usfrau/Hausmann Sonstiges: enziert usioniert				
Derzeitige/zuletzt ausgeübte Berufstätigkeit:					
Berufstätige: tatsächliche wöchentliche Arbeits	zeit: Stunden				
Monatliches Netto-Haushaltseinkommen: [ 2001-2500 2501-3000 3001-3500 ] möchte ich nicht nennen	] <500				
Ihr Haushalt verfügt über (mit Anzahl):					
Auto: Eigentumswohnung:					
sonstiges:	Auf wie vielen m² wohnen Sie? m²				
Ich bin RaucherIn Nicht-RaucherIn					
	]ausübend ☐ohne Bekenntnis ]nicht ausübend ☐möchte ich nicht angeben				
Der beste Moment Ihrer letzten Woche:	Der schlechteste Moment Ihrer letzten Woche:				

Die derzeitige Situation ist für das Befinden	nachteilig	weder noch	förderlich			
Länge der Verkehrswege						
Kinderbetreuung						
Altenpflege						
Medizinische Versorgung						
Die Menschen, die hier leben						
Ausbildungseinrichtungen						
Gemeindepolitik						
Freizeitmöglichkeiten						
Lebenskosten						
Landschaft						
Ortsbild						
Die Möglichkeiten auszugehen						
Persönliche Sicherheit						
Lärm						
Öffentliches Verkehrsangebot						
Kulturelles Angebot						
Sauberkeit						
Sonstiges:						
(auch Schlagwörter liefern bereits sehr wertvolle Zusatzinformationen):						
Kreuzen Sie bitte im Folgenden jene Sätze an, die Sie unmittelbar ansprechen, um Ihr persönliches Lebensgefühl zu beschreiben: (Mehrfachantworten möglich) [] Ich fühle mich rundum wohl.         Ich lebe in Einklang mit mir selbst.       Ich bin oft gereizt.         Es ist schon alles sehr stressig.       Ich habe Angst vor dem Altern.         Ich musste lernen, mich mit meinem Leben abzufinden.       Ich bin vom Leben enttäuscht.         Ich kann oft nicht schlafen aufgrund von Problemen.       Derzeit genieße ich mein Leben.         Manchmal geht es mir gut, dann wieder schlecht.       Mir fehlt etwas in meinem Leben.         Eine gewisse Beeinträchtigung meiner Stimmung geht nie ganz weg.       Mein Leben hat weder Höhen noch Tiefen.         Gibt es Tätigkeiten, die Sie so gerne ausüben, dass Sie ganz darin aufgehen und alles rundherum vergessen?       Mein Altern und alles rundherum						
nein ja und zwar täglich wöchentlich monatlich seltener als monatlich Welche?						
Was von dem Folgenden verschafft Ihrem Leben derzeit Sinn?						
Beruf Freunde Beziehung	Anderen zu helfe	en 🗌 Selbstverw	irklichung			
	]Erfolg ⊡So	nstiges:				

### Teil 2: Kreuzen Sie bitte an, wie sich die folgenden Situationen in Ihrem Wohnort auf Ihr Befinden im letzten Monat ausgewirkt haben.

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Teil 3: Kreuzen Sie bitte zu jedem Thema an, inwiefern dieses Ihr Befinden im letzten Monat beeinflusst hat.

- Benutzen Sie die Kategorie "nur selten und kurz", wenn die genannten Dinge zwar gelegentlich auftreten, aber rasch wieder vorübergehen, ohne Ihr Befinden länger zu beeinflussen.
- "Öfter bzw. länger" bedeutet, dass Dinge im letzten Monat wiederholt aufgetreten sind oder für längere Zeit für Ihr Befinden wesentlich, aber nicht die ganze Zeit wirksam waren.

Bitte wählen Sie **abschließend** die fünf für Ihr Befinden bedeutsamsten Bereiche aus und vergeben Sie in der Spalte ganz rechts die Plätze 1 (am wichtigsten) bis 5 (vergeben Sie jeden Platz ein einziges Mal).

	Beeinflusst mein Befinden					
	nicht	nur selten und kurz	öfter bzw. länger	fast immer	ist nicht aufgetreten	Platz
Momente der Freude						
Stress						
Treffen mit guten FreundInnen						
Burnout (ausgebrannt sein)						
Schmerzen						
Probleme in der Arbeit						
Gutes Familienleben						
Angst						
Krankheit						
Gefühl, geliebt zu werden						
Freude an der Arbeit						
Einsamkeit						
Erfolgserlebnisse						
Erschöpfung						
Sinn im Leben fühlen						
Probleme im Familienleben						
Glauben/Religiosität						
Keine Entscheidungsfreiheit						
Gefühl, ausgegrenzt zu werden						
Sich unattraktiv fühlen						
Lob oder Anerkennung						
Depressive Stimmung						
Sich fremd fühlen						
Fehlende Anerkennung						
Zu wenig Zeit für mich						
Langeweile						
Opfer von Gewalt						
Unerfülltes Sexualleben						
Sehnsucht nach Herkunftsort						
Sprachliche Probleme						
Ausgenutzt werden						
Körperliche Einschränkungen						
Ärger						
Sonstiges:						

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Bitte nutzen Sie hier die Gelegenheit zu einer persönlichen Anmerkung zu Ihrem Befinden (auch Schlagwörter liefern uns wertvolle Zusatzinformationen):

