

Wellbeing in the Netherlands

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The Netherlands Institute for Social Research | SCP
Parnassusplein 5
2511 v x Den Haag
The Netherlands
Tel. +31 70 340 70 00
Fax +31 70 340 70 44
Website: www.scp.nl
E-mail: info@scp.nl

Wellbeing in the Netherlands

The SCP life situation index since 1974

Nederlands Welzijn

De SCP leefsituatie-index sinds 1974
(met een samenvatting in het Nederlands)

Proefschrift

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Jeroen Boelhouwer

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Promotor:

Prof.dr. P. Schnabel

Co-promotor:

Dr. I.A.L Stoop

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Foreword

How can we tell whether people in the Netherlands are enjoying good levels of prosperity? Does it depend on national incomes rising or higher share prices? Or perhaps on the standard of education or whether or not they live in properly insulated homes? Or when they become happier? I have always found these questions intriguing and still do, after ten years' involvement with the life situation index.

It is clear to me that an answer to the question of how people are is not just about how much money they earn. That is important, true enough, but it is not the only thing that matters. It is also about their housing, whether they are healthy and socialising and it refers to whether they generally feel good and are happy about what they have and what they do. So the question of how people are relates to their wellbeing, their prosperity, their quality of life. Another – related – term which is often used nowadays translates as 'broad-based prosperity': in addition to its economic component it should also include a social one (and frequently environmental aspects as well).

These terms have recently been receiving a great deal of press coverage and have featured prominently in the social and political debate. Prosperity and wellbeing are often linked together, not just theoretically, but also in social reports and monitoring systems, for example. New initiatives are being launched across individual countries (including France and the UK), across borders ('Measuring the Progress of societies' by the OECD) and within countries. Sometimes, individual indicators are presented, but it is becoming more and more frequent for indicators to be combined and indices to be presented as summaries. The number of initiatives and the level of enthusiasm hark back to the 'social indicators movement' from the 1960s and 1970s.

It was also at that time that the SCP was set up. As early as 1974, the SCP decided to construct a composite measuring instrument: the 'wellbeing standard'. It was developed by Dr. Marijke Mootz, initially together with Dr. Aat Nauta and later with Marjanne Konings-Van der Snoek. My involvement in the research started on a sad note in the mid-1990s, namely with the illness and death of Marjanne Konings. After Marijke Mootz left the SCP in 1996, I became fully responsible for the activities relating to the wellbeing standard. This offered me an opportunity to concern myself with some interesting questions, such as how do we know whether people are doing well? And does everyone benefit from improvements? The beauty of the wellbeing standard is that it does not seek to look at one aspect of wellbeing, but to offer an overview of the empirical relationships between sub-areas, both in the sphere of wellbeing and the sphere of prosperity. The work that I have carried out on the life situation index since that time has therefore been largely built on what had already been done. For that and for the assistance and support I was given when first setting out on the life situation index path, I would like to thank Marijke and Marjanne.

Another enjoyable aspect of the life situation index is its relationship with government policies. It is not just the fact that I studied political science, but also my political activities which have made me very interested in the areas where science and politics and science and policies meet. Working on the life situation index ties in very nicely

with this aspect: the overriding goal of the life situation index is to identify and describe social developments for the purpose of policies, more specifically social policies aimed at preventing social disadvantages from developing, and where they exist, to overcome them.

Not many countries and not many measuring instruments offer researchers such a long time series of data than does the life situation index. This makes working with the life situation index special, even by international standards. I discovered this when I became a member of the International Society of Quality of Life Studies (ISQOLS). Coincidentally this was founded around the time when I became involved with the life situation index. It went without saying that I joined the ISQOLS: the organisation offered an ideal opportunity to exchange views in an international scientific forum about what I was doing at the SCP. The ISQOLS brought together representatives from an interesting range of scientific disciplines, including sociologists, political scientists, philosophers, economists and market researchers, under the broad banner of 'quality of life'. The ISQOLS conferences were occasions for debates between supporters of different scientific currents, such as between the broadly Anglo-Saxon subjective approach versus the broadly Nordic objective approach. There was also growing support for the view that consolidating indicators into a single index yielded more added value than reporting on individual indicators.

Not only did I regularly attend a number of ISQOLS conferences, I also gave presentations about the life situation index (on its purpose, history, structure and construction) and I was a member of the ISQOLS Board of Directors from 2003 to 2006. Subsequently, I also put forward some tentative proposals for using the methodology of the life situation index to make an international comparative index. This is not that simple, however. For the life situation index we have access to data gathered specifically for this research, but this is not the case for any other international data set. A selection of the presentations also found its way into articles, published in *Social Indicator Research* and elsewhere. I would like to take this opportunity to thank all my colleagues at conferences who at some point had discussions and debates with me.

Thanks are also due to Marijke Mootz and the SCP advisory group (Gerda Jehoel-Gijsbers, Andries van den Broek, Mirjam de Klerk and Lex Herweijer) for reading earlier drafts and commenting on them, and to Ruut Veenhoven, Ingrid Robeyns, Peter van der Heijden and Edith de Leeuw for being members of the doctorate committee.

There are others, too, to whom I owe a debt of gratitude. First, to my mother and father, who showed me that freedom and security go very well together, and who have always encouraged me to make my own decision.

When I said to Merijne and Jasper that they should answer, 'Yes, a lot...', if anyone ever asked them, if they had missed me a lot in recent years, they looked at me in some confusion. They had not missed me at all, had they? It did not help that I explained to them that they were probably right, but that the answer I suggested was normal in the case of someone writing a thesis. But they were right – they had not missed me! Thanks to the

opportunities provided by the sCP, I have been able to write this thesis largely without it encroaching onto my family life. I am truly grateful to the sCP for that, in particular the board (Paul Schnabel and Rob Bijl), Theo Roes (former deputy director) and Ineke Stoop (my departmental head). I would also like to record my special thanks to the latter two for their efforts and supportive words in encouraging me to write this study. And even though this thesis has affected my private life to a less than average degree, I would still never have been able to write it without my love for and the love from Marieke, Merijne, Jasper and Tim*too.

Summary

Recently, there has been a lot of interest in achieving a broader perspective on prosperity and the development of countries. The focus is no longer solely on economic figures: more and more initiatives are being set up in which social indicators (also) play a role. The idea that economic indicators alone do not suffice to establish whether a country is faring well is not new. There was already such an understanding in the 1960s and '70s, and then too, initiatives were developed to allow social indicators to play a role beside the economic indicators. It was during this time that the SCP developed the life situation index.

For more than 30 years now the Netherlands Institute for Social Research (SCP) has been using the 'life situation index' (*leefsituatie-index*) to present an overview of the life situation of the Dutch population. This study explains what the SCP's life situation index is and how it originated. It also looks at the context in which the index developed and the changes it has undergone since its inception. Even so, the book is more than just a historiography: it raises questions about the choices made and identifies some 'white spaces'. For a number of reasons this study is different from other SCP reports. The line of approach is not a specific theme or target group for policy. Nor is the intention to outline a particular situation, to evaluate policy or to make policy recommendations. Rather, the book provides a background study on the life situation index and its underlying conceptual framework. The book deals with three major questions, which go to the core of the discussions on the index: namely, is an index helpful in the (policy-relevant) description of the life situation of Dutch people? Does the design of the index meet the requirements? And is the composition of the index appropriate? These questions run like a thread not only through this book, but also through the history of the index. In this book we have tried to answer these questions by focusing on three objectives:

- 1 to outline the historical and international context within which the life situation index has been developed;
- 2 to describe the choices made for domains and indicators and the ways in which these have been consolidated into a life situation index;
- 3 to test the stability and sensitivity of the index.

The overriding goal of the life situation index is to identify and describe social developments for the purpose of policy, more specifically social policy, aimed at preventing social disadvantages, and where they exist, to overcome them. The index consists of a combination of indicators in eight dimensions: housing, health, sports, social participation, socio-cultural leisure activities, ownership of durable consumer goods, holidays and mobility. In each dimension, called a 'domain' in this study, indicators are chosen which relate to the actual situation (and not to the evaluation of the situation). The indicators describe an outcome, not an input (so the focus is on a person's health, not on the number of doctors).

The historical and international context

It has been clear for a long time that the state of a society cannot be measured solely by economic factors. The social domain is also important. During the 1960s the social indicators movement laid the foundation for the development of social indicators and social monitoring systems. This was also the time when the SCP was founded. Interest in social indicators waned in the 1980s, but it revived in the mid 1990s. Since then a wide range of new initiatives has been launched. These initiatives focus not only on national developments, but also on international and intra-national comparisons. A common feature of the initiatives is that they want to describe the social situation in countries or municipalities on the basis of social indicators. The actual indicators deployed differ, however. There is no comprehensive and widely supported theory from which the choice of indicators follows logically and uniquely. Moreover, there is no general consensus on the definition of the terms used. There is no agreement on what precisely is meant by 'social cohesion', 'social capital' or 'social exclusion'. Nor is there a good definition of the 'life situation'. But there is agreement that the concepts are wide-ranging, that they consist of several domains. The choice of domains and indicators seems to be informed, at least in part, by the choice of concept. Different indicators are used for social cohesion and social capital, although these do overlap to some extent. In this book we use the following definition for the 'life situation': the life situation is the whole of individual living conditions which relate to prosperity and wellbeing. The life situation relates to a state of affairs and to both material and non-material aspects.

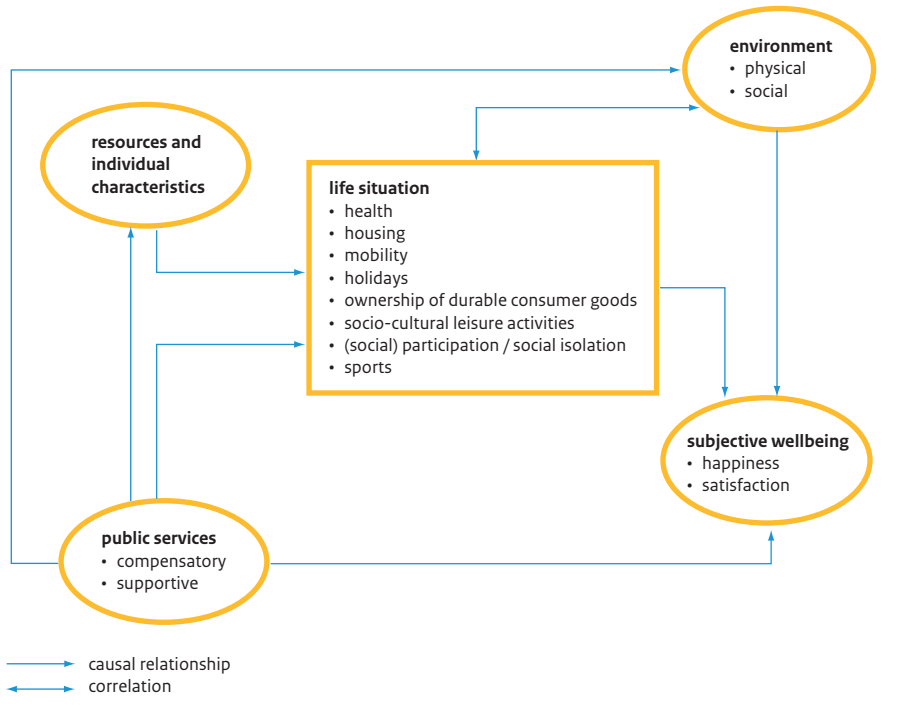
The perspective of the life situation index is clear: the index must be policy-relevant, describe the life situation as a whole, have a broad content, and measure the life situation in such a way that progress or deterioration is visible. What is more, we must be able to show the trends not only for the Netherlands as a whole, but also for various social groups in Dutch society.

