



EuReporting

**Explaining Quality of Life -
The Controversy between
Objective and Subjective Variables**

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Explaining Quality of Life.

The Controversy between Objective and Subjective Variables.

The first part of my speech will focus on classifying the various indicators that have also been compiled in the EURO-Module. Such a classification serves to describe different types of research, along with their characteristic questions, advantages and disadvantages, on the basis of different possible linkages.

In the second part of this talk, I would like to address specifically Austrian research endeavors. The examples drawn upon are intended to be paradigmatic of the research types outlined in my initial arguments and to point out to various problems. I shall report mostly from our own research, as I am most familiar with its background and problems.

Let us first structure the variables applied in most studies, including the EURO-Module, along a continuum ranging from "more objective" to "more subjective" (Fig. 1). Such a structure allows to focus on roughly four groups of variables: these groups are simply defined as Social Structure (Group A), Resources and Behavior (Group B), Evaluation of Living Conditions (Group C), and Subjective Quality of Life (Group D).

The core elements can be identified in Group A - in terms of standard demography - whereas the classic stratificational variables of education, occupational prestige and income already show a large proportion of evaluative significance.

Differences should actually be made, in describing living conditions (Group B), between such conditions as housing conditions, which can also be identified as resources, and more closely activity-related variables, such as the frequency of meeting friends and relatives, the extent of attending to one's children, etc.

Fig. 1: Types of indicators

| A | B | C | D |
|--|--|---|--|
| SOCIAL STRUCTURE | RESOURCES & BEHAVIOR (Living conditions) | EVALUATIONS of living conditions & behavior | QUALITY OF LIFE (subjective) |
| <p data-bbox="414 707 672 778">Socio-demographic variables</p> <p data-bbox="398 834 687 1026">Age Sex Occupation Household composition Marriage status</p> <p data-bbox="454 1074 631 1153"><i>Social Stratification</i></p> | <p data-bbox="795 707 1034 778">Standard of living</p> <p data-bbox="808 754 1021 778">Social relations</p> <p data-bbox="813 834 1016 866"><u>Domains of Life:</u></p> <p data-bbox="853 874 976 1066">Housing Health Education Work Income</p> <p data-bbox="781 1074 1048 1106">Personal Environment</p> <p data-bbox="757 1161 1072 1281"><i>Characteristics of social/economic/political system</i></p> | <p data-bbox="1205 707 1489 738">Domain satisfactions</p> <p data-bbox="1189 754 1505 826">Importance of life domains Perceived need fulfillment</p> <p data-bbox="1216 874 1480 1026">Comparison with the past (income) or with the wants (standard of living)</p> <p data-bbox="1144 1074 1554 1193"><i>Evaluation of quality of society social/economic/political dimensions</i></p> <p data-bbox="1167 1201 1532 1281"><i>Comparison with living conditions in other countries</i></p> | <p data-bbox="1659 707 1818 826">Well-Being Satisfaction Happiness</p> <p data-bbox="1603 874 1874 1026">Pos./Neg. emotions Hopes, Fears, Moods Anomie, Anxiety Mental Health</p> |

Comparatively few studies have dealt with the ways certain resources are actually put to use. Different "healthy" living situations have been observed to bring about quite divergent processes of adaptation - a problem encountered by preventive medicine, amongst others.

Likewise, the concepts of "Having", "Loving" and, in part, "Being" (according to ALLARDT) would be included in Group B.

Groups C and D, in which evaluations and cognitions are clearly predominant, are set apart by their different degrees of "reference to reality". In Group C, evaluations and satisfaction still unambiguously relate to concrete issues, and Group D contains overall classifications that chiefly refer to "life as a whole". The so-called "subjectivists" - deriving from the US research tradition, in particular - regard these variables as important, since people strive for psychic well-being in the end. Ernst GEHMACHER, an Austrian researcher of happiness, once remarked that "The last benefit always is a psychic benefit".

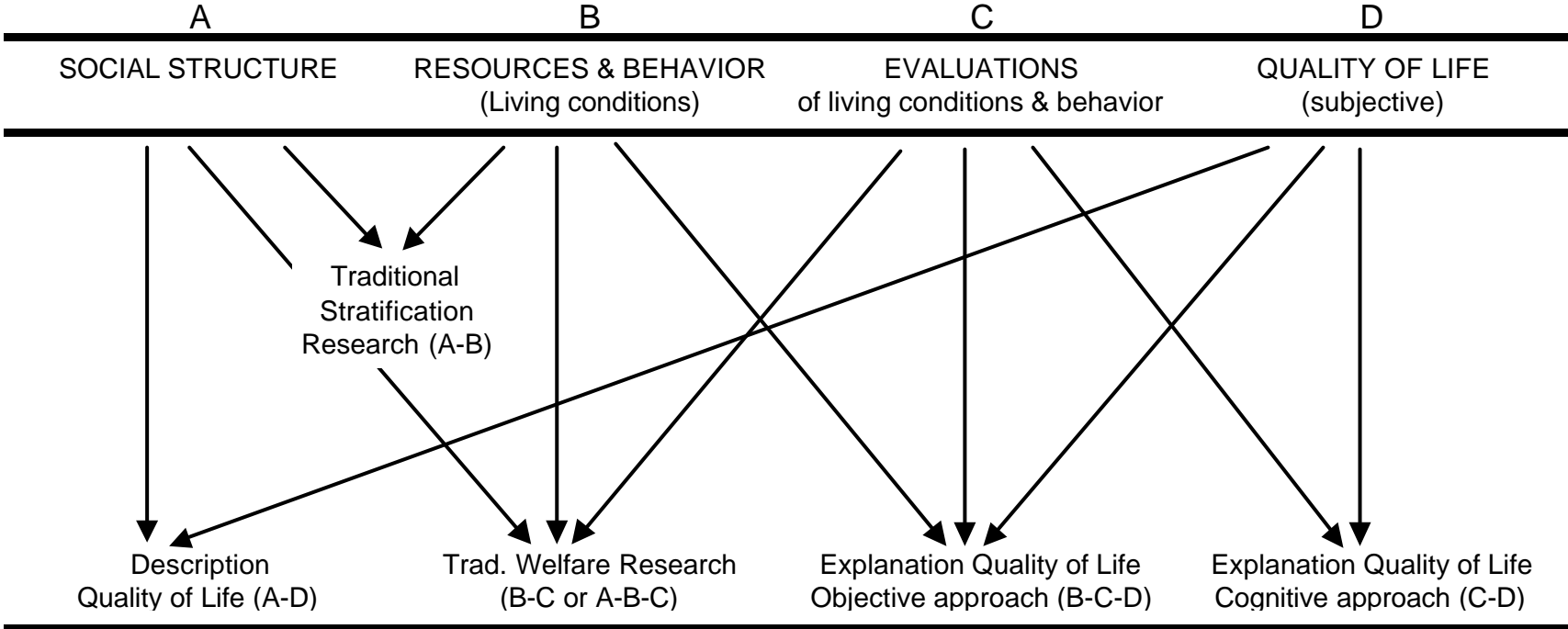
VEENHOVEN's paper on satisfaction research (1995, p. 33) described satisfaction "as one symptom of a good 'fit' between human nature and habitat".

