HAPPINESS, FUNCTIONINGS, AGENCY AND RESPONSIBILITY

Christian Radden
International Doctoral Program "Quantitative Economics"
University of Kiel

June 30th, 2008

Abstract

The starting point for this paper is the search for possible intersections and mutual impulses of the capability approach and the happiness literature. Respecting the request for multidimensionality, I agree with suggestions favoring to use happiness informatino as functionings among others. Two separate ways to do so are detected. First hedonic research is making use of so-called objective happiness. In this regard, objectivity is obtained by only evaluating instant information, which are assumed to be free of emotional biases. In contrast to that, the rather new eudaimonic literature focuses on non-instant information. Subjective information evaluated by the Self-Determination Theory (SDT) are assumed to contain hints about the processes behind decision-making. I claim, that what initially is seen to be open for interfering (adaptation) biases, by means of SDT, might become a measure that indicates if the achieved beings and doings are agency goals. Even further, high levels of such measures indicate that the respective achieved beings and doings have been chosen freely. Therefore, being able to evaluate the proposed subjective indicators could possibly supersede the counting and reviewing of existing alternatives. Assessing welfare in the sense of the CA would then get by with achieved functionings. Finally, it is argued that working with SDT's concepts, the CA would be enabled to be more responsive to the questions of individual responsibility.

JEL Codes: D63, I31, I32

1   Introduction

Recently, it seems to be a widespread opinion in both fields that looking for possible intersections of the capability cpproach (CA) and the happiness research require further attention. However, according to Comim (2005), even though both approaches have the same objective, until now they did relatively ignore themselves. This might be reasoned by the different perspectives taken and raises the questions what these differences determine.

The happiness literature can classically be said to be rather subjective, whereas the CAstresses on the importance of objective measures of well-being. In this respect the SWB-OWB-distinction has been defined not about measurement issues like self-reported or not, but about what is measured: whether feelings or non-feelings.[1]

Thus, a major reason for the mutual disinterest might be located in Sen's initial critique on subjective information, namely on adaptive preferences. Long-lasting deprivation is seen to possibly cause a downgrading of inaccessible options ('the sour grapes effect') instead of upgrading the accessible alternatives. Concerned people might tend to adjust to miserable circumstances, where resignation is driving what is seen to be feasible. Examples given by in the CA literature are about the 'hopeless beggar' or the 'tamed housewife'. However, as mentioned in the beginning, meanwhile more emphasis is given to reasons to combine objective and subjective information. None of the both approaches is able to claim to give the exclusive answer for all problems of evaluating well-being.

But where are possible intersections and what can be gained from cooperation? Before looking for these, first, we have to acknowledge that we are trying to find a synthesis of a one-dimensional and a multi-dimensional approach of well-being. Therefore a combination will result in either a one- or a multi-dimensional measure.

There are contributions favoring happiness to be a proxy for an overall aggregate of the separate dimensions under consideration. Since the request for multidimensionality is initially underlying the CA, to me a more appropriate step further seems be given by Gasper's (2005) suggestion to use SWB as one valued functioning among others.

Doing so is raising an additional topic that is discussed in the literature. The question in this regard is to what extent self-stated well being could be an indicator for the freedom to have and the fulfillment of agency goals.[2]

The paper is structured as follows. In the second section, I briefly introduce those CA-concepts and their interrelations that are used in the analysis, viz. functionings, capabilites and agency. Thirdly, the respective concepts of happiness are discussed. The fourth section introduces the Self-Determination Theory (SDT). After showing empirically that SDT is representing a certain aspect of happiness other possible applications of SDT are discussed and conclusions are drawn.

---

[1] See Gasper (2005).
[2] See e.g. Gasper (2005, 2007) or Teschl and Comim (2005).

2   The capability approach

The CA has been developed as a critique on how standard welfare economics assesses well-being. Neither the possible interpretations of utility, nor of economic rationality are seen to offer an appropriate help when asking if a life is a good one. This has been justified i.a. as mentioned above by the possibility of adaptive preferences but as well by a general critique on one-dimensionality.[3]

Rather the quality of life is said to consist of multiple facets. All separate factors constituting a good life need to be given to generate well-being. This perspective emphasizes the intrinsic value of e.g. good health. Without doing so the multiple dimensions have only instrumental value for an overall aggregate like utility. Therefore it's argued that it should be focused on the different prerequisites for a good life when evaluating individual well-being. The implied complexity of such a more general perspective should not be sacrificed for the sake of (over-)simplification. Amarty Sen, who developed the CA, strongly argues in favor for such vagueness in the evaluational exercise.[4]

Among the possible paths to follow, Sen finds the approach of Rawls most helpful. Here emphasize is given to the means to achieve (in terms of primary goods) rather then the achievement as such. However, the CA suggests to go even further. It is argued that it's worth to take the opportunity to make use of these means into account as well. A strong argument to do so is seen in the human diversity. Acknowledging the existence of differences in individual characteristics (labeled as 'individual conversion factors') implies possible differences of well-being achievements, given the same in the beginning. Therefore, taking diversity into account implies that not only the means one is endowed with should be taken into account. Rather also the opportunities to achieve those factors relevant for a good life by converting the endowments should be included. The assumed aspects necessary for a life to have quality are called 'functionings' or 'beings and doings'. The realized beings and doings of a person are labeled as 'achieved functionings'. Again, assuming diversity in the conversion of inputs into achieved functionings implies the importance of taking the varying opportunities to achieve functionings into account. This opportunity set, from which the realized beings and doings of an individual compose a subset, is called the 'capability set'.[5]

An ongoing debate is on how to find the valuable dimensions for assessing well-being. Opposing fronts argue either in favor for a universal list, enumerating each facet of which a life of quality is generally consisting of, or a respective democratic process, in which each society is defining its own priorities. Both views have in common, that the dimensions are defined in an objective way, somewhere outside the individual. From this perspective, if being interested in evaluating well-being, one should assess the

---

[3] See e.g. Sen (1985, 1987).
[4] See e.g. Sen (1985), Roemer (1996, p. 193) calls Sen the 'Heisenberg of distributive justice' for having a broader perspective at this point, the latter is said to make a virtue of a necessity. Roemer rejects this procedure, arguing in favor for an 'exact answer'.
[5] See e.g. Sen (1992).

capabilities of people, or in other words, the opportunity to achieve those 'objective' factors relevant for a life to have quality.