Another basic principle is that we want to place the description of the life situation in a broader framework of background information. To that end we use a conceptual framework, in which the life situation takes centre stage (see figure S.1). The conceptual framework also includes determinants of the life situation: in addition to personal characteristics (such as age and household composition), also education, work, health and income (which we call 'resources' here). Environment also plays a role in the life situation of citizens. These include both a physical component (in what city and neighbourhood does a person live? What is the neighbourhood like? Is it safe?) and a social component (what is the demographic composition of the neighbourhood?).

The life situation index itself includes indicators which relate to the actual state of affairs, not to an (individual) evaluation of it. In the broader conceptual framework we look at both. We assume that people's life situation will affect their happiness and satisfaction. And finally, the conceptual framework includes the use of public services. The idea here is that the government helps to prevent social disadvantages from developing, and where these do develop, to compensate them as much as possible.

The following are not included in the conceptual framework: the development of the life situation (it provides a snapshot), and preferences, values and standards which lead to particular behaviours.

Figure S.1
Conceptual framework for the life situation



The life situation is better today than 30 years ago

Over the past 30 years the life situation of the Dutch population, as measured by the life situation index, has improved. This improvement has occurred among all social groups, but not for all groups to the same extent. For example, the life situation of people aged between 55 and 74 years, higher-educated people, single people and couples without children improved by more than the average, while it improved by less than the average for 25-34-year-olds, the lowest-educated and lone-parent families.

Looking at the resources, the life situation of people in work, with a higher education qualification or on a high income has improved more than the average. Since 1974 the differences in the life situation scores between groups at the extremes have increased. Thus in 2006 the difference in life situation between the employed and the unemployed, between the highly and the lowly educated and between high and low incomes was greater than in 1974.

The determinants (income, education, work, health, age and household composition) explain differences in the life situation to a large extent: 54% in 2006, 45% in 1974. The life situation differs not only between social groups, but also between geographical units. In general it is the case that the more urban the area or the larger the city, the less good the life situation. However, over the years the differences have narrowed, above all because the life situation in the big cities has improved.

And finally, there is a positive correlation between the actual life situation and the evaluation of the situation. People with a good life situation are happier and more satisfied than people with a bad life situation. The correlation with the life situation is stronger for personal aspects (such as satisfaction with one's circle friends and education) than for political aspects (such as satisfaction with Dutch society). However, personal happiness is only to a limited extent dependent on the life situation. More important for happiness is the satisfaction with specific elements of the life situation and having a partner and friends.

The choice of domains and indicators of the life situation

The life situation index is based on a series of data files: surveys which ask detailed questions on all elements of the index, background information and other aspects of the conceptual framework. The time series we now have is one of the major advantages of the research: after all, developments can only be outlined with a time series. But this does not mean that today's index is exactly the same as the one at the outset. Since 1974 a number of changes have been made in the composition of the index, in the collection of the data, and in the consolidation of the data into a single index. Some of these changes create unwelcome difficulties in comparing the life situation over time, but they also offer opportunities to implement desirable adjustments. For instance, in the case of keeping indicators up to date, such as the ownership of durable consumer goods, where the slide projector has been replaced by the personal computer.

Because we can use the index to track the life situation over time, we gain valuable insights into social developments: is the life situation improving or deteriorating, are there groups who are being left behind? What is more, the index provides an insight into developments in a broad range of domains simultaneously, because prosperity and well-being are linked in the index, with both material and non-material aspects included. In this way a multifaceted picture of developments emerges.

The broad and multifaceted concept of 'life situation' has been operationalised on the basis of eight domains:

- 1 health;
- 2 housing;
- 3 mobility;
- 4 holidays;
- 5 ownership of durable consumer goods;
- 6 socio-cultural leisure activities;

- 7 (social) participation / social isolation;
- 8 sports.

Health is not only regarded as a determinant of the life situation (having a condition, disability or illness), but also as an element of the life situation (impediments owing to this condition, disability or illness).

For one part the choice of these domains is based on their policy relevance (with the Dutch constitution and political and public debate providing the starting point). And for another part the choice is based on discussions in the international social indicators movement. The 'face validity' of the eight domains also plays a role: in a welfare state these are the core domains of what is generally understood by the life situation. The choice of domains in this book has been calibrated to internationally available indices and monitoring systems and to what people themselves regard as important. Such a calibration is not straightforward, because each index and each monitoring system has its own basic assumptions and overall objectives. Thus the choice will be different when descriptive indicators are used instead of evaluative indicators. Even so, the same domains recur time and again in different social indices.

The main difference with other indices is that the life situation index does not include domains and indicators which relate to the determinants of the life situation (such as education and work). The SCP regards these determinants as 'resources' which can be used to improve the life situation.

In order to construct the life situation index, a relevant selection of core indicators must be made within each domain. The indicators of the life situation must fulfil five criteria, in addition of course to the usual criteria applying for indicators in general (such as measurability and reliability). The indicators must:

- 1 be interpretable in terms of positive and negative;
- 2 apply to everyone;
- 3 be measured at the individual level;
- 4 be descriptive;
- 5 be focused on output and realised wellbeing.

On the basis of the first criterion we can make assumptions about the contribution made by the indicators to the life situation. We expect, for instance, that engaging in sporting activity makes a positive contribution to the life situation, and that not doing so makes a negative contribution; that voluntary work is positive, not doing so negative; and so on. When these expectations cannot be corroborated empirically, this may be a sign that the indicator in question does not fit in with the other indicators, for instance because it does not relate to the life situation but to something else. Hence it would be better not to include such indicators in the life situation index.

When choosing indicators, it is also important that they have a distinguishing capacity. If everyone has a telephone, it is not sensible to include telephone ownership as an indicator. This means that once in a while specific indicators need to be replaced by other indicators: not only when they become widely available, but also when they become

obsolete and no one uses them anymore. The history of the life situation index shows that such changes do not have any implications for the outcomes: the patterns in the life situation scores do not change because of them.

Other than the occasional adjustment of the selected durable consumer goods, there is currently no reason to review the index's domains or indicators. The included domains and indicators together offer an accurate overview of the life situation of Dutch people.

Another basic principle is that the focus is on the individual, not on the municipality, the province, an institution or an agency. The individual is the analytical unit: the home forms part of the life situation, but the neighbourhood in which the home is located does not. Of course it is true that an individual operates within a certain environment, but the life situation only relates to the individual him- or herself. In the conceptual framework the individual life situation is correlated with the individual's environment, which makes it possible to pose questions such as: do people with a bad life situation live in unsafe neighbourhoods?; or do people with a good life situation live in neighbourhoods with high social cohesion?

We have decided not to combine descriptive and evaluative indicators in the index, because these represent two different perspectives, each of which reflects a distinct image of 'reality'. It turns out that there is only a loose connection between descriptive and evaluative indicators, even when they are more or less directly correlated. The main reason for this is that people quickly adjust their satisfaction level to a new situation. Another factor is that satisfaction also depends on personal characteristics.

Construction of a composite life situation index

Once the domains and indicators have been decided, there are several ways of consolidating the indicators. However, all the ways of constructing an index have their downside, which makes it difficult to choose the 'best' way. A major decision is whether or not to weight the indicators when they are added up together. In the construction of the life situation index we use different weights for the indicators. The weights are decided by statistical means, on the assumption that the indicators must correlate with each other and with the eventual index (i.e. the life situation). Non-linear canonical correlation analysis is well suited for this. This method has a number of other advantages, such as the possibility of including (theoretically distinctive) domains in the analysis, so that one domain with many indicators cannot dominate. Another advantage is that the response categories are rescaled so that, for instance, the difference between engaging in sports and not doing so may not be same as the difference between engaging in one sport or two sports. Another advantage is the possibility to include nominal variables.

Combining social indicators into a composite index offers added value above the use of loose indicators in several ways. For one thing, an index instead of loose indicators offers added value in terms of communication, not only with policy makers but also with the public. Furthermore, an index makes cumulation effects visible. These effects are relevant for policy making because they show the seriousness and the extent of social

deprivation; this is far more awkward with the presentation of separate indicators. Another major added value of a single index over separate indicators is that it makes complex concepts more understandable. Although the general concept of the 'life situation' is complex and multidimensional, in public debate it is used as a single concept, which means that there is also a need for a description of that concept as a whole. It is also easier to compare groups with each other with a single index than with many different indicators. Because the index is calculated at the individual level, it is possible to examine for which groups the life situation has deteriorated, why this has happened, and whether the deterioration in one domain can be compensated by an improvement in another domain.

For all these reasons an index is a useful tool in the policy-relevant description of the life situation of Dutch people.

Sensitivity and stability

Although the life situation consists of different domains, we are looking for the common basis of the domains, or, to put it in statistical terms, we are looking for a single dimension, for a one-dimensional solution. This means that we exclude domains (and indicators) which are part of another dimension (and not the one in question). After all, when indicators exclusively load on another dimension, this means that they are measuring something different than the other indicators.

The domains which were chosen for the life situation index on substantive grounds in the first instance also turn out to be connected empirically. It is possible to use the selected domains (and the indicators within those domains) to construct a meaningful, interpretable index for the life situation.

The question is whether it matters for the measurement of the life situation precisely which domains and indicators are included in the index. The stability analyses conducted in this study and the history of the index show that the choice of domains is more important than the choice of the precise indicators within a domain. In the operationalisation of the concept it is important that the different domains have a shared basis and are connected in such a way that they refer back to the same underlying concept. The analyses conducted in this study show that the combination of random, unconnected domains will lead to an uninterpretable whole.