Many findings indicate that measures of satisfaction generally correlate with the objective quality of the environment and thus should not be omitted from analysis.

At any rate, the Scandinavian tradition (ERIKSON, UUSITALO, partially ALLARDT) has set great store by measuring material provisions. The objective approach is indispensable to measure the liminal values of under-provision, and thus political relevance. Convergence between these two aspects has made it possible to address new, more complex research issues.

The simplest research questions (Fig. 2) are descriptions at all four levels (both objective and subjective).

Fig. 2: Research field



Yet these descriptions acquire scientific prestige and validity only once description as such has been continued at the level of international comparison (that is, along the type of statement: "There is more X in country A than in country B"). This approach remains unsatisfactory, however, as the "explanations" of differences merely represent "interpretations" of different causal conditions in the countries involved. We must therefore rely on investigating causal hypotheses.

Different research questions and strategies can be distinguished according to what concepts are brought to bear on one another.

The consequences of social positioning, in particular, have been described in the framework of traditional research in social stratification (Type A-B). Type B-C research endeavors include those that deal with the various aspects of living and occupation and that survey respective extents of satisfaction in detail: for instance, research in occupational satisfaction or in individual aspects of family life. More recent welfare research (Type A-B-C) is characterized by the convergence of multiple areas of life, by more pronounced emphasis on cognitive factors (such as needs, demands, satisfaction), and by the linkage with social structure.

Subjective quality of life (Variable Group D) can thus be explained by three variable groups (A, B, C) alone or in combination: In general, little variance (5-12%) can be explained in social structural descriptions of subjective quality of life. Very clear differences can be shown, however, by leaving aside the linear approach and describing various groups according to simple (but relevant) combinations of features - this shall be demonstrated with examples taken from our own research.

It proves much more difficult to trace back overall measures (happiness / satisfaction, emotions) to conditions linked together in Group B (resources and behavior) than to proceed from the domain evaluations or comparisons pooled in Group C. Let us call the latter approach the "cognitive approach". This includes the "explanation" of total quality of life by means of domain satisfactions or various comparisons, such as with "the past" or with what "significant others" (neighbors, friends, colleagues) have or do. Likewise, comparisons can be drawn upon between claims and/or supposed needs and one's own property to explain total quality of life. As it seems, the height of "explanatory" correlations, beta- and/or path coefficients is often a mere function of "operational proximity" between the independent and dependent variables. Under certain conditions, a high degree of explanation of variance can thus be generated. The expressiveness of such results, however, remains deficient due to the tautology of statements.

In comparison, explaining subjective quality of life on the basis of variables from Group B - that is, living conditions, resources and different patterns of behavior - seems much more valuable to me, since they would rather facilitate social political conclusions.

It is becoming increasingly difficult, however, to capture unambiguously important (objective) issues that highly correlate in technical terms - or prove especially relevant for a high quality of life. The reason is that individual designs of living are continuously differentiating in modern industrial society. This fact is also the foundation for the development of so-called lifestyle research which preferably investigates horizontal rather than vertical differentiation (cf. HRADIL 1999, SCHULZE 1990).

These different approaches are "accompanied" by different theories. Cognitive theories clearly prevail in the field of subjective evaluations. Conversely, classic reinforcement-punishment and rational-choice approaches are applied in more objective areas.

MICHALOS (1991) postulates that satisfaction and happiness represent functions of seven perceived discrepancies, whereas every comparison stands for a single theory.

The comparison between what one has and wants represents the aspiration theory, the comparison between what one has and one's neighbors have represents the social comparison theory, and the comparison between what one has and deserves represents the equity theory.

There is no doubt that cognitive approaches are essential to solve what Wolfgang ZAPF (1984) has called the satisfaction paradox or dissatisfaction dilemma.

Many of the controversies unresolved as yet, such as the top-down / bottom-up debate, have a lot to do with the operational proximity among the indicators in use. This problem only emerges when attempts are made to explain global satisfaction with domain satisfactions. In such cases, of course, mutual interaction is bound to set in.

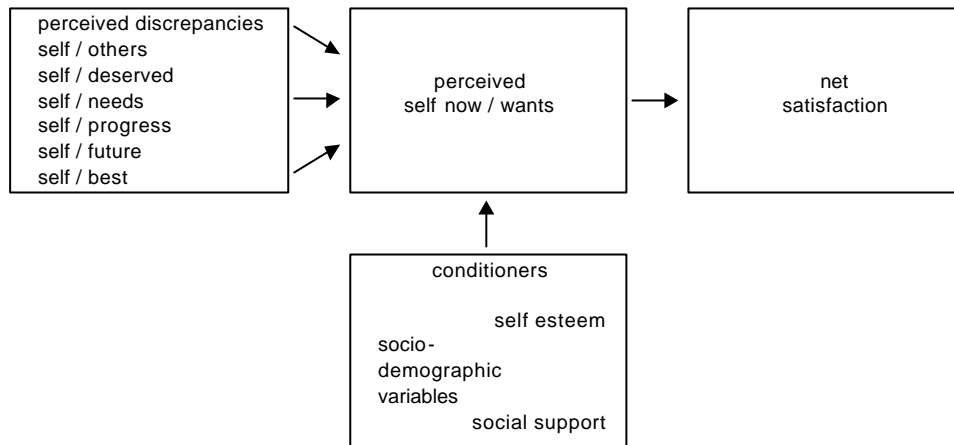
Such difficulties do not arise, in any case, when connections are examined between Groups B and D.