However, Sen distinguishes even further at this point. Although interrelations are acknowledged he finds it reasonable to differentiate between the opportunity to achieve well-being and the opportunity to achieve objectives other than the pursuit of one's own well-being. A person's success in the pursuit of the totality of her considered goals and objectives is called agency achievement. Individual agency goals will in most 'normal' cases include inter alia the pursuit of the own well-being, but it is assumed that the latter generally is only one objective among other goals.[6]

Sen rejects the classical economic interpretation of rationality as egoism as an overall aggregate of all objectives and, by introducing the concept of agency, opens the exercise for a broader idea of man, that could contain e.g. sympathy, too.

So when it comes to the question of how the individual is making use of his capability set, the CA acknowledges beyond human diversity in characteristics also human diversity in purposes.[7]

However, an account for the second diversity has hardly ever been incorporated when it comes to applications of the CA empirically. Since the attempt to measure capabilities by means of raking of opportunity sets has rarely been seen operable, for pragmatic reasons most contributions evaluate what functionings (well-being) are achieved.[8]

3 Recent findings in the happiness literature

Two questions where raised in the beginning. First, if happiness can be integrated into this framework, and second, if happiness is able to indicate the level of a person's agency achievement or even agency freedom. Regarding the first of the two questions we need to see that happiness classically is assessed as a *subjective* indicator of well-being. However, as mentioned above, due to the possibility of adaptive preferences of the resigned poor the CA is rather focusing on *objective* information. In this regard e.g. Teschl and Comim (2005) suggest making use of Daniel Kahneman's so-called *objective* happiness. The latter is the concept evaluated by positive psychologists, which's research is particularly driven by the distorting impact adaptation has on people's self-evaluation of well-being. Retrospective evaluation of subjective well-being like those reported in large surveys like the GSOEP (German Socio-Economic Panel) are seen to be biased and therefore of no value. This branch of the literature rather focuses on daily information obtained e.g. via the Experience Sampling Method.[9]

It seems to me that this might be a promising way to integrate a special sort of happiness information into the CA framework. If the methods used to evaluate this kind of well-being are convincingly *objective*, why should this dimension not be assimilated as a functioning?

---

[6] See e.g. Sen (1992)
[7] Regarding the latter the need for reflection or for having good reasons is assumed, whims or caprices are not included.
[8] See Schokkaert (2007)
[9] See e.g. Kahneman et al. (1999)

However, the happiness literature provides additional impulses for the CA. These can be found in what has been contributed with regard to adaptation. Comparable with the CA's view on the latter, work on happiness describes the 'hedonic treadmill', meaning that people are seen to be continuously in need for growing stimulations in order to maintain constant levels of satisfaction. A concept that has been used to reason the 'Easterlin Paradox' that is about findings of low correlation between income and subjective well-being over time. Even further, the happiness literature delineates the 'happy poor', who have apparently become adapted to its lot.[10]

But happiness research also emphasizes on the positive aspects of adaptation and not only on those dealing with resignation, central to Sen and his followers. The same mechanism is seen to be at work both, when a lottery winner readjusts to her former level of happiness after some months and when people overcome bad situations. More precisely, people are able to play an active part in accepting or changing miserable circumstances. Thus, with adaptation in such terms of coping, positive aspects appeared on the agenda. Thus, the initial reason for the CA to abandon subjective information from the evaluational exercise is weakened. Happiness literature can be seen to sensitize the CA that its perspective of adaptation might have been to narrow. Based on this, subjective information could possibly be allowed to play a role. So where do we find these subjective measures?

Another label for the positive psychologist's object of interest is hedonic happiness. One example how the latter can be defined is given by Vitterso (2003, p. 142):
"Hedonism refers to activities undertaken for the sake of either attaining some pleasure or avoiding something unpleasant. Activities of these sorts are deemed to be satisfying."
As described above, the objective nature of this measure is obtained by making use of short-term or instant information. In contrast to that, subjective information can be seen to be included in those long-term, retrospective evaluations that have been discarded by hedonistic researchers. Not doing the latter is strongly advocated by e.g. Schokkaert (2007).

In this regard, the very active happiness literature is providing concepts that constitute an opposite to hedonism. Another facet of happiness is detected and described as so-called eudaimonic well-being. Again, Vitterso (2003, p. 142) is cited here for an example how the concept of eudaimonia can be defined:
 "In brief, the concept of eudemonia refers to the fulfillment of our potential as human beings, with a focus on autotelic activities. (If something we want to do is not wanted for the sake of anything else, the act or activity can be called an autotelic activity.) "

It is widely agreed that the two concepts of hedonic and eudaimonic happiness are not independent. In this respect research indicates a high level of statistical covariance. However in spite of the statistical convergence between hedonia and eudaimonia, there are very important differences, worth to be investigated.[11]

---

[10] See e.g. Argyle (1999)
[11] See Deci and Ryan (2008)