Does it matter whether we use different weights for different social groups? Sensitivity analyses show the impact of calculating the index for specific groups only (such as old people or women). It does not matter much whether the life situation is calculated with weights on the basis of all respondents or only specific groups. It is true that some indicators have a somewhat greater influence for some groups than others, but the effect on the final outcomes is marginal. This means that the index is stable and that there is no reason to modify the theoretical proposition that we want a single index to compare different social groups.

Using or not using weights does not have much impact on the results either. The main advantage of not using weights, and instead simply adding up indicators, is the simplicity of the procedure. But set against this advantage there are a number of problems, which have prompted us to use opt for the use of different weights (for indicators): firstly, the determination of the correct sequence for nominal indicators (flat, single-family dwelling); secondly, the extent of difference within that sequence (is the difference between engaging in one and two sports the same as the difference between engaging in two and three sports?); and thirdly, there is the loss of insight into any diminishing returns, such as found with the diversity of participation (more is not always better). The latter is an important substantive perspective.

To decide the weights for the life situation index, we use a statistical method which is based on correlations (non-linear canonical correlation analysis). The advantage of this approach over a simple addition is that a check is built in which shows whether the selected indicators are connected with each other. When this is not the case, the weight of the indicator in question will be low. When indicators are chosen merely for theoretical reasons and then added together, there is no such check.

The analyses conducted in this study do not lead to a modification of the method used to construct the index.

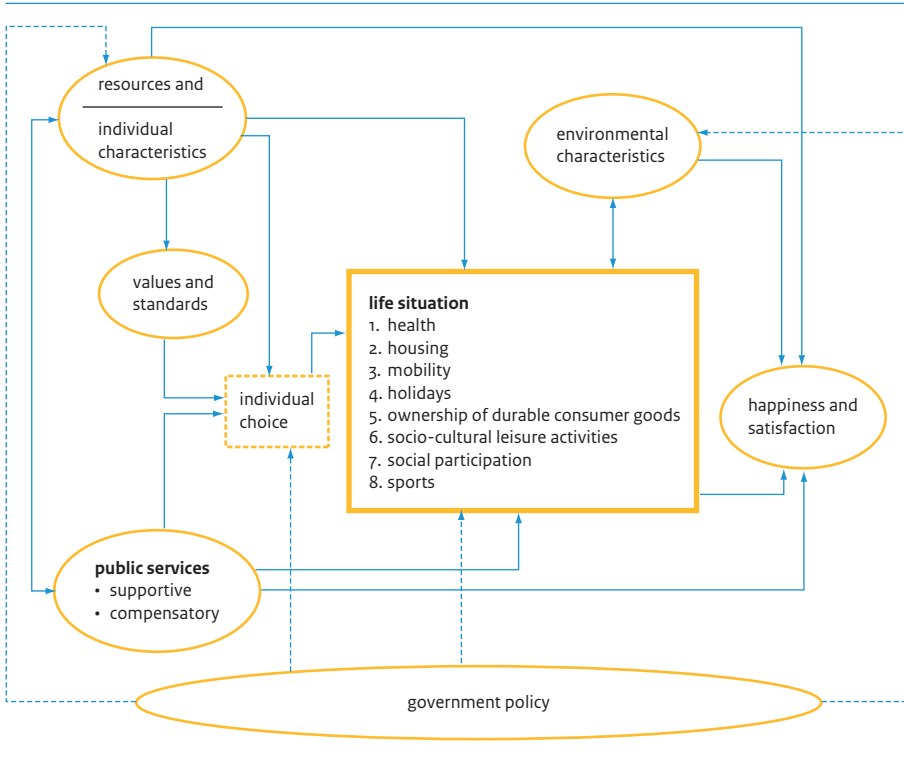
Proposals for the future

In this study we explain what precisely the life situation consists of and how its design and development fits into the national and international contexts. With a view to the future we can offer a number of directions in which the life situation index and the conceptual framework might develop: adaptations which should lead to a better description and analysis of the life situation.

- 1 Giving people's choices, preferences, values and standards a role in the conceptual framework. These standards and values determine, at least in part, preferences, assessments and choices which people have and make and which lead to particular behaviours.
- 2 Including 'self-reliance', that is, having sufficient skills to participate in society, among the resources.
- 3 Testing the whole model with the help of structural equation models. This should provide a better understanding of the causal relationships between and within the blocks and of the effects of the resources and background characteristics on the life situation.

When we incorporate these proposals into the conceptual framework, the framework changes somewhat, as shown in figure S.2.

Figure S.2
Adjusted conceptual framework for the life situation



We can use this adjusted conceptual framework in the future to more adequately describe the life situation, with the overriding goal the identification of social developments for the purpose of policy, specifically social policy, aimed at preventing social disadvantages, and where they exist, to overcome them.

However, there will always be discussions about the usefulness and necessity of the life situation index, about the choice of the indicators and about the means of consolidating them. These discussions will be reinvigorated by the renewed interest in devising alternatives to the gross domestic product (GDP), the interest in sustainability and quality of life, and the interest in a broad concept of prosperity. It is our hope that the ideas behind the choices for the life situation index described in this book can play a role in this debate.

1 The scp life situation index

How do we know whether the Dutch people are faring well? Are they faring well when national income rises, or when share prices rise? Are they faring well when education levels are high, or when they live in properly insulated homes? Or when they become happier? For a long time the main thought in political and societal debate was that people were doing well if the economy was performing well. This perception changed in the last century when it was recognised that a country's development could not be measured solely with economic indicators, but that social indicators were also required (see e.g. Stiglitz et al. 2009, Noll 2002b, Cobb and Rixford 1998). What had started with research into the social consequences of the NASA space programme, from 1960 onward grew gradually into a movement which sought to chart these social aspects: the social indicators movement (see e.g. Rapley 2003, Noll 1996, Cobb and Rixford 1998).

The increased attention to social indicators was accompanied by attention to social policy, wellbeing and deprivation. Although the social indicators movement originated in the United States, it also took root in other continents, including Europe. The foundation of the Netherlands Institute for Social Research | scp in 1973, during the movement's heyday, ensured that attention to social (and cultural) aspects of society became a permanent fixture in policy preparation in the Netherlands. One of the scp's official tasks is 'to carry out research designed to produce a coherent picture of the state of social and cultural wellbeing in the Netherlands and likely developments in this area'. The first Social and Cultural Report included the scp's definition of 'social and cultural wellbeing': 'the preponderance of social and cultural wellbeing increases as the quality of life in a society improves and the relationships between different groups is a satisfactory one. Quality of life is defined as the degree to which highly rated values are realised, in terms of health, education, housing, etc.' (scp 1974: p.13).

This social and cultural wellbeing can be described in several ways. For instance by highlighting a specific aspect and making it the theme of a publication. The scp reports thematically on, for instance, mobility, voluntary work, leisure and poverty. These reports usually also pay attention to target groups of policy, such as old people or immigrant communities. Another approach actually takes these social groups as the starting points. The scp reports on old people and people with disabilities, for instance, and in these reports it examines different themes, such as housing, health and leisure. In both the target group reports and the thematic reports the 'coherent picture' manifests itself above all in the conclusions, where different aspects of wellbeing are related to each other.

However, as early as 1974 the scp also decided to construct a composite measuring instrument: the 'wellbeing standard' (*welzijnsmaat*). The wellbeing standard includes indicators which can be influenced by the government and which together reveal something about wellbeing. It focuses on the (objective) description of a situation, the state in which people find themselves. Evaluations of the situation, (subjective) judgements and satisfactions are deliberately left out of consideration. Even so, the notion of wellbeing does have a strong connection with happiness. To leave no doubt that we want to

measure something different from happiness, we call this measuring instrument the 'life situation index' (*leefsituatie-index*). The overriding goal of this index is to identify and describe social developments for the purpose of policy, more specifically social policy, aimed at preventing social disadvantages from developing, and where they exist, to overcome them. The distribution aspects are particularly important in this respect: are some groups in society being left behind and in need of special attention? It goes without saying that to describe and identify developments, it is essential to have access to a time series of data.

Three objectives

Reports on the life situation index were published primarily in the 'Social and Cultural Report' (*Sociaal en Cultureel Rapport*) until 1988, then in the annual 'Social and Cultural Outlook' (*Sociale en Culturele Verkenningen*), and since 2001 in its successor, the biennial 'The Social State of the Netherlands' (*De sociale staat van Nederland*). In the latter reports the concept of the life situation plays a central role: 'the publication describes and analyses the life situation of the Dutch population' (SCP 2001: p. 3). The Social State of the Netherlands relies on a conceptual framework which underpins the description of the life situation, with the index holding a pivotal position (see figure 1.1). The first issue of The Social State of the Netherlands, published in 2001, included a brief overview of the backgrounds to the framework, but no detailed explanation of the choices and discussions (see also Boelhouwer and Roes 2004). Moreover, for some time now no separate attention has been paid to the choices and considerations underlying the index itself (although Boelhouwer 2008 did offer some suggestions). 'Life situation' is a rather vague concept: what is meant by it, and why? Why is an index constructed, and how is this done? These questions are addressed in this study. The line of approach here is not a specific theme or a target group of policy, as in SCP reports. Nor is the intention to outline a particular situation, to evaluate policy or to make policy recommendations. Rather, this book provides a background study on the life situation index and its underlying conceptual framework. The target group of this book is different from that of the SCP reports: this study is aimed less at policy makers and more at researchers who want to develop an index or are already using one.

This study focuses on three objectives:

- 1 to describe the historical and international context within which the life situation index has been developed;
- 2 to describe the choices made for domains and indicators and the ways in which these have been consolidated into a life situation index;
- 3 to test the stability and sensitivity of the index.

The starting point is the current life situation index, as reported on primarily in The Social State of the Netherlands, as well as the associated conceptual framework. Of course, taking the index and the conceptual framework as the starting point does not mean that they should remain as they are; it does not mean that they are the *end point*. On the basis of the issues discussed in the course of this book, it should be possible to

decide whether, and if so which, changes are necessary or desirable for both the index and the conceptual framework. There is no blueprint for the description of the life situation: over the years there have been discussions about the usefulness and necessity of a single index, and all elements of the life situation index have undergone changes. The method for gathering data has changed, the choice of domains has changed, the indicators included have changed since the 1970s, the way in which the indicators are consolidated into a single index has changed, and the perspective on the connections with other indicators (such as resources and environment) has changed. These changes are described in detail in Boelhouwer and Stoop (1999).

The life situation index was developed during the high point of the welfare state. This was also a period when many people put their faith in various forms of social engineering, in society being *maakbaar* (literally 'makeable'), as the Dutch say. Since then there have been extensive debates on the role of government and the extent to which society can be engineered. These debates relate in part to the services provided by the welfare state (WRR 2006, RMO 2006). Society itself has also changed over the past three decades. The process of accelerating individualisation may well be the most important in the context of the life situation (SCP 1998b: Ch. 1). This may have implications for the life situation index and for the conceptual framework which we use in the description of the index. After all, it is the relevance for government policy which lies at the root of the development of the life situation index and the indicators included in it. Does the index still fulfil this relevance criterion? This question surfaces time and again in the history of the life situation index, and it will also be considered here.