#### Teil 4: Beantworten Sie nun bitte die folgenden Fragen zu Ihrem Leben.

	•						
ch habe eine körperliche/gesundheitliche/ psychische Einschränkung nein ja, welche:							
Kreuzen Sie nun bitte an, welche der folgenden Punkte Ihnen persönlich finanzielle Sorgen bereiten (Mehrfachnennungen möglich):							
Ausgehen Haushaltsgeräte 🛛	Jrlaub DTV, PC, Handy Kind(er)						
Lebensmittel Aus- oder Weiterbildung	Cleidung 🗌 Wohnsituation 🗌 Auto						
Reparaturen Anderes:							
Immer wieder belastet mich Sorge um: (Mehrfachr	ennungen möglich)						
Gesundheit Kind(er) Eltern	🗌 meine Zukunft 📄 Zukunft der Welt						
🗌 Arbeitsplatz 🗌 Karriere 🔲 Finanzen	PartnerIn Sonstiges:						
Ich beziehe Kraft, um mit den Schwierigkeiten des (Mehrfachnennungen möglich)	Lebens fertig zu werden, durch:						
PartnerIn Kinder Beruf	FreundInnen 🗌 mich selbst						
Eltern Religion Spiritualität [	Freizeitaktivitäten						
Mein derzeitiges Leben 🗌 verbessert sich	verschlechtert sich bleibt gleich.						
Mein derzeitiges Leben 🔲 ist schlechter als früh	er □ist besser als früher □ist gleich geblieben.						
Teil 5: Und nun noch ein paar abschließende Fra	gen, dann ist es geschafft!						
Wie zufrieden sind Sie alles in allem mit Ihrem Le	en?						
extrem unzufrieden							
Wie glücklich sind Sie alles in allem mit Ihrem Lel extrem unglücklich	en?						
Bitte denken Sie kurz an eine Person, die einen guten Freundeskreis besitzt, mit dem sie sich regelmäßig trifft. Sie lebt in einer ausreichend großen Wohnung und hat keine finanziellen Sorgen. Sie ist körperlich gesund und hat genügend Zeit für Hobbies. Das Leben dieser Person hat sowohl Höhen als auch Tiefen.							
Wie <b>zufrieden</b> stufen Sie diese Person auf der fol extrem unzufrieden	jenden Skala ein?						
Wie glücklich stufen Sie diese Person auf der folg extrem unglücklich	enden Skala ein?						
Bitte denken Sie kurz an eine andere Person, die Freunde hat, die sie selten trifft. Sie lebt in einer kleinen Wohnung und ist finanziell eingeschränkt. Sie ist bis auf Kleinigkeiten körperlich gesund und hat wenig Zeit für ihre Hobbies. Das Leben dieser Person ist recht eintönig.							
Wie zufrieden stufen Sie diese Person auf der fol- extrem unzufrieden	genden Skala ein?						
Wie glücklich stufen Sie diese Person auf der folg extrem unglücklich	enden Skala ein?						

#### Wir bedanken uns sehr herzlich für Ihre Mitwirkung!

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The following pages reveal insight into first results based only on the paper questionnaires. Furthermore only printed questionnaires are used completed by respondents of the respective ten communities. The other questionnaires will be used in the near future to identify classes of different personalities and their respective profiles, but are irrelevant for comparison purposes based on community level.

Out of the 881 inhabitants of the ten communities who filled out the printed questionnaire and sent them back by post mailing, 536 are female and 338 are male. 797 always lived in Austria. The rest of them settled down at a later point of time. 781 typically speak German at home, the rest some different language. 155 are unmarried, 449 are married, 83 live in cohabitation, 119 are divorced, and 83 are widowed. 592 have kids, 171 still live with them together. 68 people nourish somebody else. The next two tables show the distribution of the level of education and the employment situation in the sample.

Level of education	# checked
None	13
Compulsory school	440
Vocational school	316
Apprenticeship	277
Foreman/craftsman's certificate	58
Qualification for university entrance	274
Bachelor	27
Master	70
PHD	50

Employment situation	# checked
Employed (fulltime)	261
Employed (parttime)	110
Self-employed	82
Partly self-employed/employed	26
Seeking for work	23
Compulsory military service/compulsory community service	0
Housewife/houseman	49
Maternity leave	24
Retirement	310
School kid	19
Student	28

120 respondents are smokers, 460 don't smoke. 9 of them life in a home (e.g. retirement home) and 508 don't. 180 don't have a religious denomination and 44 didn't want to give an answer on this question. 328 practice religion and 185 are not active in religious activities. 232 respondents positively answered the statement "Ich habe eine körperliche/gesundheitliche/psychische Einschränkung" [I have a physical/health/mental restriction]. 58 respondents positively answered the statement "Ich benötige Hilfe bei alltäglichen Tätigkeiten" [I need help regarding everyday activities].

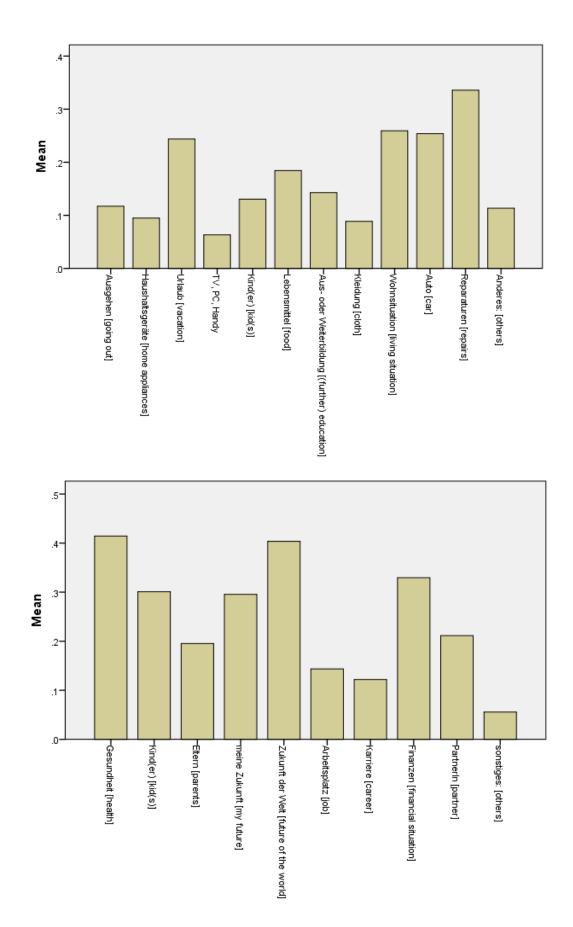
The following questions reveal insight into the economical situation of the people contained in the sample. The household income distribution looks as follows:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<500	24	2.7	3.5	6.9
	501-1000	69	7.8	10.1	17.0
	1001-1500	118	13.4	17.3	34.3
	1501-2000	111	12.6	16.3	50.6
	2001-2500	89	10.1	13.0	63.6
	2501-3000	94	10.7	13.8	77.4
	3001-3500	56	6.4	8.2	85.6
	3501-4000	33	3.7	4.8	90.5
	4001-4500	18	2.0	2.6	93.1
	4501-5000	23	2.6	3.4	96.5
	>5000	19	2.2	2.8	99.3
Missing	Don't want to give an answer.	199	22.6		