I would now like to address the second section of my talk.

Let us begin with a comparison of theories or, perhaps more precisely, concepts within a students survey carried out in collaboration with Alex MICHALOS. This should serve to show what I mean by operational proximity with regard to indicators.

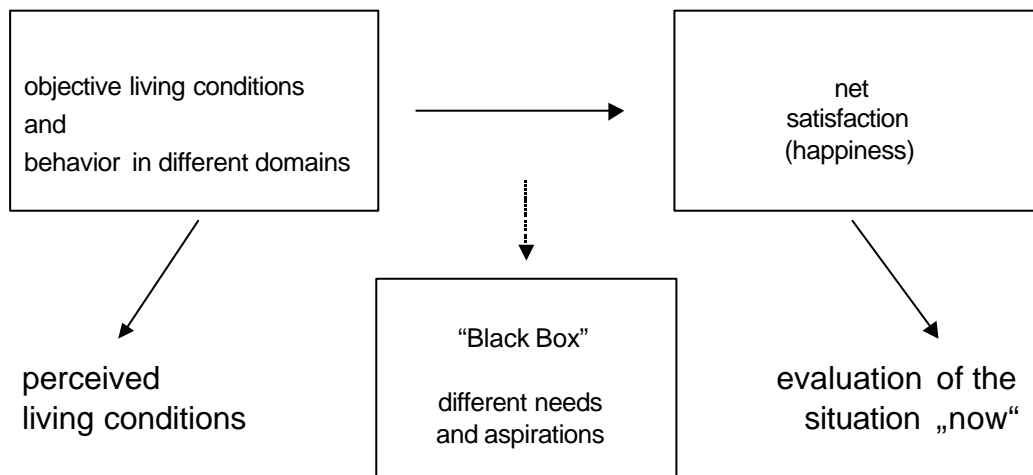
Dependent variables are domain satisfactions (cf. SCHULZ 1995). According to multiple discrepancy theory (Fig. 3), a number of comparisons come to bear on how large discrepancy is estimated to be between actual situations and what one would like to have (self/wants comparison). The latter variable then serves to explain domain satisfaction. In my own classification, both dependent and independent variables derive from Group C and therefore are very similar in terms of operationalization. For reasons of contrast, I have attempted to define "resources" for different areas of life (Fig. 4) with which to "explain" domain satisfactions.

Fig. 3: Perceptual Core of MDT (Michalos, 1991)



Strictly spoken, MICHALOS' approach is not purely cognitive, as it includes so-called "conditioners", such as self-esteem and social support - variables that belong to Group B.

Fig. 4: Resource Theory



On the other hand, the so-called "objective living conditions" in operationalization are merely perceived living conditions. Nevertheless, differences are considerable along the objective-subjective dimension.

As expected, the comparisons do explain much variance (a total of 80%) in terms of partnership satisfaction (Fig. 5).

But is it not more adequate to develop rather simple models with variables from Group B of resources - objective living conditions - even though this may in fact explain less variance?

In addition, certain variables may possibly be exclusively expressive for certain groups of the population. In our model (Fig. 6), the presence of a partner (thus also implying sex among students) and intensity of communication together explain 46% of variance in partnership satisfaction.

Fig. 5: Explaining satisfaction with living partner (SWL) by multiple discrepancies. Second column: Explaining self/wants comparison variable (SW) by multiple discrepancies.

| Independent variables: | Dependent variables | |
|------------------------|---------------------|--------|
| | SWL | SW |
| Self-other | 0.18 | 0.43 |
| Self-deserved | | |
| Self-needs | | 0.21 |
| Self-progress | | 0.26 |
| Self-future | | |
| Self-best | | 0.10 |
| Self-wants | 0.74 | (n.i.) |
| r^2 | 0.79 | 0.80 |

Fig. 6: Explaining satisfaction with living partner (SWL) by selected dichotomous variables

| Independent variables: | Dependent variable SWL |
|---|------------------------|
| Existence of "a steady" partner (no) | -0.38 |
| Frequency of sexual intercourse (less than once a week) | - |
| Frequency of contact (only weekend or less) | - |
| Intensity of communication (many topics/often) ^a | 0.36 |
| r^2 | 0.46 |

^a Dichotomized scale: speaking about partner, hobbies and interests, personal problems, parents, finances, political topics, faithfulness and jealousy (every topic: long, short, not at all). Cronbach-Alpha = 0.48.

Beta-Values (Multiple Regression)

The results are quite similar with regard to satisfaction with one's education (Fig. 7, 8). In turn, the MDT variables explain a considerable amount of variance, while the more objective variables of success and perceived usability of studying explain little. Only the variable of study conditions

evaluation explains slightly more. Strictly spoken, however, it should be omitted on account of its potential tautology.

Fig. 7: Explaining satisfaction with education (SWE) by multiple discrepancies.
Second column: Explaining self/wants comparison by multiple discrepancies.

| Independent variables: | Dependent variables | |
|------------------------|---------------------|--------|
| | SWE | SW |
| Self-other | | 0.19 |
| Self-deserved | | 0.15 |
| Self-needs | | 0.40 |
| Self-progress | 0.14 | |
| Self-future | | |
| Self-best | | 0.18 |
| Self-wants | 0.63 | (n.i.) |
| r^2 | 0.59 | 0.50 |

(n.i.) = not included in equation

Fig. 8: Explaining satisfaction with education (SWE) by selected variables

| Independent variables: | Dependent variable SWE |
|---|---------------------------|
| Success (negative) ^a | -0.14 |
| Intensity of work (high) ^b | n.s. |
| Usability of study (not useful) ^c | -0.22 |
| Studying conditions (inadequate) ^d | -0.35 |
| r^2 | 0.27 |

^a How are you making progress in your studies? (very good – very behind)

^b How many hours do you study per week? (less than 10 hours – more than 40 hours)

^c Do you think that you may use your knowledge?

^d How much do you like studying at the university?

Beta-Values (Multiple Regression)

Type C-D shall also be demonstrated on the basis of the same material - the students survey. Global measures (overall happiness and overall satisfaction) are explained with domain satisfactions.

Approximately one third of variance is explained by the domain satisfactions regarding health, friendship, life partners and education (Fig. 9).