Three further questions can be derived from the above-mentioned objectives, and these questions will run like a thread through this book. Firstly, does it make sense to use an index to describe the life situation of the population? Would it not be better to identify and describe a series of core indicators within the most important life domains? Secondly, on the assumption that an index is useful, should it be designed along the lines that the life situation index has been designed? After all, it is possible to imagine other ways of constructing a composite index: would these not be better? And thirdly, there is the not trivial question about the composition of the index: does the life situation index include the right indicators? With this book we are not trying to close down the discussions, but we seek to describe the outcomes of the discussions over the past 30 years and make recommendations for further development.

The life situation in the spotlight

This is not the first study dedicated to the life situation index. A report on this issue was published in 1990, for instance, explaining the choices and backgrounds in broad outline (Mootz and Konings-Van der Snoek 1990). Since then several major and minor changes have been carried out, but these were only ever reported in fragments, so that there is no up-to-date publication which outlines the backgrounds and discussions (for example, see SCP 1998a, Boelhouwer and Stoop 1999, SCP 2001: Ch. 11). What is more, there is currently a growing interest in social indicators, both national and international (Stiglitz et al, 2009, European Commission 2007, OECD 2004, Hagerty et al. 2001).

In fact, there is interest not only in indicators in specific areas (such as health), but also in a coherent description of social developments and in composite indices. The process of European unification plays a major and stimulating role here. The Maastricht Treaty and Lisbon Treaty refer explicitly to the social agenda, to social exclusion and to living conditions. This stimulates interest in social monitoring and social reporting, both at the level of the EU member states and in international comparisons. Furthermore, there is also growing interest in social monitoring within countries, that is, in cities and regions. Many Dutch cities and provinces publish social reports which are similar to The Social State of the Netherlands (examples are Amsterdam, Lelystad, Utrecht, Drenthe and Zeeland).

Another reason for publishing a background study on the life situation index at this moment is the increased interest in the index itself. For one thing, the index has a role to play in The Social State of the Netherlands. And for another, six municipalities have adopted the index in full and report on it: Amsterdam (since 2000), Purmerend (since 2003), Dordrecht (since 2003), Lelystad (since 2005), Eindhoven (since 2007) and Haarlemmermeer (since 2008). A comparison of the life situation in some of these municipalities is available in Boelhouwer and Schyns (2005).

Internationally there is also growing interest in the life situation index. Thus in 2005 a successful attempt was made in the United Kingdom to reconstruct the index with British data (Brand 2005), and in 2010 Flemish researchers ventured a similar effort (Noppe and Schelfaut 2010). Furthermore, in 2005 a Canadian overview study on social indices said of the life situation index that it 'is fairly unique internationally in that the underlying indicators are based on surveys of individuals [...] rather than being restricted to presently available aggregate data' (Sharpe and Smith 2005: p. 35). And finally, an overview study by the ISQOLS concluded that the life situation index may be the best predictor of happiness (Hagerty et al. 2001).

The search for the best means of describing the life situation in an integrated way was for a long time a solitary SCP project. There were no comparable measuring instruments, neither in the Netherlands nor in other countries. These days the interest in indices is growing, both nationally and internationally, and more and more initiatives are being launched in other countries to develop indices. By explaining in this book why we made which choices for the life situation index, we hope that we can make a contribution to the debate on index construction.

The conceptual framework of the life situation index

In the course of the description of the life situation index and the choices made, it may happen that a term is used which is only discussed in detail later in the book. To avoid confusion among readers, we here provide a brief outline of the life situation index. For the same reason we also introduce the conceptual framework which we use to describe and interpret the life situation index.

The *life situation index* consists of eight domains of the life situation:

- 1 health (impediments);
- 2 housing (including type of home, number of rooms);
- 3 mobility (possession of a car or a public transport season ticket);
- 4 holidays (frequency of holidays, foreign holidays);
- 5 ownership of durable consumer goods (including personal computer, dishwasher);
- 6 socio-cultural leisure activities (including visits to museums and theatres, membership of clubs and societies, hobbies);
- 7 social participation (voluntary work, social isolation);
- 8 sports (diversity and intensity of sporting activity).

In short, then, the life situation index includes indicators which relate to both material and non-material aspects, or to the prosperity and wellbeing of the Dutch population.

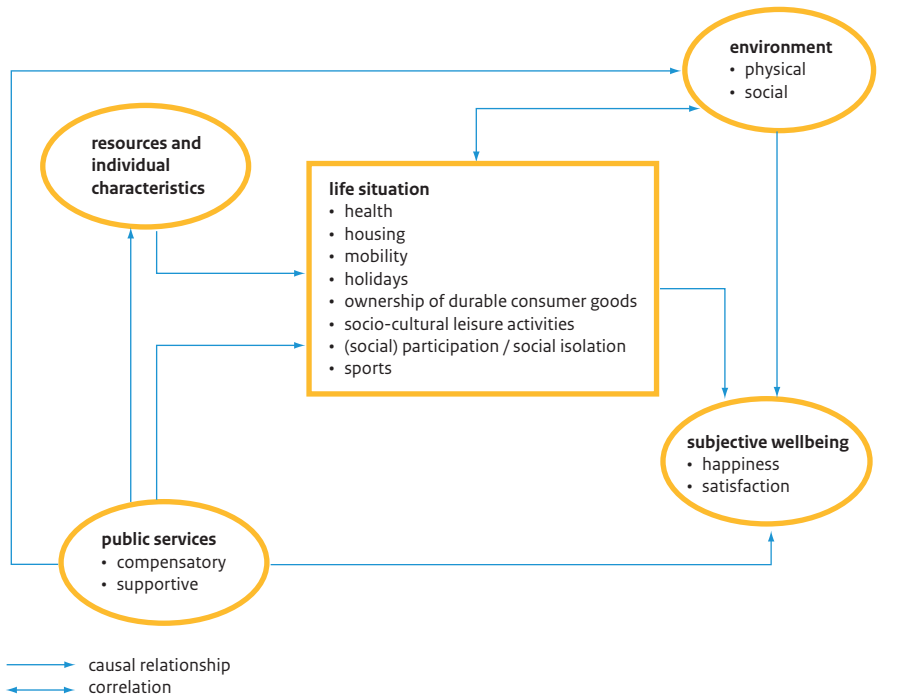
In the *conceptual framework* we assume that the quality of the life situation depends on personal characteristics (age, household composition) and social opportunities. We call these opportunities *resources*, and we distinguish four of them: education, income, employment and health. The resources and personal characteristics are determinants of the life situation and do not form part of the index, with the exception of health, which is regarded as a determinant of the life situation (having a condition, disability or illness), but also as an element of the life situation (impediments owing to this condition, disability or illness).

Subjective indicators do not form part of the index. Whether people are happy and satisfied with what they have and do is of course important for the quality of life, but it is not part of the life situation. After all, how people perceive a particular situation may be different from what that situation actually is. But we do assume that a person's life situation has an impact on his or her happiness and satisfaction.

The relationships between the resources, the life situation index and the subjective indicators constitute the core of the conceptual framework for describing and interpreting the outcomes of the research (figure 1.1). The conceptual framework includes two other 'units' as well. First, the everyday environment, where environment means not only the physical surrounding (the neighbourhood, the city), but also the social environment (social contacts). With these characteristics we also look at the safety of the neighbourhood where someone lives. We assume that there is a relationship between the environment and the life situation, without assuming causality. The second block consists of services which the public authorities have set up to prevent social disadvantages from developing (in terms of access to the labour market, for instance), and where these do develop, to compensate them (through the housing allowance, for instance).

Figure 1.1

Conceptual framework used for the description of the life situation



Finally, it is worth pointing out here that this book is not about ‘the’ life situation as an absolute given. Rather, it is about an interpretation and representation of the life situation as decided by the SCP. For the sake of convenience, we will talk about ‘the’ life situation henceforward. We will also use the term ‘index’, but we could also be using ‘standard’, ‘measuring instrument’ or ‘composite indicator’.

Data collection

The data used in this book are taken from surveys. Until 2004 the data were collected by Statistics Netherlands (CBS). The CBS launched the ‘Life Situation Survey’ (*Leef-situatieonderzoek*) in 1974 in close cooperation with the SCP. Until 1989 this was a survey among a representative sample of the Dutch population conducted every three years; in 1989 it changed into continuous life situation research, with data updated annually until 1993. In 1997 the CBS developed the ‘Permanent Survey on Living Conditions’ (*Permanent Onderzoek Leefsituatie*), in which the life situation questions were included in a separate two-yearly model. In 2002 the CBS decided to stop gathering the required data; this was taken over by the SCP between 2004 and 2008, when the CBS assumed responsibility for it once more. Disruptions of this kind are always risky because of how they could affect the time series, the continuousness of which is a major point of focus in relation to

changes. Chapter 7 describes how we can highlight trends in spite of such disruptions. The response rates dropped from about 70% in the 1970s to 60% in the 1980s and 45% in the early 1990s. From then on more attention was paid to combating non-responses, bringing the response rate to about 55% since 1997. Further details on the data files used are available on the SCP website (http://www.scp.nl/Onderzoek/Bronnen/Beknopte_onderzoeksbeschrijvingen).

Structure of the study

The structure of the study is broadly based on the three objectives set out above. The book starts with a description of the historical and international context within which the life situation index was developed. After devoting attention to the social indicators movement, which was a major catalyst in the last century, we consider several recent developments. Then we examine the choices made for the operationalisation of the life situation concept: which domains and indicators are included in the life situation index? Why do we make an index? What precisely is the conceptual framework? Why is income not included in the index? And what is the relationship with happiness? The next chapter summarises the results of 30 years of the life situation index and describes its development since 1974: is the life situation better today than then? Then we consider the third objective and present several tests with regard to the stability and sensitivity of the index. The final chapter consists of a critical evaluation of the current life situation index: are the index and the conceptual framework adequate, or do they need to be modified? Do the available data provide sufficient information to properly analyse the life situation of the Dutch people? How in fact can the index be used? Is a single index still a good idea these days? The book concludes with recommendations for the future of the life situation index.

2 Social indicators and the historical context of the life situation index

In this chapter we discuss the backgrounds to and the context of the life situation index. First we examine indicators (as they form the basis for the index): what do we mean by ‘indicators’? Then we consider a major catalyst for the development of social indicators, the social indicators movement. It was during the heyday of this movement that the SCP was founded and the first steps towards a life situation index were taken. We conclude by discussing a number of more recent initiatives, at Dutch and international level, aimed at describing the development of a society. These issues set the context of the life situation index, both in terms of the history of social indicators and current developments.