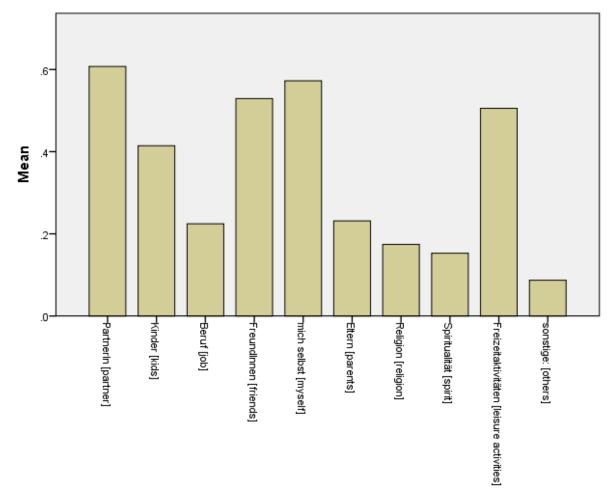
In brackets the number of respondents is listed for the statement "My household has..."

- ...a car (#726) ...an owner-occupied flat (#160)
- ...a house (#485)
- ... a garden (#484).

Regarding the two statements "Kreuzen Sie nun bitte an, welche der folgenden Punkte Ihnen persönlich finanzielle Sorgen bereiten (Mehrfachnennungen möglich):" [Please check which of the following issues make you have sorrows (multiple reponse possible)], and "Immer wieder belastet mich Sorge um: (Mehrfachnennungen möglich)" [Again and again I am burdened by sorrows about: (multiple reponse possible)], percentage values can be interpreted from the two bar charts below. Most of the respondents ticked "Reparaturen" [repairs] when they were confronted with the first statement. Concerning the second statement, career is not a critical aspect, but health and future of the world are seen quite critically. These values have to be taken carefully, as somebody who just skipped the question downgrades the percentage value.



Concerning the statement "Ich beziehe Kraft, um mit den Schwierigkeiten des Lebens fertig zu werden, durch:" [I gain energy to cope with the troubles of life by:], again percentage values can be interpreted from the bar chart below. Again, these values have to be taken carefully for the same reason as with the latter two mentioned in the last paragraph. Partners play a dominant role here.



In brackets the number of respondents who marked the fields are listed for the statement "Mein derzeitiges Leben..." [My current life...]

...verbessert sich (265). [improves] ...verschlechtert sich (86). [gets worse]

...bleibt gleich (407). [stays the same]

In brackets the number of respondents who marked the fields are listed for the statement "Mein derzeitiges Leben..." [my current life]

...ist schlechter als früher (148). [is worse than it was]

...ist besser als früher (357). [is better than it was]

...ist gleich geblieben (279). [stayed the same]

The next table lists the mean values of the overall satisfaction question ("1 - extremely satisfied", "10 - extremely unsatisfied") and the overall happiness ("1 - extremely happy", "10 - extremely unhappy") question of the ten different communities. Inhabitants of Loc7 are the most satisfied ones compared to the other communities. People living in Loc2 show the lowest satisfaction values, Loc9 second lowest. Summarized there is no community with an extremely bad satisfaction level. Concerning the happiness question, Loc5 shows the highest values and Loc8 and Loc9 the lowest ones.

Community	satisfaction	happiness
Loc1	7.309211	7.234323
Loc2	6.870370	7.169811
Loc3	7.651515	7.343284
Loc4	7.579710	7.597222
Loc5	7.482143	7.625000
Loc6	7.523810	7.238095
Loc7	8.161290	8.258621
Loc8	7.350649	6.987342
Loc9	7.070175	6.931034
Loc10	7.225352	7.111111
Overall mean	7.454323	7.346906

To have an anchor for the satisfaction and happiness questions, two descriptions of life situations of two artificial persons were described and afterwards rated for satisfaction as well as for happiness. Mean satisfaction and happiness evaluations of people are rather close to each other.

*Person 1:* Bitte denken Sie kurz an eine Person, die einen guten Freundeskreis besitzt, mit dem sie sich regelmäßig trifft. Sie lebt in einer ausreichend großen Wohnung und hat keine finanziellen Sorgen. Sie ist körperlich gesund und hat genügend Zeit für Hobbies. Das Leben dieser Person hat sowohl Höhen als auch Tiefen.

[Please think shortly about a person with a good circle of friends to meet on a regular basis. He or she lives in a sufficiently large flat and has not financial sorrows. He or she is healthy and has sufficient time for hobbies. The life of this person has ups as well as downs.]

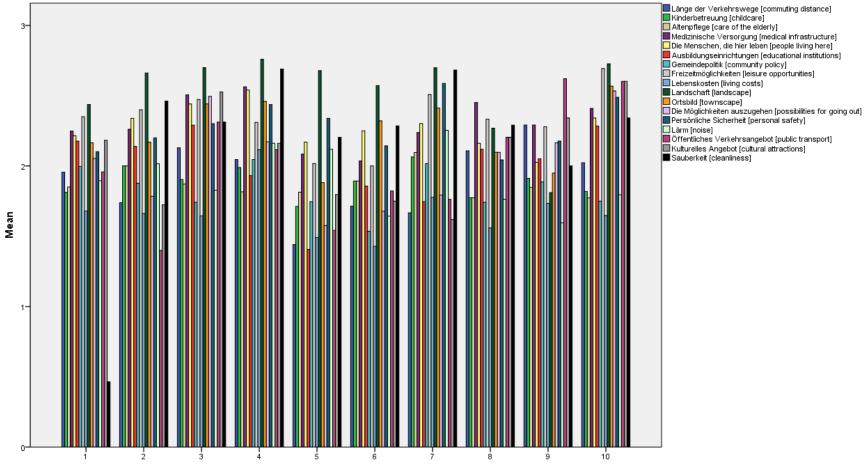
Mean satisfaction value: 7.92926 vs. Mean happiness value: 7.736216

*Person 2:* Bitte denken Sie kurz an eine andere Person, die Freunde hat, die sie selten trifft. Sie lebt in einer kleinen Wohnung und ist finanziell eingeschränkt. Sie ist bis auf Kleinigkeiten körperlich gesund und hat wenig Zeit für ihre Hobbies. Das Leben dieser Person ist recht eintönig.