Fig. 9: Explaining global satisfaction and global happiness by domain satisfaction

| Independent variables: | Dependent variables | |
|------------------------|---------------------|------------------|
| | Global satisfaction | Global happiness |
| Health | 0.22 | 0.23 |
| Financial situation | | |
| Family relations | | |
| Paid employment | | |
| Friendship | 0.26 | 0.28 |
| Housing | | |
| Life partner | 0.24 | 0.35 |
| Recreation activity | | |
| Religion | | |
| Self-esteem | | |
| Transportation | | |
| Education | 0.20 | 0.11 |
| r^2 | 0.32 | 0.38 |

Beta-Values (Multiple Regression) n = 343

Comparing this model with a model of resource variables (Type B-D), indicators are shown to emerge from the same domains as explanatory variables, yet they explain less variance in total (18% for global satisfaction, 25% for happiness) (Fig. 10).

For students, the following factors are chiefly decisive in terms of quality of life: studying itself (progress of studying and perceived usability of studying), qualities of relationship with one's partner, integration in a group, and freedom of vegetative symptoms.

Fig. 10: Explaining global satisfaction and global happiness by selected variables of four domains

| Independent variables: | Dependent variables | |
|--|----------------------------|-------------------------|
| | Global satisfaction (high) | Global happiness (high) |
| Vegetative symptoms (often) | -0.18 | -0.20 |
| Stomach problems (not) | | |
| Intimate friends (existing) | | |
| Working colleague (existing) | | |
| Meeting a group (regularly) | | 0.11 |
| Existence of a steady partner (no) | | |
| Frequency of sexual intercourse (frequent) | | 0.11 |
| Frequency of contact (seldom) | | -0.19 |
| Intensity of communication (often) | 0.14 | 0.15 |
| Progress of studying (negative) | -0.13 | -0.19 |
| Intensity of work (high) | | 0.12 |
| Usability of study (not useful) | -0.17 | -0.20 |
| Conditions of studying (terrible) | -0.15 | |
| r^2 | 0.18 | 0.25 |

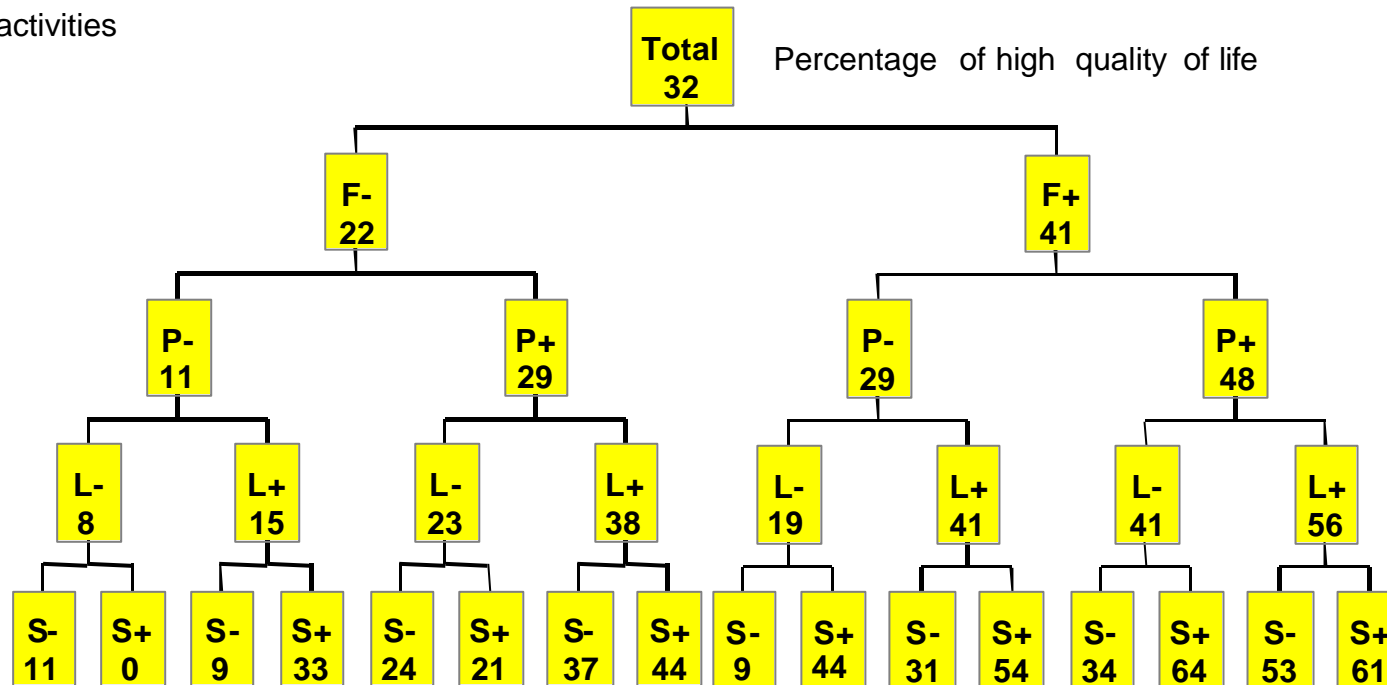
Beta-Values (Multiple Regression) n = 343

We attempted to generate different models of students' quality of life (SCHULZ and NORDEN 1991). The model was intended to comprise no more than four variables in order to illustrate different conditions of students' quality of life. For this reason, we followed the Sunquist-Morgan approach (TREE Analysis, cf. Fig. 11). The regression equation explains 22% of variance, the four factors being satisfaction/success with studying, present partner, finances, and sporting activity. Looking at the groups defined by the variables, it is interesting to observe rather large differences in the quality of life, ranging from 0% to over 60%. It is also interesting to see what compensatory function is attached to students' sporting activities: very well or very poorly equipped in terms of studying success, partnership and finances, sports seem to contribute little to nothing to the quality of life. Conversely, sporting activities appear quite compensatory in cases of individual deficits.