2.1 The origin of social indicators

The insight that information is required to describe a society is not new. As early as 1790 the US constitution included provision for a regular census of the population. The figures which this census yielded formed a major element of the ‘state of the union’. In the first instance the description of society was thought to be more interesting than the analysis of data, and in any case the analyses did not go much beyond breaking down data by population groups (Gasteyer and Flora 2004). The collected information could describe problems, but it was difficult to attach an explanation or a cause. This was due in part to the limited scope of the information: the main aim was to draw attention to a particular problem, such as the low wages of workers or poor public health in cities. The lack of analyses was also due to a lack of theories which could have served as the foundations for explanations (Cobb and Rixford 1998).

It is only more recently that scientists and researchers have become interested in using information for policy formation and the political decision-making process. This requires not only statistics, but also social indicators, a ‘special form of statistics’ (Horn 1993). A frequently quoted definition is the one put forward by the sociologist Raymond Bauer:

social indicators are [...] statistics, statistical series, and all other forms of evidence – that enable us to assess where we stand and are going with respect to our values and goals, and to evaluate specific programs and determine their impact. (Bauer 1966: p. 1)

Of course there are also economic or environmental indicators, but in this book we will restrict ourselves to social indicators because we are interested in developments in the social domain.

Indicators are statistics, then, but statistics only become indicators when they stand for something else, something which has not been measured. Thus a person’s height is a statistic, with which it is possible to study the average height of the population or differences between men and women, but at the same time physical height can also be used as an indicator for wellbeing. The taller a population on average, the greater

that population's wellbeing (Usher 1996). In contrast with a statistic, an indicator often has a normative character: it involves implicit or explicit assumptions about desirable directions (Cobb and Rixford 1998, Horn 1993, Atkinson et al. 2002). This is the case, for instance, when indicators play a role in the formulation and evaluation of policy (Vogel 2002). The percentage of people who play a sport is a statistic, but it can also be seen as an indicator of a healthy lifestyle, to the extent that there is a single yardstick or norm that can be used to define what a healthy lifestyle is.

An advantage of indicators is that, ideally, they allow us to achieve the most efficient system of measurements: after all, we are dealing with an indication, not an exhaustive description of developments (Vogel 2002). In addition to this information-saving function, researchers have identified three other functions of indicators (Noll 2002b, Engbersen et al. 1998):

- 1 *to record*: for the purpose of policy formulation, tracking social developments with the help of social indicators and background indicators;
- 2 *to explain*: acting as a bridge between theory and empirical research; this function is used above all in the academic world;
- 3 *to explore*: using the indicator to gain a new perspective on reality; indicators rarely fulfil this function when they are part of a monitoring system or are embedded in a scientific theory.

Social indicators have been used for some time, then, and they have been widely researched. On the basis of this experience it is possible to list a number of other considerations which should be borne in mind when indicators are used (based on the 'lessons learned from the history of social indicators' identified in Cobb and Rixford 1998):

- 1 Having a number does not necessarily mean having a good indicator: what does the number of inhabitants of a city tell us? Moreover, the symbolic value of an indicator may outweigh its value as a literal measure. This goes especially for composite indicators and indices: it is not always clear what exactly an index measures, but it can be understood as a metaphor.
- 2 The importance of an indicator (for policy, for instance) is greater if it reveals causes instead of mere symptoms. It helps if there is a theory (or at least an idea) about what the cause of the problem might be, otherwise you might end up with an indicator that tells you something other than what you were looking for.
- 3 Comprehensiveness may be the enemy of effectiveness. Having a huge volume of indicators may get the 'user' lost in numbers, especially when there is no analysis or interpretation added to them.
- 4 An indicator should not be confused with the reality. After all, it 'only' gives an indication of a development.

2.2 The social indicators movement

Two major periods in the development of social indicators can be distinguished in the last century. The first period was round 1930, when President Hoover established the Research Committee on Social Trends in the United States. Headed by the sociologist

William F. Ogburn, the committee produced the first, extensive, example of a social report in 1933, the 'Recent Social Trends in the United States'. This 1,500-page publication included an enormous range of topics which were linked together, including demographics, health, education, environment, leisure and crime. The report presented the information without any interpretation, however: it was a collection of data and trends without evaluation or recommendation. The authors were primarily interested in setting the topics in a cohesive context and in looking at the United States as a whole. The intention was to identify 'the various threats to American life' (Cobb and Rixford 1998). Incidentally, this was not only the first, but also the last *national* social report produced in the United States (Miringoff et al. 2004).

In the mid 1960s, the concept of the 'Great Society' launched by President Johnson stimulated interest in people who were not benefiting from economic growth. Social policy was required to create a safety net for these people:

the Great Society is concerned not with how much, but how good – not with the quantity of our goods but the quality of our lives. (Richard Goodwin, quoted in Bauer 1966: p. xii)

There was also criticism of the best-known economic indicator, the gross domestic product (GDP). This was attacked for its one-sided economic perspective, and for not revealing anything about income distribution in a country. Furthermore, the GDP does not throw any light on the informal economy (such as voluntary work and housework) and does not take any account of negative environmental aspects of economic activity. An important reason for devoting more attention to social issues was the flourishing economy in the 1960s. Strong economic growth brought considerable prosperity, but also raised questions. Were the *economic* gains accompanied by *social* gains? And what about the social costs and the damage to the environment? This was a time of growing political attention to groups which were lagging behind and did not share in the economic prosperity. Concepts such as prosperity, wellbeing and wealth were juxtaposed with deprivation and poverty. The question whether more also meant better acquired a prominent place in the debate, and thus drew attention to quality in addition to quantity (Noll 1996, Land 2000).

Interest in social indicators took off after 1960, with more and more scientists studying them. This collection of researchers and policy makers later became known as the 'social indicators movement'.¹ The NASA space programme is generally regarded as the spark for the social indicators movement (Noll 1996, Rapley 2003, Land 2000). NASA wanted to gain an understanding of the consequences which the space programme would have for society, and it was particularly curious about the *social* consequences (Bauer 1966: Ch. 1). At the start of the programme it was recognised that the extent of the consequences for society was not clear:

it has long been observed that innovations, particularly technical innovations, have consequences that ramify well beyond what was intended or anticipated. (Bauer 1966: p. 2)

Soon after this project was launched, it became clear that the information to answer this question was not available: because the consequences were not clear, a wide-ranging information system was needed. Moreover, there was no methodology or theory available on the basis of which the required information could be gathered. It was thus unclear what choices had to be made. The sociologist Raymond Bauer, who headed the project, designed a system of social indicators which were intended to provide this insight (Noll 1996, Rapley 2003, Land 2000, Cobb and Rixford 1998, Horn 1993).

At almost the same time, the Russell Sage Foundation, another US institute, proposed a project to measure social change in 1965, and the US Department of Health published 'Towards a Social Report' in 1969. This latter report was to explore the possibilities for systematically charting social developments in the United States. This was regarded as a first step towards a system of social monitoring. This report also gave a huge impetus to political and scientific initiatives aimed at social indicators research in the United States; the indicators used could serve as tools to direct policy (Miringoff et al. 2004, Cobb and Rixford 1998).

In this early phase the researchers working with social indicators were greatly influenced by the development of economic statistics. There were attempts to arrive at something comparable to the 'system of national accounts'. The unity, integration, coverage, routine data collection and standardised compilation and reporting of these accounts was seen as the pre-eminent prototype for the social domain (Vogel 2002). For a more detailed discussion of a relationship between the quality of life and national accounts, see Van de Ven et al. (1999).

The first initiatives for social reporting and the development of social indicators originated in the United States, but interest in social aspects of society spread quickly, also to Europe. In 1970 the OECD launched a social indicator development programme, which resulted in the publication of a list of indicators in 1982, followed by a 'compendium' in 1986 (OECD 1976, OECD 1986). One of the pioneers in Europe was Sweden. The Swedish system of social indicators was geared not just to influence policy, but also to feed the public debate on the population's wellbeing and to the interests of the scientific community (Vogel 2002).

In the Netherlands there were also ambitions for a widespread use of social indicators. In the foreword to the first Social and Cultural Report, the minister responsible for coordinating wellbeing policy, Harry van Doorn, stated that

one of the reasons for founding the SCP on 1 January 1974 was the government's desire that all those involved in policy formation in the area of social and cultural wellbeing (officials, politicians, directors, civil servants, students, or simply people with an interest in the issue) be reminded, at set times and right across their day-to-day worries, about the lot of those people for whom all the policy efforts are intended. (SCP 1974: p. 1)

He also commented that the problems in the area of wellbeing were 'so numerous and complex that unfortunately the perspective on people and their life situation is sometimes lost'. Information which could provide some of this 'perspective' was not

available, however. For that reason the SCP decided already in 1974 to develop, in close cooperation with Statistics Netherlands (CBS), a new interview survey: the 'life situation survey' (*Leefsituatieonderzoek*).

In the 1960s many politicians became convinced that society could be engineered – 'makeable' (*maakbaar*), as the Dutch say. This idea opened up a debate on the desired political objectives and how they should be applied in practice. When does a person suffer from deprivation? What do we understand by poverty? What is wellbeing? It also became clear that the definition of these concepts alone was not sufficient: to make social engineering a reality, sufficient and appropriate information had to be available to test whether the formulated objectives could be achieved. Through this information provision, the social indicators movement increasingly concentrated on influencing the political decision-making process and public debates (Vogel 1995).

However, at the end of the 1980s the influence of the social indicators movement began to wane in the United States, after the OECD did not follow up on the compendium published in 1986 and the US government insisted that social indicators should be presented as neutral statistics, without interpretation in other words (Cobb and Roxford 1998, Noll 1996). In this way the research into social indicators in the United States lost the backing of government: once again economic indicators were considered more important than social indicators. Another factor behind the decline was that no widely accepted method had been found on which to base the normative selection of indicators and to determine when a trend is good or bad. An additional problem was the absence of an agreed measuring unit for combining and comparing, the equivalent of money in the economy, as it were. Furthermore, researchers could not agree on the definitions of social indicators and raised questions about the usefulness of social indicators for policy. Could social indicators achieve more than just informing the public and policy makers about social conditions, and actually be used in the process of policymaking (Ekos 1998, Finn 1998, Cobb and Rixford 1998)? It was precisely this aspect, however, that was very important for some people, who saw information provision as crucial to political and public debate (Vogel 1995, Johansson 2002).