[Please think shorly about another person, with friends whom he or she seldom meets. He or she lives in a small flat and is financially restricted. Essentially, this person is happy but has little time for hobbies, his or her life is monotonous.]

Mean satisfaction value: 4.510182 vs. Mean happiness value: 4.505411

From the next page one can figure out mean value differences on items of the question: "Kreuzen Sie bitte an, wie sich die folgenden Situationen in Ihrem Wohnort auf Ihr Befinden im letzten Monat ausgewirkt haben." Scale definition: "1 - negatively", "2 – neither nor", and "3 - positively". For example, cleanliness was evaluated negatively in Loc1 compared to Loc7 or Loc4 where cleanliness was evaluated positively. Official transportation possibilities are evaluated better in urban regions like Loc3, the Loc9 and the Loc10 but much worse in rural areas like Loc2, Loc5, Loc6 and Loc7.



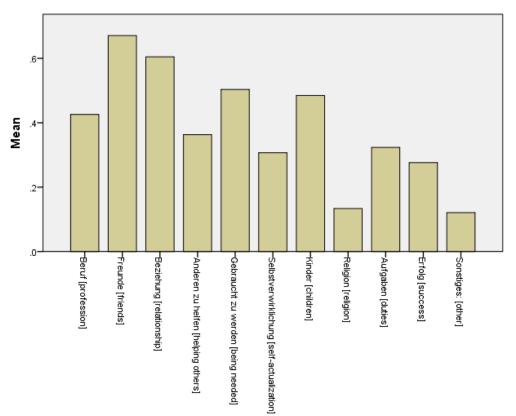
The question "Gibt es Tätigkeiten, die Sie so gerne ausüben, dass Sie ganz darin aufgehen und alles rundherum vergessen? Ja und zwar..." focuses on the flow concept. [Are their activities which you like so much that you forget everything around? Yes, namely...] 262 respondents said that they perceive feelings like this daily, 270 weekly, 74 montly, 46 more seldomly than monthly, and 191 state not to experience like this.

The next table gives the absolute numbers of people who ticked one of the possible choices on the question: "Kreuzen Sie bitte im Folgenden jene Sätze an, die Sie unmittelbar ansprechen, um Ihr persönliches Lebensgefühl zu beschreiben: (Mehrfachantworten möglich)". [In the following, please check those sentences which appeal to you spontaneously to describe your personal feeling about life.] As unchecked counts zero and checked counts one the values in column mean can be interpreted as percentage values. Again, these values have to be handled with care as somebody who just skipped the question downgrades the percentage value. Additional relevant information for interpretations purposes can be found in column "Chance to tick" which gives the number of respondents who found the question in their questionnaire. Experiences in the course of the study concerning the response behavior yielded two minor questionnaire changes. For example, the statement "Ich habe Angst vor dem Tod" [I am afraid of death] was changed into a different question, namely "Ich habe Angst vor dem Altern". [I am afraid of getting older.] At the beginning of the survey 613 respondents were confronted with the former statement but just nine percent checked the box. Afterwards the statement was changed into the latter one and finally 15% out of 268 ticked the box. One reason for this might be that the first statement was formulated too extremely. A weaker formulation of the statement might reveal insight into the real phenomenon of aging.

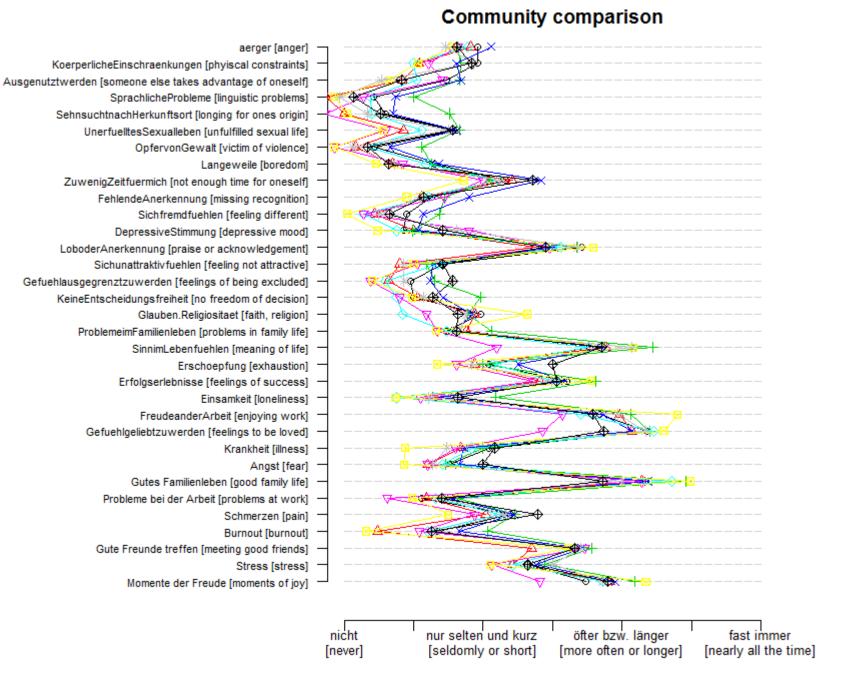
	Chance to tick	mean
Ich lebe in Einklang mit mir selbst. [harmony with oneself]	881	.46
Es ist schon alles sehr stressig. [stressful life]	596	.24
Derzeit genieße ich mein Leben. [enjoying life]	881	.58
Ich kann oft nicht schlafen aufgrund von Problemen.	881	.18
[sleepless because of troubles]		
Manchmal geht es mir gut, dann wieder schlecht. [ups and downs]	881	.36
Eine gewisse Beeinträchtigung meiner Stimmung geht nie ganz weg.	881	.18
[always some restriction in mood]		
Mein Leben hat weder Höhen noch Tiefen. [no ups and downs]	881	.07
Ich fühle mich rundum wohl. [feel completely well]	881	.41
Ich bin oft gereizt. [often irritated]	881	.17
Ich habe Angst vor dem Altern. [afraid of getting older]	268	.15
Ich bin vom Leben enttäuscht. [disappointed of life]	881	.05
Ich musste lernen, mich abzufinden. [had to learn to resign]	881	.22
Es fehlt etwas in meinem Leben. [something missing in life]	881	.20
Meine Probleme werfen einen Schatten auf mein ganzes Leben.	881	.09
[Problems cast a shadow on whole life.]		
Es ist halt immer derselbe Trott. [always same daily routine]	881	.14
Ich fühle mich irgendwie fehl am Platz. [feel to be out of place]	285	.06
Ich habe Angst vor dem Tod. [afraid of death]	613	.09