Fig. 11: Student quality of life – a model by four dichotomous variables

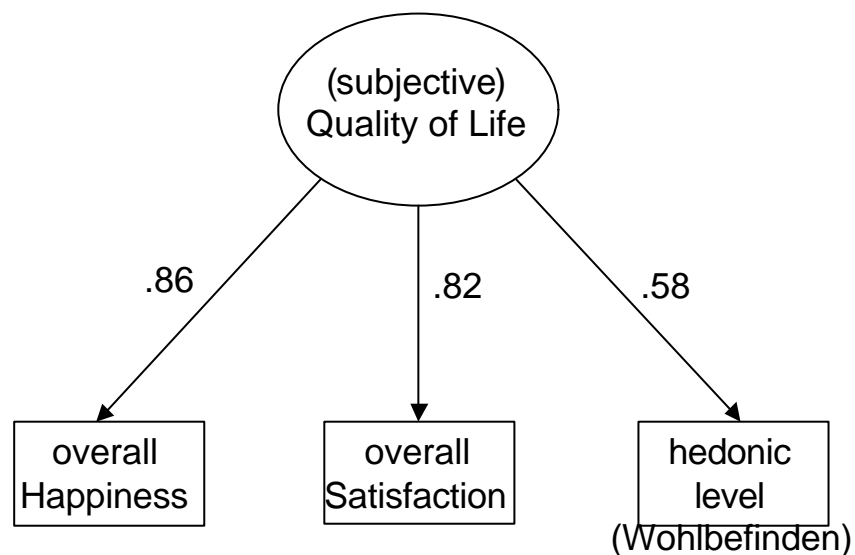
A model by four dichotomous variables (n=333)

- F ... Satisfaction /Success with studies
- P ... Existing partner
- L ... Financial situation
- S ... Sport activities



Now, I believe I have been somewhat jumping ahead: the measure of subjective quality of life used in this students survey, and in several representative surveys as well, is a sum scale (Likert Type, Cronbach Alpha = .79, 5-step answer scale) of overall satisfaction, overall happiness and the hedonic level of affect (well-being). A secondary analysis with LISREL (KIENBERGER 1997) indicates that the formal reliability of the variable (hedonic level of affect) does not come near that of the other variables, turning out to be rather low with 0.33. However, the model of measurement is altogether satisfactory, and the scale was thus maintained. This scale was applied again in another representative survey, and the model exactly reproduced, so that the instrument of measurement can be regarded as highly stable (Fig. 12).

Fig. 12: Measurement model „quality of life“



LISREL-Model (Cronbach Alpha = .79)

The percentage of total points can be grouped in low LQ (24%), medium (49%) and higher-level LQ (27%).

Let us now turn to the quality of life in the Austrian population according to the 1984 survey (SCHULZ et al. 1985). Considerable intergroup differences arise from doing without the linear approach, by breaking the population down into groups along sociodemographic features, and finally by structuring those groups according to their extent of low quality-of-life levels (Fig. 13). Such an approach would be classified as AD in my typology. This attempt only identifies subsamples of more than 20 individuals (roughly 1.2% of the total sample). 25 groups thus describe 68% of the total population.

Without exception, the groups showing low quality of life comprised low-income female individuals living in childless households. They are poorly educated women who are still employed (and presumably show a poor working situation) as well as those who are no longer employed, showing a low income and no life companion. This represents a cumulation of problems frequently described in social gerontology (cf. ROSENMAYR and ROSENMAYR 1978: 236, 251ff.).

The leaders in this line are employed, better educated and higher-income men who have a life companion but no children.

One of my collaborators carried out a secondary analysis on the basis of the data material from the IFES cultural study (the 1989 representative survey) in which questions were asked as to the three quality-of-life indicators. The analysis was performed with the same method and generated virtually identical results (KIENBERGER 1997). The model of measurement applied in the quality of life scale has been corroborated, and there are hardly any differences as to content: The worst-off persons are women aged 60 plus who have no life companion nor children, who are no (longer) employed, who only hold a certificate of statutory education, and are classified in the lower income category.

The subjective measures are thus suitable to illustrate the situation of population groups and are obviously valid. Indeed, we may perfectly refer to known-groups validity.

Fig. 13: Groups defined by socio-demographic, dichotomous categories ranked by percentage of low quality of life (minimum group size: 20)

| Group | Age | Sex | Partner | Children | Educa- tion | Occupation | Income | % | % QL low | |
|-------|-----|-----|---------|----------|----------------|------------|--------|-----|-------------|--------------------------|
| 1 | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 3,7 | 9 | Age |
| 2 | 1 | 2 | 1 | 0 | 2 | 0 | 1 | 2,1 | 10 | 1 -60 years |
| 3 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1,7 | 10 | 2 60+ years |
| 4 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 7,6 | 12 | Sex |
| 5 | 2 | 1 | 1 | 0 | 2 | 0 | 2 | 2,3 | 12 | 1 male |
| 6 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1,8 | 12 | 2 female |
| 7 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 3,9 | 13 | Partner |
| 8 | 1 | 2 | 1 | 1 | 2 | 0 | 1 | 5,1 | 14 | 1 yes |
| 9 | 1 | 2 | 1 | 0 | 2 | 1 | 2 | 1,2 | 14 | 0 no |
| 10 | 2 | 1 | 1 | 0 | 2 | 0 | 1 | 2,5 | 18 | Children (<14) |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1,5 | 19 | 1 yes |
| 12 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2,6 | 20 | 0 no |
| 13 | 1 | 2 | 1 | 0 | 1 | 0 | 1 | 2,7 | 22 | Education |
| 14 | 1 | 2 | 1 | 0 | 2 | 1 | 1 | 2,2 | 23 | 1 primary |
| 15 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 1,7 | 27 | 2 above primary |
| 16 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 3,7 | 27 | Occupation |
| 17 | 2 | 2 | 1 | 0 | 2 | 0 | 1 | 1,8 | 30 | 1 yes |
| 18 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 2,1 | 32 | 0 no |
| 19 | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 1,7 | 32 | Income |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1,7 | 32 | 1 -10.000 ATS |
| 21 | 1 | 2 | 1 | 0 | 1 | 1 | 1 | 2,1 | 35 | 2 10.000+ ATS |
| 22 | 2 | 2 | 1 | 0 | 1 | 0 | 1 | 4,4 | 36 | % |
| 23 | 2 | 2 | 0 | 0 | 1 | 0 | 1 | 5,6 | 50 | percent of sample |
| 24 | 2 | 2 | 0 | 0 | 2 | 0 | 1 | 2,1 | 50 | |