The same period also saw a decline in the specific interest in developing a coherent system of social indicators. The goal was no longer to arrive at a comprehensive and systematic description of social conditions. Instead, most researchers switched to developing indicators in subareas such as health and environment. A division also emerged between the United States and Europe. In the United States the interpretation of social indicators was virtually declared taboo, while the Europeans continued to consider this very important. Their view was that tables full of figures without interpretation did not contribute much to the explanation of social phenomena – one of the key reasons for using social indicators. What is more, in a number of European countries there continued to be interest in a systematic description of social aspects of society. Thus 'Social Data' (*Données Sociales*) continued to be published in France, as did 'Social Trends' in the United Kingdom, and in the Netherlands, the biennial 'Social and Cultural Report' (*Sociaal en Cultureel Rapport*). There were even some new developments, such as in Germany, where the 'Information Report' (*Datenreport*) was first published in 1983, in Italy, where 'Italy Today', an

abridged English version of the annual report on the country's social situation, was published from 1984 onwards, and in the Netherlands, where the SCP published not only the Social and Cultural Report but also the 'Social and Cultural Outlook' (*Sociale en Culturele Verkenningen*) from 1985. This new publication was launched at the special request of the Lower House of Parliament, which wanted to see a counterpart to the annual 'Macro Economic Outlook' (*Macro-Economische Verkenningen*) published by the Netherlands Bureau for Economic Policy Analysis (CPB).

Since the turn of the century new initiatives have been launched with the aim of providing systematic insights into developments within countries, both within Europe (Poland; Switzerland: 'Social Report' (*Sozialbericht*), since 2000, published every four years) and beyond (New Zealand, 'Social Report', since 2001). In the Netherlands the SCP has since 2001 published The Social State of the Netherlands in alternation with the Social and Cultural Report. The successor to the Social and Cultural Outlook, The Social State of the Netherlands, is more extensive and encompasses more domains.

Social monitoring

All these reports can be covered under the umbrella term 'social reporting': 'a more or less institutionalized collection and presentation of data which enable the evaluation of the life situation and wellbeing of the population and their changes over time' (Noll 2002b: p. 14). In this way they are fulfilling the role of a social monitor, in which a collection of indicators is presented and systematically described and analysed. The monitoring role has been called the most important and most successful application of social indicators. A social monitor highlights and describes changes and trends, provides information about social structures and processes, and outlines the conditions and consequences of social policy (Noll 2002b, Zapf 2000, Vogel 2002).

A social monitor supplies the public debate, the media and policy makers with information. A social monitor cannot go much further than providing information: whether something should be done with the information, and if so, what, should be left to social actors, policy makers and politicians (Johansson 2002). This role of social reporting is stronger in countries where the improvement of living conditions, especially for deprived groups, is regarded as a key policy task; social reporting is also important for the policy-making process, for analysing developments and for assessing progress on relevant policy objectives (Vogel 2002). The objectives of a social monitor can be formulated as follows (SCP 2001: p. 4):

- to provide an overview of the life situation of the population, on the basis of key figures in a number of socially and politically relevant areas;
- to provide systematic information on developments in various groups in society and the various regions of the Netherlands;
- on the basis of this information, to highlight social problems and disadvantages for the purpose of policy formulation and political action;
- to analyse the backgrounds, causes and consequences of these problems;
- to supply information on the extent to which policy objectives are being achieved.

With regard to the final objective, it must be said that expectations should not be set too high in the case of a broad-based monitor. The needs of policy makers for result measurements do not always square with a social monitor's informative value, especially in terms of establishing causal links between specific policy efforts and results (Noll 2002b). If policy makers want to know what effect a specific policy is having, a broad-based and general monitor will, as a rule, lack the depth of information required for such a purpose. However, that does not exclude the possibility of using social indicators in an analytical way, for instance by developing models and hypotheses about how society fits together and by then also testing these models (Cobb and Rixford 1998). What is beyond question is the importance of information being available on the basis of which social changes can then be determined. The paucity of data (which marked the start of the development of social indicators) has made way for a surfeit of data (Mootz 2006). In many EU member states there is now a wealth of information available. Recent initiatives are concerned mainly with country comparisons. Although country comparison is not the first priority of the life situation index, in the next paragraph we discuss a number of recent initiatives because these give an impulse to the monitoring of social changes in Europe. In that way they contribute to the development of social indicators, and what is more, they play a major role in the debate on how social indicators relate to each other.

2.3 Recent interest in social indicators

The period since 1990s has seen a growing interest in and a stronger policy commitment to the social sphere in many European countries. This can be attributed in part to the desire for benchmarking in the process of globalisation and European unification (compare Noll 2002b). The growing interest in the social domain is expressed through the formulation of policy objectives, for instance in the areas of poverty and social exclusion, whose implementation is then closely tracked. At supra-national level, in the European Union, more and more initiatives are launched in the social sphere. Improving living conditions, expanding social security, equal opportunities and promoting social inclusion are major pillars of policy-setting European treaties, such as the Maastricht Treaty and the 'Social Agenda' (drafted following the Lisbon summit in 2000). The significant political attention to these issues has contributed to the growing interest in social indicators. After all, information is needed to decide to what extent objectives are being achieved. But this also means that the global concepts used by politicians must be made concrete and measurable and that information must be gathered on them (Noll 2002b). The initiatives described below represent only a selection of the growing stream; but together they give an impression of the differences as well as the similarities in underlying principles and scope. In our view, they are also among the best-known and most influential initiatives.

International initiatives

Below, we describe eight examples of recent interest in social indicators. The first relates to 'human development'. This concept was developed by the United Nations, which has

been reporting on it since 1990 in the annual 'Human Development Report'. This initiative is based on the 'capabilities' approach developed by the economist Amartya Sen (UNDP 1990, Sen 1993). Human development is seen here as enlarging people's choices. The aim of this is to create an environment in which people can live long, healthy and productive lives. There are three basic dimensions of human development, each of which applies to all stages of development:

- to live a long and healthy life;
- to acquire knowledge;
- to have access to the resources required to have a reasonable standard of living.

When these opportunities are not available, other opportunities will also remain beyond reach. The human development approach also pays attention to the choices and opportunities people should have in other areas, ranging from political, economic and social freedom to opportunities to be creative and productive and to have self-respect (UNDP 1995). This approach thus establishes a clear relationship between the individual level and the social level, and links individual wellbeing to social characteristics such as freedom and equality.

In addition to looking at the choices people have, this approach also takes into account the use people make of the opportunities they have (the choices they make). This can be called the wellbeing level (UNDP 1990).

Every year the 'Human Development Report' devotes special attention to a specific topic, such as climate change in 2007, international cooperation in 2005, cultural liberty in 2004, and poverty in 2003. By now the United Nations Development Programme (UNDP) also publishes specific reports on a number of countries, especially developing countries. In 1997 the SCP made an attempt to break down the human development index for the Netherlands by province and 'COROP' regions (NUTS3 regions; 40 regional areas). Of all the provinces, Utrecht scored best and Friesland worst on the Dutch HDI (see SCP 1997: p. 77-99).

A second initiative has been launched by the OECD, picking up the thread left in 1986 with the compendium of social indicators. The report 'Society at a Glance: OECD Social Indicators', first published in 2001, contains a 'new list' of social indicators. The 'new' is evident, for instance, from the fact that the main domains within which the indicators are gathered are different in 2001 than in 1986. These domains are derived from the central question posed by the OECD, namely 'whether our societies are getting more or less unequal, healthy, dependent and cohesive' (OECD 2003: p. 3). The list contains a total of 45 indicators, which together cover a broad range. The indicators are divided into four underlying 'objectives of social policy' (OECD 2003: p. 11):

- enhancing self-sufficiency; independence is promoted by ensuring active participation in the economy and society (education, work);
- equity, which in this context refers to 'equity of outcome'; this is measured mainly in terms of households' access to financial resources (pension, social security, poverty);
- improving population health (life expectancy, health-adjusted life expectancy, spending on healthcare and old people in institutions);

- countering social exclusion and increasing social cohesion; this is an overarching policy objective in many OECD countries, but it is difficult to link concrete indicators to it; in the absence of definitions of the concepts, the report presents indicators which demonstrate to what extent citizens participate in the community where they live or which say something about family relations and relations between groups.

According to the OECD, the domains should not be separated too strictly. For instance, indicators which relate to equity cannot always be distinguished from indicators for self-sufficiency. The report is intended to meet ‘the growing demand for a concise but comprehensive quantitative overview of social trends and policy developments’ (OECD 2001: p. 3). Since 2004 the OECD has also organised ‘world forums’ on statistics, knowledge and policy, which are aimed at measuring the progress of societies.

The third initiative is concerned with the concept of ‘social exclusion’. In 2001 the European Commission asked a group of experts, headed by the economist Tony Atkinson, to draw up proposals for common social indicators for the EU member states in the area of social exclusion. The aim was to come to a multidimensional set of indicators in order to quantify the (also multidimensional) concept of social exclusion. The result was ‘Social Indicators: The EU and Social Inclusion’ (Atkinson et al. 2002). This report distinguished three types of indicators: a small set of lead indicators, a large set of supportive indicators, and a set of indicators which may differ from country to country in order to highlight specific issues. The proposed indicators related to different dimensions of social exclusion. Examples of the lead indicators were income inequality, long-term unemployment, the proportion of people who describe their own health as poor, and the proportion of people living in households which lack specified housing amenities or have specified housing faults (Atkinson et al. 2002: p. 196). This Atkinson study provided the basis for the establishment of the ‘Laeken indicators’ on social exclusion. These indicators now provide the basis for the measurement of social exclusion in the EU (for a discussion of and some critical comments on the Laeken indicators, see Jehoel-Gijsbers 2004 and Sharpe and Smith 2005).

The fourth initiative is the European Commission’s report ‘The Social Situation in the European Union’. Published annually since 2000, this report describes the quality of life of European citizens. Each year the report has a specific, politically relevant theme. In the 2007 report (published in 2009), the theme was ‘social cohesion through equal opportunities’, in 2006 the theme was the balance between generations in an ageing Europe, and in 2004 the social dimension of an enlarged Europe. Each report starts with a general description of the social situation in Europe with special reference to that year’s theme. It then outlines the situation in the EU member states in a large number of domains on the basis of 20 core indicators relating to ageing, migration, education, work, unemployment, income, social protection, life expectancy (in good health) and gender differences (European Commission 2004). Every year the Dutch government publishes a *Staat van de Europese Unie* (‘State of the European Union’), which sets out, from a Dutch perspective, the main changes in the EU, specifically a retrospective of the pre-

vious period and the agenda for the coming two years. As an Annex to this report, the SCP publishes the 'European Outlook' (together with CPB – the Netherlands Bureau for Economic Policy Analysis), which explores European trends and developments that are relevant to the Netherlands (one part of the report is mainly on public opinion, another part is thematic – in 2008, for example, on Europe's neighbours).