Big differences can be found taking the general content of a statement into consideration. Statements like "Mein Leben hat weder Höhen noch Tiefen", "Ich bin vom Leben enttäuscht", "Meine Probleme werfen einen Schatten auf mein ganzes Leben", and "Ich fühle mich irgendwie fehl am Platz" all have percentage values lower than 10%. On the other side, statements like "Derzeit genieße ich mein Leben", "Ich lebe in Einklang mit mir selbst", or "Ich fühle mich rundum wohl" all have percentage values higher than 40%. Summarized, negative statements are more seldomly checked compared to positive statements.

Below a bar chart with percentage values of the respective checked items on the question "Was von dem Folgenden verschafft Ihrem Leben derzeit Sinn?" [What of the following gives meaning to your life?] can be found. Again, these values have to be treated carefully because of the downgrading effect. Compared to all the social categories like Freunde [friends], Beziehung [relationship], Gebraucht zu warden [being needed], and Kinder [children], individual person oriented categories like Beruf [profession], Selbstverwirklichung [self-actualization], Aufgaben [duties], and Erfolg [success] were chosen rather seldom, similarly religion.



The next plot shows mean values for 33 wellbeing drivers based on community level. The thick black line gives the overall mean through all communities. The thin colored lines give mean values for each community separately. Some of the variables are more heterogeneous from the viewpoint of the different communities (e.g. burnout), some of them are evaluated rather homogeneously throughout all communities (e.g. Lob oder Anerkennung [praise or acknowledgment]). Some variables are evaluated as being perceived as rather often (e.g. Gutes Familienleben [good family life]), some seem to be more or less not existent (e.g. Langeweile [boredom]) for a vast majority of people.



### **Results of open responses/interviews**

A final evaluation of the interviews cannot be produced at this point of time, rather the whole interview material has to be the basis for further in-depth evaluation. What can be concluded after the data collection and the transcription is that they contain very telling specific responses, in many but not all cases in harmony with the quantitative data and enriching them.

The spontaneous comments about life and its problems drew, among others, attention to the following problem areas or groups of persons:

- Women with kids: repeatedly, the burdens of growing up a child have been mentioned (whereby the diaries revealed some extremely monotonous courses of the days), regarding time but also regarding the desire to work or not to lose the option to continue working after paternity leave.
- Financial troubles: many respondents told the interviewers about financial troubles and sorrows and gave a detailed picture of what they can or cannot afford, and how their mood is affected.
- Students and pupils: many persons experienced school as an obstacle for evaluating selfesteem and self-confidence. Students repeatedly indicated to worry about the future, in particular when writing a thesis.
- Environment: many positive locations could be identified where the environment, in particular the option to spend leisure time outside in nature, was considered most favourable for subjective well-being. On the other hand, rough climate and lack of direct exposure to sun was complained about. (In particular, at a certain location; in fact, this location was chosen for its extreme periods of shadow, in order to test whether conditions like that are mentioned which happened, indeed.)
- Corruption: though politics is generally judged very critically, one specific location could be spotted where the perceived amount of corruption is obviously dramatically higher than elsewhere.
- Migration: various evaluations of life have been observed by persons with migration background, ranging from quite positive down to feelings of being underprivileged and hopeless.
- Working situation: For many respondents, their job was actually a source of well-being and meaning, whereas others talked about various kinds of troubles, sustainable disappointment, and feelings of insecurity about the future.
- Health: Much was said about various types of handicaps and health status and about the success in coping with these difficulties.
- Aging: Maybe not a majority, but a substantial core of elderly people in the sample reported to feel dissatisfied, due to a lack of options and targets in life or to the impression that they missed certain experiences or success in life and will never have them anymore.

But, as mentioned before, a more binding evaluation should not be given until a professional qualitative text analysis has been applied to all 500 interviews.

### **Triangulation**

### **Comparing macro-impression from interviews and questionnaires**

One of the key questions of this study was to judge whether the claim that most people are fine still holds after a closer investigation. It is a conclusion from the replicable observation that, in SWB questionnaire, most people rate their SWB as moderately or even extremely positive, such as 7 to 10 on a 10-point scale. Self-evaluations smaller than the mid-point of the rating scale are taken rather by a minority.

However, it is unknown how well the subjective rating on a numerical scale reflects the "true" emotional status of the respondent, or – more precisely – whether the researchers' interpretation of the response "8" matches to the "real" meaning of the response. As mentioned earlier, experience (including the pre-tests for this study) indicates that there might be a strong tendency to choose positive ratings. This could be explained by social norms, social desirability, suppression of negative emotions, focusing biases, momentary mood, avoiding cognitive dissonance, and similar. Nevertheless, subjective ratings are the most immediate source of evidence since nobody can tell better about SWB than the respondent himself or herself.

The idea of the present study was to compare numerical ratings with the content of the interviews. This bridge between numerical judgment and (also subjective) narratives is available for a total of 500 interviews because every interview partner had to respond to a demographical response sheet as well which included the standard questions for life satisfaction and happiness. Unfortunately, an external rating of SWB or quality of life on the basis of an interview is still subjective, so that a very carefully designed categorization scheme is necessary which allows for judgments with a large interrater reliability (as measured by Cohen's Kappa or other consistency indicators). In the follow-up steps of this research, a sophisticated catalogue will be generated with more precisely specified coding guidelines. But this work will be based on a thorough qualitative content analysis extracting the categories from the text material available. At the moment, only a first rough impression on a small subsample can be given about how responses are related to narrated life circumstances.