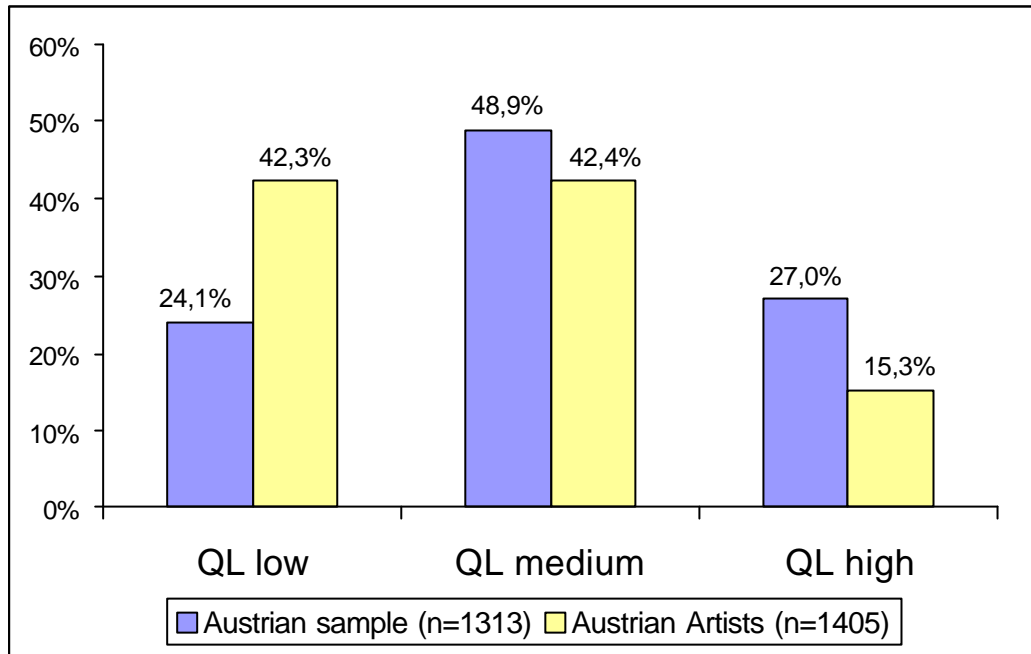
But what conclusions can be drawn from this? Provided that short, easily applicable scales of subjective measures are available, and their distribution within the basic totality is known, it would also seem useful to apply such scales to studies that do not chiefly concentrate on living standards.

For example, I have compared students with a subsample of young, employed adults (age 18-30) with respect to quality of life. The cliché of carefree students, "living on without hardship, doing some exams from time to time, without the slightest pressure to achieve", was impressively refuted. In this connection, the psychosocial moratorium (ERIKSON 1966) - that is, longer-term education and freedom of professional labor - has a detrimental impact on many students. More than one fourth of the students show a low level of quality of life - as against 2% of the young, employed adults. A recent investigation by KREUTZ (1998) bears out the large burden and cumulation of problems among students.

I would like to report yet another interesting application of the quality-of-life scale in the framework of a comprehensive study on the social and economic situation of visual artists in Austria (SCHULZ, HAMETNER, WROBLESKI 1997). 1400 full-time professionals in the fine arts participated in this study. Visual artists' poor material situation is rather well known and has barely changed in the past ten years. Assumably, the possibility of artistic self-realization could come to bear on happiness and satisfaction with life - on subjective quality of life. Yet this has not at all been the case. Roughly 42% of the artists show a low level of quality of life (as compared with a mere 24% of the total population). While 27% of the population show a relatively high score in this respect, only 15% of the artists show a high quality-of-life level (Fig. 14).

A CHAID analysis demonstrates clearly that income is the crucial basis upon which subjective quality of life is determined. In addition, the presence of a life companion (contributing to the household budget) is decisive in cases of low-income subjects. Very many visual artists (40%) see artistic success as a decisive mark of their artistic profession. This may account for the strong impact exerted by one's income upon subjective situations.

Fig. 14: Quality of life of Austrian population in comparison with Austrian artists



In the following section, I would like to refer to several results of a secondary analysis from the quality-of-life study. These results were meant to contribute to the debate on how precisely overall happiness / overall satisfaction - subjective quality of life - are constituted. Are the influences direct, deriving from salient factors of the areas of life, or do the domain satisfactions subjectively represent an important "provisional appraisal"?

VEENHOVEN (1995: 28) discusses the appraisal strategy which is used to assess both domain satisfactions and overall satisfactions.

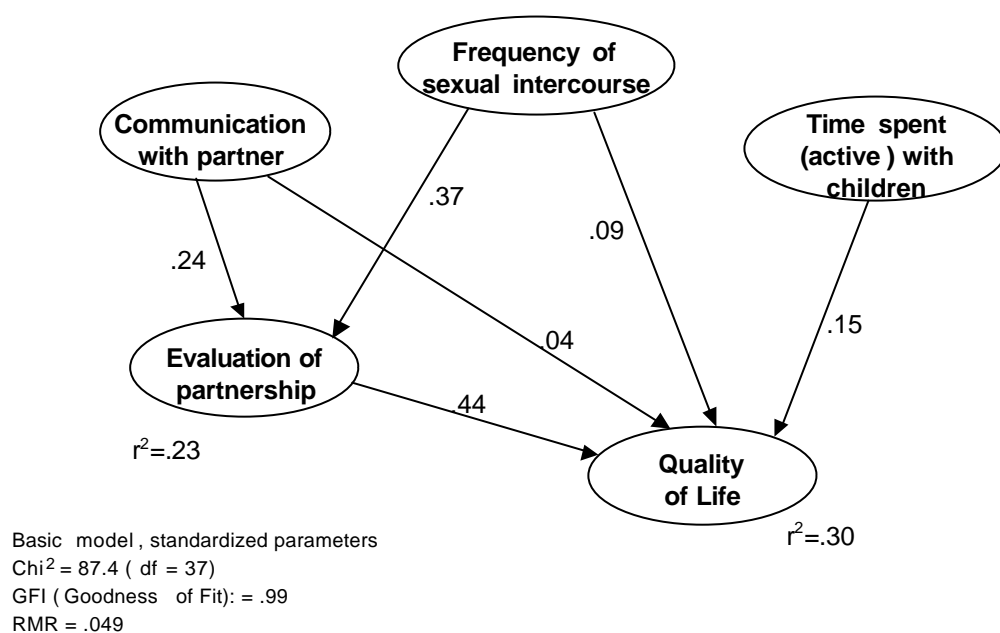
Simply spoken, our data cannot produce a final contribution to this controversial issue, as we still followed a bottom-up conception in 1984. According to this conception, satisfaction with life is classified on the basis of domains (that is, satisfaction with life aspects), and we thus developed our questions according to this conception. However, our secondary analyses attempted to test a bottom-up model as against a top-down model. KIENBERGER (1997) performed this test in line with the procedure elaborated in SCHERPENZEEL and SARIS. The bottom-up model finally showed the larger extent of adaptation. Therefore, the following models defined domain evaluations (material equipment, professional situation, partnership) as independent variables, and quality of life as a dependent variable (these areas of life explain 44% of overall quality-of-life variance in the model).