The fifth initiative is the EuReporting project. Led by the German research institute GESIS and originally financed by the European Commission, this project's main aim is to establish a scientific, theoretical framework in order to collect social indicators within Europe and to use this information to establish a monitoring system which should be usable in policy formation (Berger-Schmitt and Noll 2000). The theoretical framework is based on the various policy goals which the European Union sets itself and on the basis of concepts of prosperity.

Based on those two pillars the conceptual framework will be elaborated by clarifying the meaning of the various dimensions and their interrelations and by evaluating their relative importance in the European context. (Berger-Schmitt and Noll 2000: p. 7)

This framework provides a guide to selecting a number of 'life domains' within which indicators are selected – this is all done by the researchers themselves. The system of indicators contains twelve life domains, within each the dimensions and indicators deal with different aspects of the individual life situation. The twelve domains of the EuReporting project are population, households and family; mobility; leisure, media and culture; social and political participation and integration; education and training; labour market and working conditions; income, standard of living and consumption patterns; health; environment; social security; and public safety and crime. The focus is not only the life situation, but also social cohesion and sustainability; these together constitute major components of the quality of a society (Noll 2002b, Berger-Schmitt and Noll 2000). The ultimate aim is to create a time series on the basis of the best available data. And finally, the project also provides for the construction of synthetic, comprehensive indices which summarise the information of central wellbeing dimensions (there is a summary index for the total life situation constructed).

The sixth initiative is 'social quality' by the European Foundation on Social Quality (EFSQ), defined as 'the extent to which citizens are able to participate in the social and economic life of their communities under conditions which enhance their wellbeing and individual potential' (Walker and Van Der Maesen 2003). Although social quality is a characteristic of societies and is primarily about social relations, it can only be experienced at the individual level; which is why it has to be measured at that level (EFSQ 2007). The concept is fleshed out on the basis of two axes, with one axis running from the micro level to the macro level, and the other running from institutions to groups of citizens. The crossed axes create four quadrants, which are described with the terms 'socio-economic security' (having access to resources), 'social cohesion' (having access to social relations, based on identities, values and standards), 'social

inclusion' (having access to institutions and social relations in daily life), and 'social empowerment' (having access to social structures). These quadrants (and hence the domains and indicators within them) were selected on the basis of discussions within an international network of researchers. Eventually, 18 domains were distinguished, with 50 sub-domains and 94 indicators (Van Der Maesen et al. 2005).²

A seventh initiative is the one launched by the European Foundation for the Improvement of Living and Working Conditions (Eurofound). This EU organisation, established by the European Council in 1975, published a report in 2003 entitled 'Monitoring Quality of Life in Europe'. This report contained an overview of developments in the study of social indicators and the European policy agenda. This overview formed the basis for a conceptual framework which identified twelve domains of the life situation (Fahey et al. 2003).³ This document also provided a basis for a detailed survey in 28 European countries, the European Quality of Life Survey (EQLF), launched in 2003 (the second edition followed in 2007). The data are used as input for reports to track and analyse social developments in Europe (for example, see Rose et al. 2009). A basic principle is that these reports should be usable for EU policy makers.

The eighth and final initiative is the European Social Survey (ESS). Launched in 2002, this study is partly financed by the European Commission, partly by research institutes in the participating countries and partly by the European Science Foundation (ESF). The ESS concentrates more on opinions, values and attitudes, and less on the 'objective' situation. Thirty-one countries took part in the 2008 round. One of the ESS's major goals is to promote high-quality and methodologically rigorous research. The research is directed less at policy makers and more at the scientific community (O'Shea et al. 2001). The survey includes a basic questionnaire used in each round, and modules which may differ from round to round. The basic questionnaire includes questions on such aspects as trust in institutions, political values and social exclusion as well as on standard background characteristics such as age, household composition and education. The intention behind the rotating modules is to respond to topical scientific or political debates. In 2002 questions were asked about citizenship, involvement and democracy, as well as immigration; and in 2004 about family, work and wellbeing, health and health-care and the 'economic morality' of the free market. In 2006 the ESS dealt specifically with people's personal and social wellbeing and the life course of people, and in 2008 with welfare attitudes and ageism.

A special feature of the European Foundation and European Social Survey initiatives is that they provide for new data collection on the basis of interview surveys. The other initiatives rely on existing data. This is significant because, as a result of European integration, it is becoming more and more important to be able to access sound data in order to compare countries with each other. It is also important that the data is available at individual level, as only then can links be established at that level (making it possible, for example, to look at cumulative effects of not having a job, low income and bad health).

Local level in the Netherlands

In addition to the above initiatives, which are primarily aimed at comparing countries, the last few years have also seen a strong upswing – internationally – in the development of social indicators at local level. The attention here is above all on the social policy of a city or municipality, which leads increasingly to ‘broad’ local social reports.

This growing interest in social monitoring at local level has also been evident in the Netherlands. Regional authorities (i.e. the provinces and municipalities in the Dutch structure) increasingly want to have a coherent understanding of the state of their city and of developments in the social sphere. A key point in this context is that public authorities (at different levels of administration) are given management roles in ever more policy areas, without however having direct control and with information on the policy areas playing a key role in the implementation of policy. The growing interest in social indicators can also be traced to the greater demand for effect measurement, or at the very least the demand for accountability of policy implementation through performance checks and targets set in advance. What is more, municipalities want to compare themselves with other municipalities and/or the national situation (benchmarking). And they want to have a better understanding not just of a single area, such as housing or health, but of several areas at the same time. This is also true, for instance, for decentralised policy for certain target groups, such as youth policy. Geographical units can also be the subject of research. Thus the SCP was asked in 2004 to develop a social monitor for the countryside (Steenbekkers et al. 2006). That year also saw the publication of the first Randstad Monitor, which compares the Randstad region (the conurbation centred on Amsterdam, Rotterdam, The Hague and Utrecht) with other European conurbations (Regio Randstad 2004).

Most larger Dutch municipalities now publish one or more monitors. The big problem is the comparability between municipalities. Several initiatives have now been launched to remedy this situation, not only for subareas (an example is the *Richtlijn Sport Onderzoek* (‘Sport Research Guidelines’)), but also for broader monitoring systems. Examples of these are the *Handboek Benchmarking Nederlandse Gemeenten* (‘Dutch Municipalities Benchmarking Manual’), published by the Association for Statistics and Research (VSO 2008); the Urban Audit, a European project (<http://www.urbanaudit.org/>); and the *Atlas voor Gemeenten* (‘Atlas for Municipalities’; <http://www.atlasvoorgemeenten.nl/>). Most provinces and a number of municipalities use the phrase ‘social state of’ in the title of their social reports, which are also structured in a similar way to the SCP’s The Social State of the Netherlands. And the social monitors of six municipalities reserve a prominent place for the life situation index (for a comparison between a number of these cities, see Boelhouwer and Schyns 2005).

3 'Life situation' and other concepts

In the previous chapter a number of initiatives have been presented which share an ambition to say something about the social situation in countries or municipalities on the basis of social indicators. The way in which they do this differs, just as the indicators used differ. But on the basis of the history of social indicators, a number of points can be identified which recur time and again in the debates on the use of social indicators. These debates are important because they give direction to the choice of indicators and set parameters for the description of the life situation. In this chapter we consider the points at issue and take positions on them. The purpose of the life situation index is looked at, as well as the core concept of the life situation: why do we have such an index, and why is the term life situation used? Besides this term, there are many other terms in circulation which also relate to the social domain, such as social cohesion, social exclusion, and standard of living, although the interpretation of the concepts differs. The choice of domains and indicators seems to be informed, at least in part, by the choice of concept. Different indicators are used for social cohesion and social exclusion, but these also overlap to some extent. Furthermore, there is a difference in the 'neutrality' of concepts. Some have a neutral connotation, such as life situation, level of living and quality of life; others do not and have a positive or negative opposite, such as social exclusion, poverty and social cohesion and their opposites social inclusion, wealth and social segregation.

3.1 Why a life situation index?

Many reports published by the SCP deal with the life situation or aspects of it, although this term is not always used and is sometimes replaced by a comparable term such as wellbeing. In fact, the SCP has been reporting on the life situation in the Netherlands since the publication of *De sociale en culturele situatie in het Noorden van Nederland* ('The Social and Cultural Situation in the Northern Netherlands') in 1975 (SCP 1975). This is hardly surprising, because it is tasked to do so under the Royal Decree of 30 March 1973 establishing the SCP. This decree also stipulates that the SCP should report on separate sub-aspects and should 'produce a coherent picture of the social and cultural wellbeing in the Netherlands'.

The first product of this decree was the Social and Cultural Report (*Sociaal en Cultureel Rapport*), which has been published every two years since 1974. This report seeks to fulfil the 'coherent picture' requirement by devoting separate chapters to major policy areas (such as health, housing, social security and education).⁴ However, it usually only succeeds in doing so in the report's concluding chapter, where the various areas are linked to each other. In 1976, in a special section appended to the Social and Cultural Report, the first attempt was made to integrate several domains into a single measuring instrument. The explicit purpose of this methodology was to fulfil the task set in the Royal Decree (see Mootz and Konings-Van der Snoek 1990). Two problems arose with the formulation of the 'wellbeing index' (*welzijnsindex*): how to determine the wellbeing level, and how to

determine which groups lagged behind in relative terms – 'who is deprived?' (SCP 1976: p. 15). To solve the first problem, a number of core indicators reflecting a wellbeing situation were combined into a 'general wellbeing standard'. With this standard it became possible to identify groups which were deprived in some sense, namely those which scored low on the standard. Two years later the objective was broadened somewhat, by arguing that not only the relative situation at any one time was important, but above all changes over time. It was also assumed that the standard could be used to identify groups which were lagging behind (SCP 1978). This approach followed on from the tradition of social reporting emerging at the time in the social indicators movement (compare OECD 1982).

The overriding goal of the life situation index is to identify and describe social developments for the purpose of policy, more specifically social policy, aimed at preventing social disadvantages, and where they exist, to overcome them. The key point is the distribution of wellbeing in *relative* terms: do all groups profit when things improve, or do some groups lag behind, and if so, which groups (Boelhouwer 2002a). In summary, five objectives can be formulated – in addition to policy relevance – for the study of the life situation (Mootz and Konings-Van der Snoek 1990).

1 *To describe the life situation as a whole*

This objective follows directly from the Royal Decree and helps to paint the 'coherent picture' of social and cultural wellbeing. With this objective the research is distinguished from research which focuses exclusively on different domains of the life situation. What is more, this fits in with the approach to dealing with social problems, which are increasingly multidimensional. An improvement in liveability is not just about tackling crime or litter, but also about social cohesion. In chapter 6 we will examine in greater detail the question as to whether it makes sense to devise a single index of divergent indicators and whether they are properly combined.