After trying out a few candidates, two independent codes were considered the absolute minimum to assign interviews to significant classifications. A single dimension ("fine – not fine") would still look appealing, but no practical way was seen how to integrate positive and negative circumstances, cheerful experiences and burdens, into one composite grading without losing too much information or objectivity. This merges well with the saying in positive psychology that absence of negative does not automatically create positive emotion. Within our working group, an agreement for a rough working categorization was reached by coding positive and negative experiences as "not mentioned", "having influence but no central effects on life", "having central effects on life", "overall importance" and "dominant factor on mood". "Central" means having substantial impact on family life or other social key relationships, on professional life or immediate personal life (such as loneliness or physical handicap). The amount of impact was to be taken from judgments found in the interviews or by the time the respondent dedicated to that topic, in particular in case of repeatedly talking or explaining or justifying facts in detail.

In a probing random sample of n=23 interviews, the average life satisfaction was 8,6 which is beyond the questionnaire sample average of 7,44; similarly, the happiness rating of the interview respondents is on average more positive than the one of the questionnaire sample (7,19 instead of

8,27). This raises the suspicion that social desirability effects could be stronger in the context of a face-to-face-interview. Comparing the responses on the demographic sheet with the ones in the questionnaire (for the subsample where interview as well as questionnaire is available), the questionnaire rating on satisfaction is noticeably smaller, indeed: 7,91 instead of 8,59 (and the same is true for happiness: 7,64 vs. 8,28). So the connection to the interview situation might raise positivity in the ratings, or even worse, create a tendency to uphold a positive view of life which would distort the validity of interviewing results.

Whatsoever, the actual target of this chapter is to compare the outcomes between external ratings on interviews and the subjective life evaluations on demographic sheet or questionnaire (if available). Both numerical ratings deliver the usual impression that a vast majority of people is, in principle, fine. The minimum number used for evaluation was 5 out of 10. Using the categorizations as described above, the picture looks as follows: 15 persons told about resources which were judged at least central, 4 did not appraise any kind of positive resources on their quality of life. Regarding the problematic areas of life, 14 respondents reported burdens with at least "central" effects, among them 4 rated "dominant" and 2 rated "overall importance". In some cases, central SWB resources corresponded to central burden; these persons rated themselves, in general, as quite satisfied and happy. Consequently, regarding subjective life appraisal, central sources of force seem to provide quite a resilient psychological state of mind, even confronted with severe troubles. (This harmonizes well with statements in the interviews.)

Special focus was laid, then, on interviews with seemingly strong negative tendency, in particular with central burden which is NOT compensated by at least central resources (in other words, with a dominating negative flavor in the narrative). In the sample of 23 interviews, 8 cases have been observed, slightly more than a third. Considering what has been necessary to be assigned to this subsample of respondents creates a much less favorable picture than the numerical evaluations might suggest. These 8 consist of persons who are handicapped or sick and consistently claim that they feel bad or angry, that life has nothing to offer for them anymore, persons who are unemployed, in severe financial troubles and hopeless or persons who even take drugs against depression.

Moreover, inspecting the average grade in life satisfaction and happiness, the numbers are smaller in fact – 7,125 and 7,125 in the demographic sheet and 7,5 and 7,75 in the questionnaire – but still in a markedly positive region which would probably be interpreted as quite satisfactory. None of them rated below 5, one of them even 10 on all variables.

As a conclusion, the conclusions from the interviews would not allow for a superficial statement that in general people are fine – unless severe SWB burdens on a third of the population are not considered substantial. On the other hand, that does not automatically prove invalidity of satisfaction or happiness scales, but it shows that numbers such as 7 must not at all be interpreted as indicators for high subjective quality of life. However, the collected data will provide the basis for better categorization instruments than the one just used, and working through all the 500 interviews will enable more advanced conclusions than possible at the moment.

The next chapter will show what kind of information might be won by integrating different information sources on a micro level.

#### Integrating information from different sources on a micro-level

Comparisons between different sources of information on an individual basis serves two targets: to give detailed impression about the validity or at least the meaning of the quantitative ratings – and vice versa, it happens as well that questionnaire results may help to support interview results), and to get richer insights into individual living conditions by combining information from different sources. A few roughly described (randomly selected) cases shall serve as an illustration.

#### Example Case 1:

This person was one of the cases where satisfaction was rated much higher than happiness (8 vs. 5). In the questionnaire, conspicuous responses were on boredom, depressive mood and loneliness. The items about basic emotions included "had to learn to resign" and "always the same daily round". Open comments in the questionnaire mentioned fear of aging and financial sorrows. Also in the interview, loneliness and depression were an issue, as well as unhappiness with the self, and – only in the interview – a phobia to go outside was reported. The following text raises severe doubts about the meaningfulness of satisfaction rating "8": *I am often dissatisfied because - in fact - life is over, no more is going to come, the daily round continues.* However, consistent with the aforementioned results, it is not at all exceptional that severely burdened persons give seemingly positive responses regarding satisfaction. Again, value "5" in happiness is obviously not to be considered as an indicator for "moderate" satisfaction.

The diary tells about positive and negative events during a week, whereby it becomes evident that the lonely phases are the problematic ones ("9" on a reverse 10-point scale). Open comments allude to bad conscience when eating, to anger with the self and to joyless TV watching (the latter being remarkable because watching TV is pleasant for many people, but in this case it rather seems to be an indication of loneliness). On the other hand, trips with the family are rated as "1" and indicated as highlights by the verbal comments. This case is an example for a quite consistent picture, where all sources of information match together well – except for the standard life satisfaction question which might mislead.

#### Example Case 2:

Most consistently, satisfaction *and* happiness are rated with "8". Major parts of questionnaire and interviews indicate a positive experience of life, with work and family as sources of subjective wellbeing. There is only little evidence about troubles, "enduring pain" in the questionnaire which stands isolated and not further explained, and some basic perception of life as "feeling irritated" and "often cannot sleep". The interview focuses slightly more on stress experience, in particular regarding the job and tensions/quarrelling with the supervisor for whom the person feels as *just being a number at work*. This may seem somewhat contradictory to the questionnaire ratings. In this case, the diary gives strong indication that the troubles at work should not be downplayed too much, because family time was consistently rated with "2" (on the reverse scale), whereas work generally received values 4 and 5. Though it is maybe overdone to claim an inconsistency between the questionnaire and the other sources, it serves as additional evidence that large ratings in the questionnaire do not at all indicate burden-free lives.