As indicated by the definition of eudaimonia, this concept is also emphasizing the motivations of a person's activities, viz. how one lives one's life gets into focus rather than only the resulting outcome, *per se*. Both, feelings of happiness and pleasure and a sense of meaning or fulfillment are seen to be important for well-being. Focusing only on hedonic happiness would disregard the processes that represent eudaimonic living and that yield well-being.[12]

Regarding the search for an appropriate measure for eudaimonia long-term evaluations as regarded in the GSOEP do not reflect the complex motivational process. However, those information can at least give some indication of overall, viz. hedonic and eudaimonic happiness achievement. Focusing only on eudaimonia the different suggestions of how to approach this facet of subjective well-being include e.g. evaluations of personality traits, of so-called experiences of 'flow' or considerations on self-control and self-efficacy. With respect to the purpose of the CA the Self-Determination Theory (SDT) can be seen to be the most promising contribution.[13]

4   The Self-Determination Theory

"The starting point for SDT is the postulate that humans are active, growth-oriented organisms who are naturally inclined towards integration of their psychic elements into a unified sense of self and integration of themselves into larger social structures. In other words, SDT suggests that it is part of the adaptive design of the human organism to engage in interesting activities to exercise capacities, to pursue connectedness in social groups, and to integrate intrapsychic and interpersonal experiences into a relative unity." [14]

To me, SDT seems to go without assuming a solely egoistic human nature or one able to sense sympathy, although at the same time excluding none of them being an a priori statement. However, when being interested in the processes of decision-making SDT is providing a good help by differentiating several types of motivation.

Recently, a comparable movement is observable in principal-agent theory, the most appropriate way in economics to recognize individual's motivation. Whereas classically the focus was solely on extrinsic motivation in the form of monetary incentives, recently authors start to discover intrinsic elements of motivation and the importance of incorporating these into economic modeling.[15]

In contrast to these contributions, for the SDT the distinction between extrinsic and intrinsic motivation is not just binary. The more the initially external values and regulations are integrated, the more the nature of motivation turns from being extrinsic to intrinsic. This process of integration that is mentioned in above citation is theorized to have four steps. In the first step motivation is purely extrinsic ('external regulation'). The second stadium is indicated by partial integration of external regulations ('introjection'). The latter have not really become a part of an individual's integrated set of motivations,

---

[12] See Deci and Ryan (2008)
[13] See Alkire (2005)
[14] Deci and Ryan (2000) p. 229.
[15] See e.g. Bénabou and Tirole (2003) or Frey (1997) for these approaches.

although they are followed. If the underlying value of a behavior is recognized and accepted the next level is reached ('identification'). However, the behavior is still seen to be instrumental. Furthermore, the fullest, most complete form of internalization of extrinsic motivation demands integrating those identifications with other aspects of the self ('integration'). However, internalization does not happen automatically. To be able to provide a psychologically meaningful interpretation and integration of a diverse set of research results in the area of intrinsic motivation and internalization, the SDT further proposes that the integrative process requires fundamental nutriments. The latter are defined as the fulfillment of so-called basic psychological needs, namely ambient supports for experiencing autonomy, competence, and relatedness. Their satisfaction, by enabling the individual to integrate inner-psychically and socially, is seen to be essential for a healthy development and well-being.[16]

In summary, first, the SDT is using subjective informatino on the satisfaction of basic psychological needs to infer the degree of intrinsic motivation. And second, it's postulating that the higher (lower) the degree of intrinsic motivation, the greater the subjective well (ill)-being. Before giving possible interpretations and applications of the inferences on the degree of intrinsic motivations, in the following I show some empirical results confirming the gross effect from basic psychological needs satisfaction on (non-instant) subjective well-being indicators.

5   Empirical application of the SDT

In the following a Structural Equation Model (SEM) will be employed. Such techniques have a long tradition in social sciences like sociology and psychology, however application to economic topics are rather seldom. Recently there are some authors active in the field of happiness research making use of SEM.[17]

In the CA literature, the general tradition of applying multivariate methods can be traced back to the pioneering work Schokkaert and Van Ootegem (1990) making use of factor analysis. In short, this technique assumes an unobservable (latent) variable that is the driving force behind a set of observable indicator variables. Based on the empirical covariance matrix one is able to extract the factor loading of each component that indicates how strong the indicator is influenced by the latent concept. Giving content to the latter then is purely a question of interpretation.

This trade-off between exactness and the need to justify comes very close to the trade-off formulated by Sen regarding the measurement of well-being. Therefore, the initial application of factor analysis by Schokkaert and Van Ootegem (1990) has been appreciated and in the following such methods have been used increasingly. When being interested in the relationship between an endogenous variable and one or more exogenous variables classically linear regression analysis represents the standard econometric technique. There are a large number of applications in the happiness and CA literature.[18]

---

[16] See Deci and Ryan (2000)
[17] See e.g. Vittersö and Nilsen (2002) or Schaufeli et al. (2002).
[18] See e.g. Kuklys (2005) for a comprehensive survey in this regard

However, variables have to be observable in this context. SEM overcomes this shortcoming by integrating both, factor analysis and regression analysis into one unified econometric model.[19]

Accordingly, the body of a SEM contains two parts. Confirmatory factor analysis is referred to as 'measurement equation' whereas the 'structural equation' indicates the relationships between the latent constructs. Applications of the SEM in the CA literature are shown by e.g. Krishnakumar (2004).

Roughly, a SEM is a hypothesized pattern of directional and non-directional linear relationships between a set of observable and latent variables. As mentioned, this includes setting up of hypothesis a priori, thereby having a rather confirmatory character. My first hypothesis relates to the way happiness interpreted as subjective ratings of experiences in the sense of global assessments or retrospective evaluations can be measured by a set of indicators. Taking into account both, overall evaluations and aspect-of-life-specific scores I construct a latent variable 'Happiness' being the driving force behind these different indicators. I hypothesize positive influences of each indicator and a good overall model fit. This first measurement model is presented graphically in the right half of Figure 1.