Finally, I would like to present to you three models in which relationships of "objective" variables (Type B), domain classifications (Type C) and overall measures - quality of life according to our

definition (Type D) - are brought into connection. The first two models, again, are secondary analyses drawn from the quality-of-life study (SCHULZ et al. 1985, SCHULZ and KIENBERGER 1999), the third study comes from an inquiry in Vienna's urban districts.

In the assumptions articulated in our models, direct effects come to bear from the relatively "objective" variables of communication, intercourse frequency and time actively spent with one's children upon evaluations of partnership and quality of life (Fig. 15).

Fig. 15: Family and quality of life



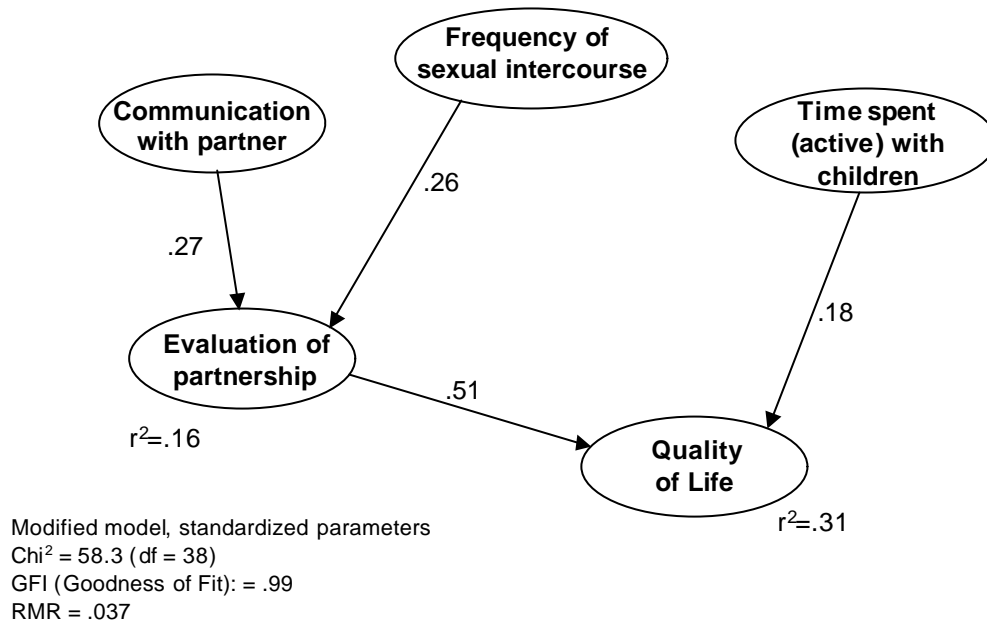
The concept of communication comprises three indicators: the classification of frequency of talks with one's life companion in the respectively past week, regarding (a) personal problems, (b) living together in a family and/or partnership, and (c) financial topics and acquisitions.

Attendance to one's children is represented by an index that refers to the time the resp. interviewee actively spent with the kids on a weekday and on a Sunday.

The concept of partnership evaluation is measured from the variables of conversation quality, the evaluation of sexual intercourse, and the overall evaluation of partnership.

The model only showed fair adaptation once the direct paths to quality of life were omitted (Fig. 16).

Fig. 16: Family and quality of life



As to contents, the model refutes purely objectivistic notions according to which approximately objectively measurable and/or behavior-relevant variables - such as sufficiently available communication, frequent intercourse and the quantitative extent of attendance to one's children - exert a strong and direct influence upon subjective quality of life - happiness, satisfaction with life as a whole, and well-being.

Rather, the model seems to validate a cognitivistic position according to which the subjective evaluation of one's living domain (life companion) has an impact upon subjective quality of life.

Purely cognitive interpretations of such a model, however, must be qualified in that significant, indirect effects emerge upon the total of quality of life, deriving from the "objective" factors of concomitant subjective evaluations.

Some degree of surprise comes from the results of a model of social contact and quality of life. The model (Fig. 17) comprises the four latent variables

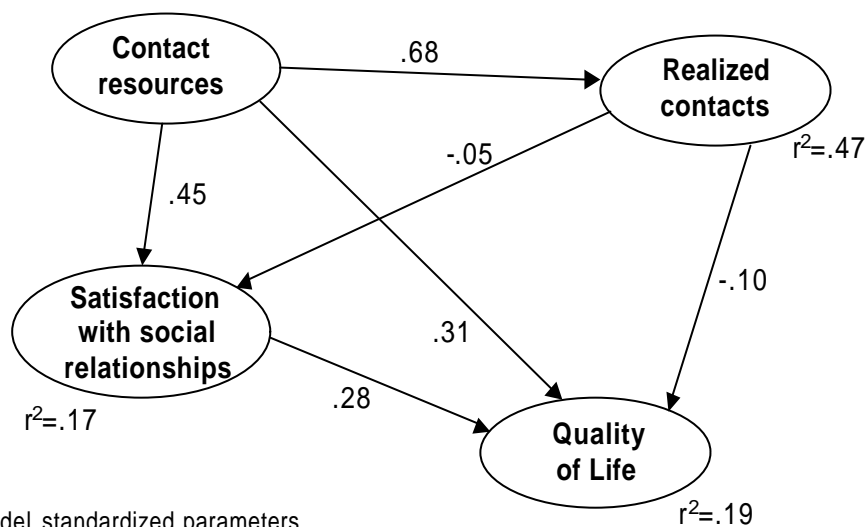
contact resources ("how many close friends do you have ..."),
 realized contacts ("how often do you meet ..."),
 satisfaction with social relationships, and
 the subjective quality of life.

The effectual connections are postulated with arrows.