In general, the discrepancy between seemingly positive ratings and troublesome life experiences can be tracked to individual cases, where – such as in Example Case 1 – inconspicuous, positive or moderate ratings meet very critical narrations about life. However, in the more detailed part of the

questionnaire, usually there is stronger information contained, such as stress, loneliness or negative basic conception of life, which can often be successfully validated in interview text. The latter question battery, used for predicting the life satisfaction rating, provides about 15% explained variance in a regression model, and some of its items discriminate quite well between positive and negative life satisfaction ratings:

I feel in harmony with myself.	8.24 instead of 6.26
I am disappointed of life.	3.38 instead of 7.65
Altogether, things are rather stressy.	6.71 instead of 7.90
My problems cast a shadow onto my life.	4.79 instead of 7.71

A feeling of disappointment is obviously a very strong statement, indeed corresponding to rather disastrous life satisfaction values. Consistent with the common agreement on scientific SWB congresses, satisfaction items do seem to perform reasonably well, for example regarding correlations with certain types of living conditions; but on the other hand, overwhelming evidence shows that the common conclusion from positive satisfaction ratings on well-being of people is way too superficial.

### **VI.** Conclusion and Discussion

The funded project provided an extensive source of data, including more than 1400 questionnaires, more than 300 diaries, 20 group discussions and finally more than 500 interviews. At the moment, there can be only first glimpses of the knowledge which can be derived from this treasure of reported personal experience. Nevertheless, the authors feel confident enough to respond to the target questions, though in a rather preliminary way.

As far as can be judged by now, mixed methods seem to be an extremely promising approach to assess quality of life, on a national as well as on a regional level. Even psychologically oriented questionnaire items discriminated quite well between different locations, but the conclusions can be drastically enriched by explanatory statements from open responses, interviews and diaries. As one out of many possible examples, the situation of mothers bringing up children will become much more evident by narratives about their various experiences on the labour market, with relatives and friends and in combination with in part extremely monotonous and stressful courses of the days. With closed responses, one would need extremely targeted questions to capture all that, which is only possible under restriction to a pre-specified particular target group. A qualitative screening will involve target groups and problem areas without the necessity that, in fact, their problems are known before already (otherwise they could not be addressed properly). As another illustration, spontaneous statements about the detrimental effects of lacking sun for many months will hardly be matched by any closed-response type questionnaire.

Based on the comparison between standard rating questions about life satisfaction and the narrated life, there can be no doubt that the seemingly positive results must not at all be interpreted as positive conditions for subjective well-being. In many cases, depressing living conditions have not manifested themselves in critical life evaluation. Press releases as the one discussed, suggesting that for a vast majority life is more or less sunny, are to be questioned strongly, and the underlying methodologies must be revised.

Regional comparisons produced substantial variance between different locations, some as expected (such as differences between "good" and "bad" districts), but others, e.g. about social or political climate, separated villages which looked similar from an external point of view. Open responses turned out to give consistent pictures about infrastructure, leisure time options, townscape or level of corruption. As an immediate consequence, reports are prepared providing extensive feedback for the communities which supported this study.

Nevertheless, there are substantial difficulties to be considered. At first, sending interviewers to people and transcribing and evaluating the interviews is quite cost-intensive, and as experience showed, interviewers should undergo a certain training to keep the value of the gained information on a high level. Additionally, and honestly speaking, the number of interviews will be somewhat limited, whatever the financial effort might realistically be. A specific analysis will clarify the questions how many interviews are typically needed before saturation effects become visible. Therefore, different numbers of respondents will be systematically simulated to find out how many cases could have been skipped without substantial loss of knowledge.

When introducing mixed methods as a standard approach, the question of acceptance will arise, since there is substantial (and at least in part justified) scepticism whether subjective ratings or narratives can be taken as valid and reliable information at all. In fact, categorizing open narratives about life *is* a difficult problem; it is hoped that the 500 interviews will serve as a basis for precise and valid categorization rules. Nevertheless, some rest of subjectivity in interpretation will ever remain, and the following analysis hopefully shed more light on the question how objective an evaluation of interviews can get.

Another points of criticism arise due to the behaviour of the respondents themselves, as the most conspicuous one the willingness or refusal to participate. Among other biases, there are more women in the sample than representative, and in some locations there is obvious self-selection of older persons. Very few participants provide informal care, which might be explained by a lack of time highly engaged care-givers will have. But even if it does not manifest itself in observable demographic characteristics, self-selection will be an issue, and the very low completion rate makes it completely uncontrollable what kind of people with what kind of experience tend to participate in the survey. If a mixed-method screening shall become a standard instrument, then it has to be a public effort with strong marketing and recruitment strategies, otherwise reasonable representativeness of the samples – and therefore validity of conclusions about the population – seems out of reach. However, it is the hope of the authors that exactly that might be the case some day.

However, the probably most critical issue of all is the question whether the really strong emotional experiences, in particular the negative ones, are reported at all. Experience from coaching talks show (verbal communication by Elisabeth Ponocny-Seliger) that even many – if not a majority – of persons who are seeking for some advice start the talk by claiming that everything would be all right. So if not even people in a problem-centred situation admit that they have problems, what may be expected from a scientific interview situation with complete strangers? The observation regarding this study was that at least some persons tell openly about their difficulties, whereas in other cases strong indications can be found that problems are just downplayed (e.g., extensive justifications or rationalizations). In fact, this obstacle is even more fundamental since people are often not conscious about negative emotions or even suppress them. As stated in the report, the interview-

based questionnaire items on rather global emotional life perceptions (e.g., *I feel well around* or *I am disappointed of life*) are chosen quite frequently which contradicts too superficial interpretations of the positive life satisfaction ratings. Future research will evaluate whether these questions will help produce less superficial narratives in the interview situation as well. Nevertheless, though perfect openness can never be expected from respondents, the mixed methods procedure obviously reveals more problems with life than the standard survey approaches. Therefore the authors believe that mixed methods are a road to be taken – knowing that being on the way does not imply being already on target.