Further, I hypothesize a simple factor structure of autonomy and competence in a similar way.[20] Again I hypothesize positive influences of each indicator and a good overall model fit. Both measurement models are shown on the left side of figure 1.
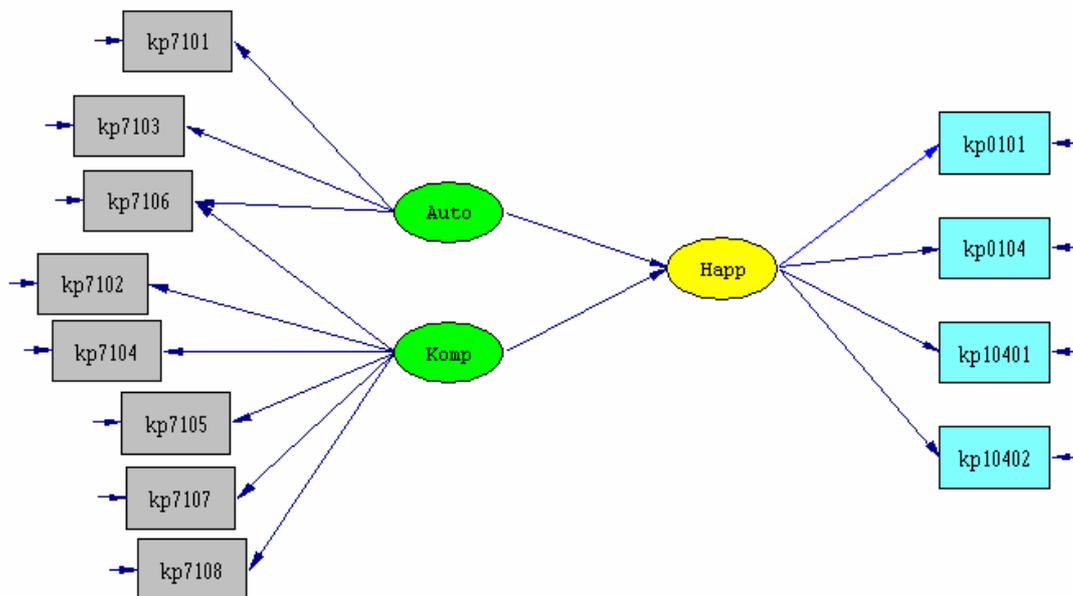

Figure 1: The Structural Equation Model of SDT

---

[19] Strictly speaking, SEM is able to work with more than one endogenous variable, having only one is the special case of a MIMIC-model.
[20] Due to data limitations do not account for 'social relatedness'.

Finally I argue that retrospective assessments as such reported in large scale surveys contain i.a. eudaimonic facets of happiness. Therefore I combine all three measurement models. The resulting SEM constructs this influence of the basic psychological needs on the reported happiness scores. Here as well, I hypothesize positive influences of each latent SDT construct on the latent happiness variable and a good overall model fit.
In the following the used sample and applied indicator variables will be introduced. Subsequently, the measurement equations and the structural relationships among the latent constructs are estimated.

Data was obtained from the German Socio Economic Panel (GSOEP) elevated by the *Deutsches Institut für Wirtschaftsforschung* (DIW). The GSOEP is a nationally representative longitudinal study of several thousands households, following the participants since 1984 to collect data on economic and socio-economic facts and behaviors.
Besides constant evaluation of a large set of variables like 'satisfaction with life', some information is only asked for in certain years. With respect to SDT the most valuable questions might be seen in a certain set asking about the individual's attitude towards life. However, data on these questions is only available from 1994 till 1996. I'm working with all three waves separately. Data of 1994 (1995/1996) consists of 5415 (5383/6209) women and 4927 (4880/5787) men living in 4582 (4524/4912) households. Weighted by the respective factor these samples are representative for the German population older than 16 years.

As mentioned above 'Happiness' was assessed by means of both overall and aspects-specific scores of reported satisfaction with life. Overall satisfaction with life was evaluated with two questions "All in all, how satisfied are you with your life at present?" and "Guess how it will be in 5 years from now". Aspects of life have been evaluated with the questions: "How satisfied are you with your health? "and "How satisfied are you with your household income?"
I've chosen these two aspects to assure to include both, satisfaction with areas of life rather weakly correlated and rather strongly related with monetary inputs. Answers had to be given by using a scale, in which 0 means totally unhappy and 10 means totally happy.

Furthermore, nine indicators where chosen to represent the latent constructs of autonomy and of competence. The assortment has been guided by those questionnaires offered by the SDT. Obviously, those are much more complex, approaching the concepts in more detail. Therefore my analysis in by no means intended to be a fully-fledged application of the SDT. Due to data limitation this is not possible, of cause.
However, I would like to give a rough impression how these concepts could be operationalized. And as will be shown in the following, even though my set of indicators is rather small, the findings are significant, what can be interpreted as strength of the hypothesized relations.
SDT concepts where operationalized by making use of ratings regarding the following request: "The following are various attitudes towards life and the future. Please indicate what most applies to you. "

For autonomy I've chosen scores on the following three indicator variables: "I determine what happens to me in life", "My behavior determines my life", and "Most plans I make are successful".

Competence is modeled to be measurable by the following five items: "It is useless to make plans because they seldom work out", "No one can escape their fate, everything in life happens as it must happen", "If I get something I want then it's mostly due to luck", "There is little sense in planning ahead because something unexpected always comes up", and "Things always happen differently, one can't rely on anything".[21]

Scales range is 1 ("applies completely"), 2 ("applies more or less"), 3 ("Does not really apply") and 4 ("Does not apply"). All three autonomy variables are recoded to increase in value. Otherwise we would rather measure heteronomy.