The model is modified step by step. Firstly, the path from "realized contacts" to "satisfaction with social relationships" is set to zero. Then, the (non-significant) path from "realized contacts" to "quality of life" is set to zero. Since the actual contacts have no bearing as explanatory units, the construction is finally omitted from the model (Fig. 18).

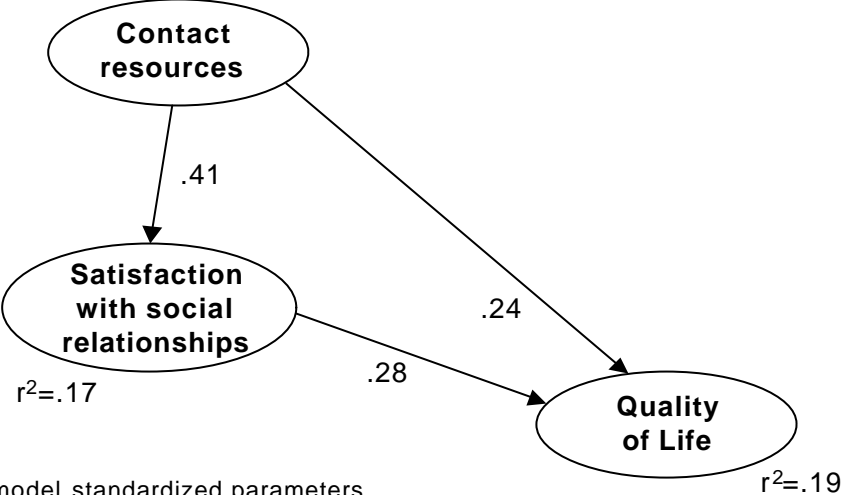
As to contents, this implies that contact resources - that is, available, accessible contact persons - are more important for satisfaction with social relationships and quality of life than the frequency of social contacts.

Fig. 17: Social contact and quality of life



Basic model, standardized parameters
 Chi² = 137.5 (df = 22)
 GFI (Goodness of Fit): = .99
 RMR = .044

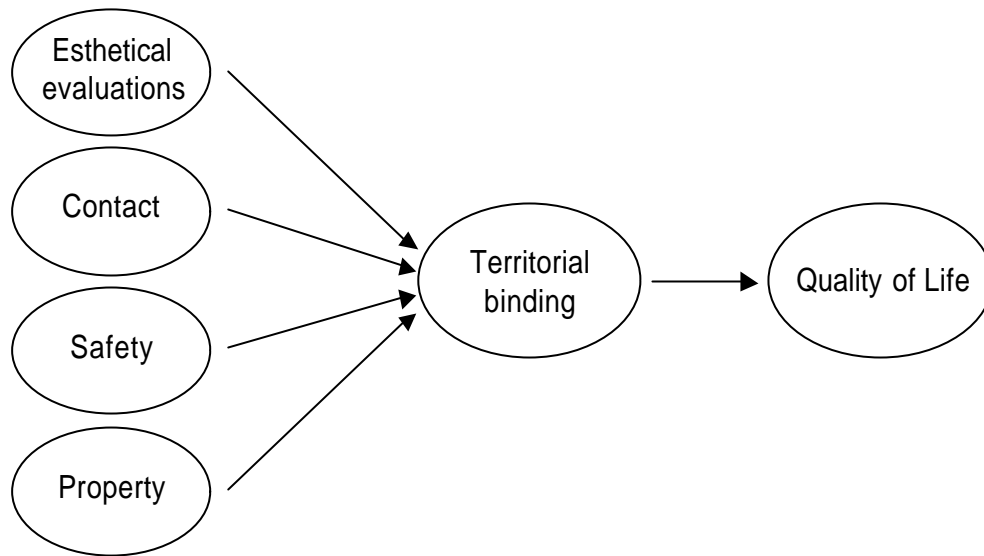
Fig. 18: Social contact and quality of life



Modified model, standardized parameters
Chi² = 67.4 (df = 12)
GFI (Goodness of Fit): = 1.00
RMR = .037

Finally, please allow me to present a model from urban research (SCHULZ and TENTSCHERT in preparation) (Fig. 19).

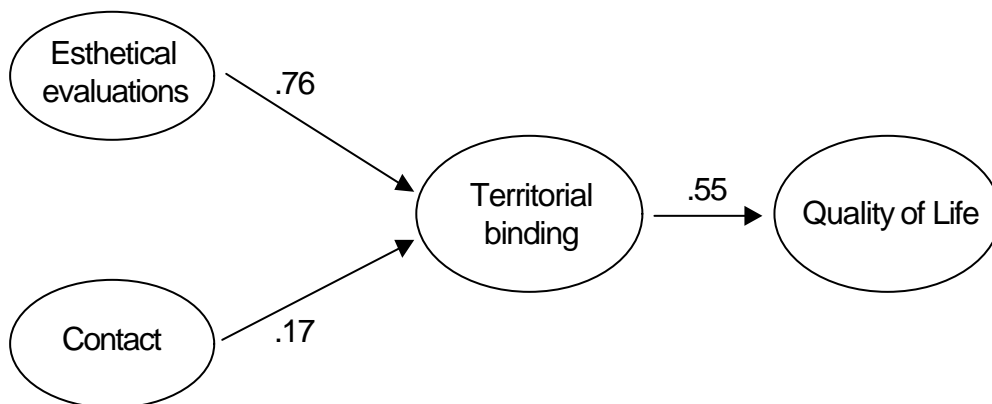
Fig. 19: Territorial binding and quality of life



Basic model

Our initial question referred to the importance of an environment perceived as esthetically pleasant. This led us to search for an external criterion: territorial attachment to one's own residential area (measured with a scale) appeared suitable to us. Further variables assumed to correlate with territoriality were measured and checked in order to measure the potential influence of esthetic evaluation upon territorial attachment. As territorial attachment has a lot to do with "feeling safe" and "environmental fitness", we assumed a connection with the quality of life. In our final model (Fig. 20), the significance of esthetically distinguished living surroundings was confirmed, as well as the influence of territorial attachment upon quality of life.

Fig. 20: Territorial binding and quality of life



Modified model

The data also confirm the hypothesis according to which man cannot adapt to all environments - "SCHIACH BLEIBT SCHIACH" (ugly is and stays ugly), goes the Viennese proverb. In such a perspective, the application of quality-of-life measures proves its applicational value in a number of yet other research environments.

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