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## Appendix A

### **Interview Guidelines**

Thema der Befragung sind die die Lebensbedingungen oder die Umstände, mit denen Sie leben, und inwiefern diese sich auf Ihre Befindlichkeit auswirken. Ich möchte Sie nochmals darauf hinweisen, dass Sie uns nichts erzählen müssen, was Sie nicht möchten. Es gibt auch keine richtigen oder falschen Antworten, wir sind daran interessiert, wie Sie persönlich die Dinge wahrnehmen. Alle Antworten werden selbstverständlich vertraulich behandelt.

Ich möchte Sie bitten, mir zu erzählen, wie Ihr Leben verlaufen ist. Am besten beginnen Sie, mit ihrer Kindheit, und erzählen dann nach und nach, was sich so zugetragen hat, bis heute. Sie können sich dafür ruhig Zeit nehmen, wobei ich Sie bitten würde, mir die guten und schlechten Zeiten in Ihrem Leben zu beschreiben. [describe good and bad times in life]

- 1. Beeinflussen Sie gewisse Erlebnisse noch immer? [still influenced by life events]
- 2. Bitte erzählen Sie mir, was Ihnen besonders wichtig in Ihrem Leben in Bezug auf Ihr Wohlbefinden ist. [important for well-being?
  - Woraus beziehen Sie Kraft? [energy]
- 3. Worauf legen Sie in Ihrem Leben keinen Wert mehr, was Ihnen früher wichtig war? Worauf legen Sie jetzt mehr wert, was Ihnen früher unwichtig war? [things less or more important than before?]
- 4. Gibt es Gefühle oder Gedanken, die Sie schon Ihr Leben lang begleiten, bzw. immer wieder kommen? Können Sie diese bitte beschreiben? [thoughts accompanying life]
- 5. Was beeinflusst derzeit Ihre Stimmung? [current influences on mood]
  - Gibt es dafür einen speziellen Auslöser, oder entspricht dies Ihrer Grundstimmung? [certain incidence?]
- 6. Welche Ziele haben Sie schon erreicht und welche Wünsche sind noch unerfüllt? Was tun Sie um diese zu erreichen? [targets reached and unfulfilled wishes; actions for gaining them]
- 7. Haben Sie das Gefühl, dass man Ihnen ausreichend Anerkennung entgegenbringt? [sufficient acknowledgment?]
- 8. Was gibt Ihrem Leben einen Sinn? Was empfinden Sie als den Sinn Ihres Lebens? [meaning in life]
- 9. Wie fühlen Sie sich wenn Sie sich mit anderen Personen vergleichen? [feelings when comparing with other people]
  - Mit wem vergleichen Sie sich und warum? [compare with whom, and why?]
- 10. Mit welchen Belastungen und Herausforderungen werden Sie konfrontiert? Wie gehen Sie mit diesen um? [which burdens and challenges? how to deal with?]
- 11. Gibt es Einschränkungen in Ihrem Leben? [restrictions in life?]
- 12. Übernehmen Sie Verantwortung für andere Menschen? In welcher Form und wie wirkt sich das auf Sie aus? [take responsibility for other people? effect of that?]
- 13. Könnten Sie mir erzählen, inwieweit für Sie Zufriedenheit mit Geld und Besitz zusammenhängt? [relationship between satisfaction and money and possession]

- 14. Welchen Ratschlag würden Sie Ihrem Kind bzw. einem guten Freund geben wie und wo das Glück zu finden ist? [recommendations for a child or good friend where and how to find happiness?]
- 15. Inwiefern hängt Ihr Wohlbefinden mit dem Ort zusammen in dem Sie leben? [influence of location on well-being?]
- 16. Was müsste sich in Ihrer Umgebung oder Ihren Lebensbedingungen ändern, um sich wohler zu fühlen? [which change in environment or living condition would improve life?]
  - Wie könnte die Gemeinde und Politiker in Österreich darauf Einfluss nehmen? [options for community and politicians?]
- 17. Was können Sie Sinnvolles dazu beitragen um die Umgebung/Region zu verbessern? [options for improving the environment for yourself?]

### **Schlussfrage**

18. Gibt es Dinge, die Ihr Wohlbefinden beeinflussen, die noch nicht angesprochen wurden? [any well-being-relevant issues not addressed by now?]

# Appendix B

Sociodemographic Sheet for Interviews

Allgemeine Informationen zu Ihrer Person:							
Geschlecht: männlich weiblich	Alter:	Jahre					
Wie zufrieden sind Sie alles in allem mit Ihrem Leb	oen?			sehr unzufrieden			
Wie glücklich sind Sie alles in allem mit Ihrem Lebe	en? ] 🔲			sehr unglücklich			
Nationalität: Österreich	🔲 sonstig	e:					
Hinweis: Bitte nur Personen mit anderer National	ität beziehungsv	veise Migra	tionshinter	grund:			
Wie lange wohnen Sie schon in Österreich? Jahre Welche Sprache wird bei Ihnen Zuhause gesprochen?							
Familienstand: ledig Lebensgemeinschaft sonstiges:	🔲 verheir	atet 🔲	geschieder	n 🔲 verwitwet			
Wie viele Personen wohnen in Ihrem Haushalt? Haben Sie (leibliche oder adoptierte) Kinder? Haben Sie Pflegekinder? Leben Kinder in Ihrem Haushalt?	🗌 nein 🗌	ja ja		Anzahl und Alter Anzahl und Alter Anzahl und Alter			
Abgeschlossene Ausbildungen: keine Pflichtschule Lehrabschluss Berufsbildende Schule (HAK, HBLA, HTL, etc.) mittlere Meisterprüfung/WerkmeisterIn sonstige Ausbildung(en):				erechtigungsprüfung			
Welche Fachrichtung(en) haben Ihre abgeschlossenen Ausbildung(en)?							
Religionsbekenntnis: ohne Bekenntnis möchte ich nicht angeben	🔄 🔲 ausübe	nd					
Welchen Beruf üben Sie aus? Berufliche Situation: unselbständig selbständig teils selbständig/teils unselbständig SchülerIn StudentIn sonstiges:		iert niert		ungsaufgaben			
Einkommen: € (monatlich/Net	to) 🔲 möchte	ich nicht ar	ngeben				
Bitte geben Sie an, welche Besitztümer Sie besitze AutoEigentumswohnung sonstiges:		hl: ) Grundstüd	k	Haus			