Application of Maximum-Likelihood (ML)-based estimators requires checking for multinormality of the used variables. Descriptive statistics of the used variables already indicate that this can not be assumed.[22]

Hence, to take higher moments into account to correct for non-normality, models are calculated using the usual ML-discrepancy function and the asymptotic covariance matrix. Estimation of SEMs in this way implicitly emanates from metrically scaled indicators. However, applying categorical data would yield underestimated parameter values. Thus, so-called polychoric correlations and the associated asymptotic variance/covariance matrix have been computed from the data.[23]

Exemplarily for 1994, these are shown in table 1 for the measurement model of happiness and in table 2 for the measurement model of autonomy and competence.

	KP0101	KP0104	KP10401	KP10402
KP0101	1			
KP0104	0,215	1		
KP10401	0,458	0,462	1	
KP10402	0,433	0,306	0,690	1

Table 1: polychoric correlation of 1994 happiness indicators

	KP7101	KP7103	KP7106	KP7102	KP7104	KP7105	KP7107	KP7108
KP7101	1							
KP7103	**0,467**	1						
KP7106	**0,364**	**0,271**	1					
KP7102	0,140	0,071	0,225	1				
KP7104	0,013	-0,073	0,118	**0,383**	1			
KP7105	0,098	0,034	0,060	**0,360**	**0,409**	1		
KP7107	0,142	0,069	0,267	**0,536**	**0,474**	**0,385**	1	
KP7108	0,167	0,081	0,270	**0,483**	**0,492**	**0,421**	**0,675**	1

Table 2: polychoric correlation of 1994 autonomy and competence indicators

---

[21] See the appendix for a table of the respective variable names in the three years.
[22] Respective tables are in the appendix.
[23] See Jöreskog and Sörbom 2000

Polychoric correlations between the items indicating happiness are not very large, however estimation yields a good overall fit of the model. The same holds for table 2. Here, validity of the factor models can a priori be assumed since the correlations within the theoretically defined dimensions are higher and close to each other, while the correlations between the two factors are rather small. Furthermore, KP7106 (LP0806/MP1006) seems to be almost equally important for explaining 'autonomy' and 'competence'. How this might be included will be shown. Analyses were conducted with LISREL. Missing data was accounted for by listwise deletion.

For assessing the overall fit of the model conventionally chi-square tests are applied. These formulations offer indicator for the size of the discrepancy between the proposed model and the data. However, chi-square tests are known to be too restrictive when populations are very large and when distributions are non-normal.[24]
Therefore, this study uses the Root Mean Square Error of Approximation (RMSEA) as a fit index. The RMSEA focuses on the degree of lack of fit in a model, asking whether the model is a decent approximation, not whether the model is exactly correct or not, like the chi-square procedure. RMSEA values smaller than 0.06 are indicating a very good fit.[25] Further model fitting can be done by specifying additional parameters. However, such steps have to be well justified with regards to contend of the model. A statistical guide which modification might be most valuable is given by the univariate Lagrange-Multiplier-test. Application suggested modeling an additional path from competence towards KP7106 (LP0806/MP1006). This modification was already hinted by the correlation matrix, and as regards content KP7106 (LP0806/MP1006) applies to both concepts.
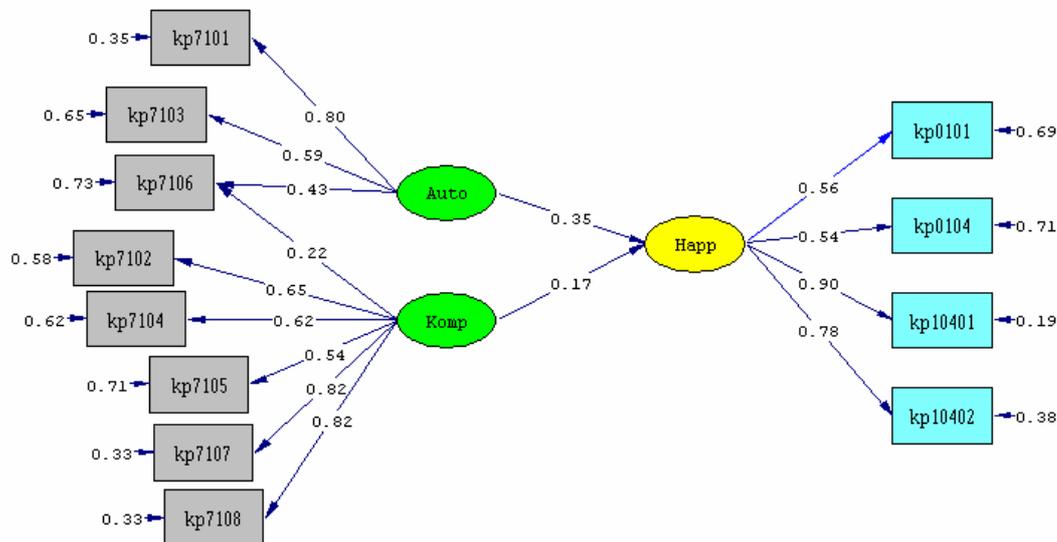

Figure 2: Standardized solutions of the 1994 Structural Equation Model

---

[24] See e.g. Bollen (1989)
[25] See e.g. Hu and Bentler (1999).

Figure 2 shows the results for the overall SEM. Similarly, for data of 1994 (1995/1996), the RMSEA value of 0.056 (0.055/0.058) indicates a very good overall fit. Factor loadings are ranging between 0.22 and 0.90 (between 0.20 and 0.90 / between 0.23 and 0.90). All parameters are highly significant ($p<0.01$).

The standardized coefficients of autonomy and competence in the structural equation confirm a positive relation with reported retrospective happiness. Furthermore, despite the ad-hoc nature of the empirical model the measure for the strength of the obtained relationship, the R-squared of 0.175 (0.176/0.195) is comparable with other contribution in the happiness literature.[26]

6   Possible applications of the SDT

My empirical results show that the concepts of SDT seem to reflect a certain aspect of non-instant information on happiness that sometimes is labeled as eudaimonia. The introduction of eudaimonic happiness above was originated with the guess that therby possibly information on the nature of adaptation could be obtained, since we are handling with subjective information. As Teschl and Comim (2005) state that the concept of adaptation is essentially about want formation. It is defined by Frederick and Loewenstein (1999) in the following way: "Adaptation, in its broadest sence, refers to any action, process or mechanism that reduces the effect (perceptual, physiological, attentional, motivational, hedonic, and so on) of a constant and repeated stimulus."

Comparing this description with the above explanation of the SDT's concepts, to me the first seems to be a special case of the more general latter. This is obtained by describing the process of want formation in more detail and linking it to certain psychological experiences assumed to be necessary for the development to be healthy. From the SDT's perspective the 'hopeless beggar', the 'tamed housewife' and the 'happy poor' are not only frustrated. More precisely, they did not experience that their actions are controlled by their own but rather by forces that are phenomenally alien to them, irrespective of their values or interests. Probably they neither feel free to decide in an autonomous way, nor sufficiently competent to change their situations. And furthermore, for those who are able to cope with comparable bad circumstances a satisfactory level of psychological need satisfaction can be seen to be the reason for not giving up and not being frustrated. Thus the two different views of adaptation of the CA and the happiness literature can be seen as two possible developments that the process of integration postulated by the SDT can take. However, both views of adaptation have in common that they assume miserable circumstances in the beginning. Without this assumption central to such interpretations of adaptation, generally want formation in the sense of on increasing degree of intrinsic motivation can be seen to represent a normal development of the individual, where initially external values and regulation are internalized step by step. [27]

---

[26] See e.g. Anand et al. (2005).

[27] And again this perspective has parallels in the recent economic literature. In a quite comprehensive way Akerlof and Kranton (e.g. 2000) are postulating the importance of norms for individual motivation with regard to macroeconomics.

From these considerations it's only a rather small step left to acknowledge that the concepts of SDT provide measures indicating if achievements initially have been agency goals. Both conceptions focus on beings and doings that people are engaged in and that they value. SDT postulates the basic psychological needs satisfaction to be an indicator of how much this valuation is intrinsically, whereas the set of agency goals consists of such intrinsically valued objectives.

Consequently, when being able to measure if individuals feel autonomous, competent and socially related there is no more need for counting their alternatives and assessing if these alternatives increase or decrease their freedom. Thus, one might argue even further that the concepts introduced are able to indicate if sufficient agency *freedom* has been present when beings and doings where chosen and achieved.

Finally, when combining opportunities and individual preferences of how to use such freedom we enter the complex debate of the role played by responsibility.

Political philosophers criticize the CA for implicitly viewing the individual, first, as not responsible for their opportunities, as measured by their capabilities, but, second, responsible for their choice of function vector and their agency goals.

In contrast to that it is argued that, first; a person may have responsibility in part over the functioning vector in her capability set. This refers to the so-called 'expensive tastes'. If a person is (actually or feeling, or both) deprived in terms of some objective functionings achievements but at the same time is insisting on 'luxury' in other dimensions a limited capability set is self-made. When exaggeratedly striving for well-being in certain parts of life public compensation for poverty in other dimensions can hardly be justified.[28]

And second, agency goals might be socially determined and not completely in one's own responsibility. This problem can be clarified by the idea of counterfactual choices. Remember that the agency goals include those objectives not related to well-being of necessity. The classical example is about the fasting and the starving person. Whereas the first decides not to eat, the latter is forced to starve, he is assumed to be without a choice. In contrast, the fasting person is assumed to have the opportunity to eat in form of a theoretically sufficient endowment with food. Therefore his decision not to eat is said to be counterfactual in nature. In this regard it is argued that the CA neglects the influence of social factors on the decision of the faster to pursuit his agency goal. It's just assumed that the self-imposed poverty in terms of caloric intake is valued and that there are reasons to value this. Critique at this point argues that counterfactual choices could be socially determined which could make a great different. External motivation might not be a bad reasoning, *per se*. A person might be advised by his medical advisor to stop eating for while, e.g. for a treatment to be effective of to lose weight when suffering from obesity. However if someone suffers from anorexia or is instructed to fast by some dubious spiritual leader we are talking about (at least partly) socially determined behavior that can be seen to offer bad reasons for counterfactual choices.

My arguing in favor for the application of SDT in this regard can be seen to be in line with Scanlon's contribution in this field. Individuals should only be seen to be responsible for those preferences they identify with.[29]

---

[28] See e.g. Roemer (1996)
[29] See Scanlon (1988)

Again, the latter is at the center of the SDT and its concepts seem to be of great help by giving some reasoning and content to the behavior of the prototypes described above. The individual having expensive tastes can be seen to be driven too much by external values and regulations. The process of integration seems to be poorly developed, thus basic psychological experiences are expected to be on a low level.

The same is true for persons exercising counterfactual choices. For the CA if someone is not eating despite he could he assumed to fast for his own and for good reasons. High measures of autonomy, competence and social relatedness can be seen to indicate a rather intrinsic motivation. Therefore SDT offers an interpretation of what makes a reason a good reason, viz. the higher the degree o intrinsic motivatio, the more the individual identifies with its own activities, and thus, the better the reason.

In contrast to that when applying SDT, if someone is not eating despite he could and simultaneously his basic psychological needs are poorly satisfied, it could be plausible to regard him as being not fully responsible for his behavior. In this regard it's useful to remember that autonomy is not contrasted with dependence. "A person can be autonomously dependent – welcoming other's influence and being responsive to good advice - or autonomously independent – being inclined to resist any external influence."[30] Rather, the opposite of autonomy is coercion. Therefore, low basic psychological needs satisfaction indicate bad reasons for counterfactual choices, viz. decisions rather based on extrinsic motivation. These individuals do not identify with what they do, they are rather coeced. In such cases solely applying the rather general (and thus impressively powerful) concept of the 'rational addict' would be quite cynical.

Particularly in this regard the SDT literature provides evaluations of family and higher-level social circumstances that enhance versus diminish the development of intrinsic motivation, the indicator of how much an individual identifies with its own behavior. "For integration to occur there must be an opportunity for the individual to freely process and endorse transmitted values and regulations (and to modify or transform them when necessary)."[31]

Consequently, this would argue for the opportunities to experience autonomy, competence and social relatedness to be included in the required capability set. In a weak form, point five on Nussbaum's list is doing so. Relatedness is emphasized to be important and some freeness of anxiety and fear is mentioned, which could be enhanced by the SDT concepts of autonomy and competence.

7   Conclusion

The starting point for this paper is the search for possible intersections and mutual impulses of the capability approach and the happiness literature. While the first is assessing well-being multidimensional and in an objective way, the latter's evaluational nature classically is one-dimensional and subjective. Respecting the request for multidimensionality, I agree with suggestions favoring to use happiness as one objective

---

[30] Alkire (2005)
[31] Deci and Ryan (2000)

functioning among others. As shown e.g. by Teschl and Comim (2005), this can be achieved by making use of so-called objective happiness. In this regard, objectivity is obtained by only evaluating instant information, which are assumed to be free of emotional biases.

In contrast to such hedonic research, the rather new eudaimonic literature focuses on non-instant information. Subjective information, in the sense of representing feelings, are assumed to contain hints about the processes behind decision-making. I claim, that what initially is seen to be open for interfering (adaptation) biases, by means of SDT, might become an measure indicating if the achieved beings and doings are agency goals. Even further, high levels of experienced autonomy, competence and social relatedness indicate that the respective achieved beings and doings have been chosen without coercion. Therefore, being able to evaluate basic psychological needs fulfilment could possibly supersede the counting and reviewing of existing alternatives. Assessing welfare in the sense of the CA would then get by with achieved functionings, when expanded by such a subjective dimension.[32]

In this way, the CA could possibly gain twofold from integrating happiness into the exercise, first from making use of objective well-being (hedonia) and second from subjective measures proposed by SDT (eudaimonia) as indicators for agency freedom. Finally, it is argued that working with SDT's concepts, the CA would be enabled to be more responsive to the questions of individual responsibility.

---

[32] Schokkaert's (2007) 'refined functionings' are outlined with a comparable intention.

8   Appendix

VARIABLES	1994	1995	1996
Happiness			
All in all, how satisfied are you with your life at present?	KP10401	LP0101	MP0101
Guess how it will be in 5 years from now	KP10402	LP0104	MP0104
How satisfied are you with your health?	KP0101	LP10401	MP11001
How satisfied are you with your household income?	KP0104	LP10402	MP11002
Psychological Needs			
I determine what happens to me in life	KP7101	LP0801	MP1001
My behavior determines my life	KP7103	LP0803	MP1003
Most plans I make are successful	KP7106	LP0806	MP1006
It is useless to make plans because they seldom work out	KP7102	LP0802	MP1002
No one can escape their fate, everything in life happens as it must happen	KP7104	LP0804	MP1004
If I get something I want then it's mostly due to luck.	KP7105	LP0805	MP1005
There is little sense in planning ahead because something unexpected always comes up	KP7107	LP0807	MP1007
Things always happen differently, one can't rely on anything	KP7108	LP0808	MP1008

Table A1: Questions and variable names in all three years

ITEMS	CATEGORIES										
	0	1	2	3	4	5	6	7	8	9	10
KP0101	2.0	1.3	2.9	6.1	5.4	15.6	10.5	16.5	22.4	10.1	7.2
KP0104	2.3	1.3	3.8	6.5	7.1	15.9	12.5	17.0	19.6	7.4	6.7
KP10401	0.6	0.4	1.4	3.0	3.6	13.1	12.1	21.0	30.3	9.0	5.3
KP10402	0.9	0.6	1.8	3.0	4.9	13.2	12.3	18.0	26.7	12.6	6.0
LP0101	1.8	1.2	3.1	6.3	5.8	15.0	10.7	17.2	22.5	10.1	6.1
LP0104	2.0	1.0	3.4	5.7	6.4	16.7	11.7	17.2	20.7	8.4	6.7
LP10401	0.7	0.4	1.4	2.7	3.6	14.6	11.1	21.8	28.9	9.5	5.1
LP10402	0.9	0.9	1.7	3.1	4.9	14.5	11.4	18.0	25.7	13.2	5.7
MP0101	1.7	1.2	3.6	5.7	6.3	15.4	11.0	16.7	22.1	9.3	6.8
MP0104	2.0	1.3	3.8	5.7	7.0	15.9	11.8	17.2	20.1	8.7	6.5
MP11001	0.5	0.4	1.5	2.8	3.7	14.0	11.8	22.1	29.0	9.5	4.8
MP11002	0.9	1.0	2.2	4.0	5.2	13.9	12.2	17.7	25.9	12.0	5.1

Table A2: Freqencies of happinss indicators for all three years

VARIABLE	CATEGORIES			
	1	2	3	4
KP7101	2.1	14.9	53.6	29.4
KP7103	1.8	11.9	55.4	30.9
KP7106	4.7	29.9	55.7	9.7
KP7102	6.4	23.3	47.5	22.8
KP7104	24.8	34.2	29.8	11.1
KP7105	6.2	18.9	54.1	20.8
KP7107	9.5	32.1	44.2	14.3
KP7108	12.2	31.5	42.3	14.0
LP0801	3.1	16.6	52.1	28.2
LP0803	1.7	12.2	57.9	28.2
LP0806	5.2	30.1	54.0	10.7
LP0802	5.8	23.3	48.8	22.1
LP0804	22.4	34.6	31.9	11.2
LP0805	5.5	19.6	53.1	21.8
LP0807	9.1	30.2	46.1	14.5
LP0808	10.6	28.6	44.2	16.7
MP1001	2.4	14.6	51.4	31.5
MP1003	2.2	11.8	56.7	29.3
MP1006	4.8	30.7	54.7	9.7
MP1002	6.6	22.7	49.1	21.6
MP1004	23.8	34.6	31.4	10.2
MP1005	5.6	18.4	54.6	21.4
MP1007	9.7	29.6	45.2	15.5
MP1008	11.0	28.6	43.0	17.5

Table A: Frequencies for autonomy and competenc indicators for all three years

9 References

Akerlof, GA, and Kranton, RE (2000), Economics and Identity, *The Quarterly Journal of Economics*, 65.3, 715-753

Alkire, S (2005), Subjective quantitative studies of human agency, *Social Indicator Research*, 74,1, 217-260

Anand, P, Hunter, G, and Smith, R (2005), Capabilities and well-being: evidence based on the Sen-Nussbaum approach to welfare, *Social Indicator Research*, 74, 9-55

Argyle, M (1999), Causes and Correlates of Happiness, in Kahneman, D, Diener, E, and Schwartz, N (eds.), (1999), *Well-Being: The Foundations of Hedonic Psychology, Russell Sage Foundation*, New York

Bénabou, R and Tirole, J (2003), Intrinsic and Extrinsic Motivation, *The Review of Economic Studies*, 70.3, 489-520

Bollen, KA (1989), Structural Equations with Latent Variables, John Wiley and Sons, New York

Comim, F (2005), Capabilities and Happiness: Potential Synergies, *Review of Social Economy*, 63.2, 161-176

Deci, EL and Ryan, MR (2008), Hedonia, Eudaimonia and Well-Being: An Introduction, *Journal of Happiness Studies*, 9, 1-11

Deci, EL and Ryan, MR (2000), The "What" and "Why" of Goal Pursuit: Human Needs and the Self-Determination of Behavior, *Psychological Inquiry*, 11.4, 227-268

Frederick and Loewenstein (1999), Hedonic Adaptation, in Kahneman, D, Diener, E, and Schwartz, N (eds.), (1999), *Well-Being: The Foundations of Hedonic Psychology, Russell Sage Foundation*, New York

Frey, BS (1997), Not Just For The Money, Edward Elgar Publishing

Gasper, D (2005), Subjective and Objective Well-being in Relation to Economic Inputs: Puzzles and Responses, *Review of Social Economy*, 63.2, 177-206

Gasper, D (2007), What is the capability approach? Its core, rationale, partners and dangers, *Journal of Socio-Economics*, 36, 335-359

Hu, LT and Bentler PM (1999), Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives, *Structural Equation Modeling* 6, 1-55

Jöreskog, KG and Sörbom, D (2000), LISREL 8: New Statistical Features, S.H.D. Du Toit, Uppsala University

Kahneman, D, Diener, E, and Schwartz, N (eds.), (1999), Well-Being: The Foundations of Hedonic Psychology, Russell Sage Foundation, New York

Krishnakumar, J (2004), Going Beyond Functionings to Capabilities: an Econometric Model to Explain and Estimate Capabilities, *Journal of Human Development*, 8.1, 39-63

Kuklys, W (2005), Amartya Sen's Capability Approach: Theoretical Insights and Empirical Applications, Springer

Roemer, J (1996), Theories of Distributive Justice, Harvard

Scanlon, T (1988), The significance of choice, In S McMurrin (ed.), *The Tanner Lectures on Human Values*, 8, University Of Utah Press

Schaufeli, WB, Salanova, M, Gonzáles-romá, V, Bakker, AB (2002), The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analysis Approach, *Journal of Happiness Studies*, 3.1, 71-92

Schokkaert, E and Van Ootegem, L (1990), Sen's Concept of the Living Standard applied to the Belgian Unemployed, *Recherches Economiques de Louvain*, 56.3-4, 429-450

Schokkaert, E (2007), Capabilities and Satisfaction with Life, *Journal of Human Development*, 8.3, 415-430

Sen, A (1985), The Standard of Living, Cambridge University Press

Sen, A (1987), On Ethics and Economics, Basil Blackwell

Sen, A (1992), Inequality Reexamined, Oxford University Press

Teschl, M and Comim, F (2005), Adaptive Preferences and Capabilities: Some Preliminary Conceptual Explorations, *Review of Social Economy*, 63.2, 177-206

Vittersö, J (2003), Flow versus life satisfaction: A projective use of cartoons to illustrate the difference between the evaluation approach and the intrinsic motivation approach to subjective quality of life, *Journal of Happiness Studies*, 4, 141-167

Vittersö, J and Nilsen, F (2002), The conceptual and relational structure of subjective well-being, neuroticism, and extraversion: once again, neuroticism is the important predictor of happiness, *Social Indicator Research*, 57, 89-118