2 *To assess this situation in terms of positive and negative*

A description of the life situation becomes more meaningful if statements can be made in terms of positive and negative (or good and bad). Although the term 'life situation' itself is neutral, we want to identify groups which are lagging behind. To decide which groups are better off than others, the index will have to include indicators which allow this distinction to be made – and therefore have to be normative.

3 *To create a time series to observe changes*

Developments can only be illustrated properly with a time series, that is, when data are available over a number of years. In addition to identifying differences between population groups, it is important to determine whether these differences remain the same or are widening or narrowing. Of course, the significance of a time series applies not just to an index, but to all individual indicators included in it.⁵

4 *To track the development of sub-indicators over time*

To gain an initial impression of the causes of changes in the life situation, it is necessary to have an insight into the development of sub-domains and sub-indicators. What is more, other sources and indicators will usually also be required to conduct a detailed analysis of what is happening.

5 To place the description of the life situation in a broader framework of background information The life situation index serves as a kind of social ‘thermometer’, and has a highlighting and descriptive function. With the index we can also say something in an evaluative sense about the effects of social policy (AEF 2002). The index then counts as an outcome indicator, in which an improved life situation is regarded as the overall result of successful social policy.⁶ Some caution is required with this line of reasoning, however, because it is difficult to test the causal connections on which this outcome is implicitly based. And in any case other factors also play a role, such as the opportunities available to a person and personal preferences. In chapter 5 we will consider the broader context of the life situation index, and will then also look at a number of causal relationships.

3.2 What is the life situation?

Since 1976 the aim of the research into the life situation has remained the same, but the name of the concept has changed. Initially the reference was to ‘the distribution and concentrations of wellbeing’; later this changed to ‘wellbeing’ and ‘social and cultural situation’ and then to ‘life situation’. The name of the index changed accordingly: ‘well-being standard’ (*welzijnsmaatstaf*), ‘measure for the social and cultural situation (*maat voor de sociale en culturele situatie*), and now ‘life situation index’ (*leefsituatie-index*).

Language plays a major role in the choice of a concept. Does everyone understand what is intended? This is even more the case when the concept is used in a debate that is also being conducted at international level. In Dutch, and in the Nordic languages, for example, the equivalent of the English term ‘welfare’ also covers ‘wellbeing’, so that it has both an objective component (‘level of living’) and a subjective component (‘quality of life’, see Allardt 1993). It is not always easy to find good translations for English terms without causing confusion about the precise meaning. Moreover, a concept may be interpreted in different ways even within the same language. This is true, for instance, for the English term ‘quality of life’, which is used by supporters of both the subjective and objective approaches.⁷ In Dutch this applies to the term *welzijn* (‘wellbeing’). Here too objective and subjective elements cut across each other: *welzijn* relates to life in general (being well), but also has a strong subjective connotation (in the sense of happiness). The connotations of a concept are sometimes more important than its precise definition. This is the case for the Dutch term *leefbaarheid* (‘liveability’), for instance. There are many different definitions and operationalisations of this term, but there is also general agreement on what is meant by it.

At the start of the life situation research the SCP opted for the term wellbeing (*welzijn*), because this gave a clear signal that the intended index was to be a counterpart to the economic indices. It also showed that the concept related to a broad range of issues, in that it was concerned not only with health, but also with participation and housing (see also Breda et al. 1997 and Hortulanus et al. 1997). In Belgium this was also made clear in the definition:

wellbeing is not only the extent to which a person’s more ‘basic’ needs such as food, clothing, health, shelter and a good living environment are met, but also the extent to which the person

participates in social life and shares its culture and values, and can develop into a socially strong individual. (Breda et al. 1997: p. 8)

In the Nordic countries the focus was on the standard of living. The Nordic 'level of living' approach is aimed at objective indicators which say something about the resources available to people. This is reflected in the definition of level of living: '*the individual command over resources in the form of money, possessions, knowledge, mental and physical energy, social relations, security and so on, through which the individual can control and consciously direct his living conditions*' (Johansson in Erikson 1993: p. 72, italics in original). A third, closely related approach is that adopted by the economist Amartya Sen, who starts from 'capabilities', that is, the opportunities open to people. Sen talks of 'quality of life to be assessed in terms of the capability to achieve valuable functionings' (Sen 1993: p. 31). It is on the basis of this idea that the United Development Programme (UNDP) developed the concept of human development (see UNDP 1990: p. 10).

The above-mentioned concepts can be found in the international literature under the denominator 'quality of life'. But in many cases the definition is not very clear:

Among the most inconsistently used terms within the human sciences is that of 'quality of life'. Indeed, the words 'quality of life' are used with such abandon that readers must delve deep into the text to ascertain the intended meaning. (Cummins in Rapley 2003: p. 27)

Incidentally, this is also the case for terms such as 'happiness' and 'wellbeing'. It seems that more often than not the definition is based on what is being researched, rather than research being undertaken on what has been defined. After all, many definitions relate to domains which are included in the research (see the Belgian definition of wellbeing), or to the demands being made of the indicators (see Sen's definition). At the time of the social indicators movement the OECD followed the same procedure when developing social indicators for 'social wellbeing', namely first defining major domains, in the hope that a definition would flow from this. It proved a vain hope:

At the time of its completion, the list of social concerns was considered as 'a step towards a workable, albeit partial, definition of what is meant by 'quality of life'. [...] The social indicators as they have now been developed, ranging from broad specifications to statistical definitions, should be viewed as a step toward the measurement of the quality of life. (OECD 1976: p. 8)

It must be said, however, that although a clear definition is lacking, there is a consensus that the concept has a multidimensional character (Rapley 2003, Hagerty et al. 2001).

The initial SCP research was aimed at the 'distribution and concentrations of wellbeing', with wellbeing defined as follows: 'all the aspects considered favourable for the life situation' (Mootz and Konings-Van der Snoek 1990). Unfortunately, this definition is not very illuminating, for what precisely is the 'life situation' here? Because wellbeing has a

strong connotation with happiness and contentment, the term was replaced in the mid 1990s by life situation.⁸ While this concept was first part of the definition of wellbeing, it was now recast as the object of the research. But this time no definition was put forward. The concept apparently had to speak for itself. Or perhaps the reporting was supposed to provide clarity. In that case the definition might be derived in some sense from the operationalisation: in other words, the domains and indicators 'define' the concept. Also relevant in this approach is that in most cases there is a general idea of what is meant, that on the basis of common sense it is assumed that the interpretation of a concept is clear enough.

In light of the above discussion and the lack of clarity in existing definitions, it is difficult to formulate a good definition of wellbeing, quality of life or life situation. To circumvent this problem, some researchers have decided not to give a definition at all. After all, the ultimate aim is to provide an insight into the life situation and into developments in it. From this perspective, providing a definition is less important than providing the best possible operationalisation of the life situation. As mentioned, this was also the OECD's strategy in response to the lack of a definition of social wellbeing. The European Union's search for indicators for social inclusion did not include a definition either (Atkinson et al. 2002).

Nevertheless, it is still possible to say something about what in broad outline is meant by the life situation. Thus the concept can be broken in two parts: 'life', which relates to living conditions, and 'situation', which relates to a state of being. Thus the life situation is about the state of a person's life, which makes clear that the concept is wide-ranging. This description also makes clear that it is not concerned with opinions and satisfactions. The concept of the life situation has a descriptive meaning, but not an evaluative meaning. This creates an affinity with the term level of living from the Nordic approach. This approach assumes that people can dispose of resources to shape and influence their own living conditions. The term living conditions shows that the approach is multidimensional: it is not about a single condition, but about several, even at the same time. Starting from resources also shows explicitly that people have a choice: what do people do with the resources at their disposal? It is also clear that the living conditions are determined, in part at least, by the opportunities which people have. A disadvantage is that the term level of living is emotionally linked to the material side of life. It also puts a strong emphasis on the resources, while the consequences of the choices which people make are neglected to some extent. This argues for choosing another term, in this case, then, 'life situation'.

And finally, the life situation relates to both prosperity and wellbeing, and as such combines both material and non-material aspects (see also Noll 2002a).

On the basis of the above considerations, we come to the following definition: the life situation is the whole of individual living conditions which relate to prosperity and wellbeing.

3.3 Principles for the indicators of the life situation

We conceive of the life situation here as a broad and multidimensional concept. But exactly what dimensions or domains are we concerned with? Because of the absence of a generally accepted theoretical framework, we cannot base the choice of domains and indicators on such a framework. The final choice of domains and indicators will be considered in the next chapter. In this paragraph we look at the principles for the indicators. We are not so much interested in the general principles which indicators have to comply with, for instance that they should be measurable or reliable. That goes without saying. Here, however, we are particularly interested in the principles which are relevant to the life situation index.

Box 3.1 Functions of indicators

Indicators can fulfil three functions: they can record, explain and explore. The indicators of the life situation index should certainly be able to record. After all, the aim of the life situation index is to highlight social problems for the purpose of policy. It is also possible to use the individual indicators to start explaining differences. Fulfilling the explorative function is more awkward, because the life situation index consists of policy-relevant indicators, with changes over time being particularly important. This acts as a constraint in terms of including indicators which yield new insights. Then again, the life situation index can uncover a development which is unexpected for a certain social group.

In the history of social indicators a number of points invariably come to the fore in the discussions on choosing indicators (see the more detailed discussions in Berger-Schmitt and Jankowitsch 1999, Noll 2002a, Vogel 2002, Rapley 2003, Hagerty et al. 2001, Sharpe and Smith 2005, Diener and Suh 1997, OECD 1982, Atkinson et al. 2002). On the basis of these discussions, it is possible to distinguish five principles for the indicators. Below, the first three are described short, the other two in somewhat greater detail.

1 Indicators must be interpretable in terms of positive and negative

Indicators in the life situation index must be connected with the life situation, and in such a way that it is possible to derive explicitly or implicitly from the indicators whether they make a positive or negative contribution to the life situation. Only then can the indicators be used to highlight an improvement or deterioration in the life situation. This principle is derived from one of the index's overall objectives, namely that it must also be interpretable in terms of positive and negative (see paragraph 3.1).

2 Indicators must be general, not specific

The indicators must be of a general nature. That is to say, they must apply to the whole population, not exclusively to specific groups, such as young people, old people, people in work or people living in big cities. Incidentally, this does not exclude the possibility that specific groups may have specific problems (SCP 1978). However, it is difficult to compare old people with young people when separate indices, with different indicators

too, have been constructed for both groups. In order not only to make statements about the life situation in the Netherlands as a whole, but also to compare groups with each other, the choice has fallen on a single measuring instrument which applies to all. It is an inevitable side effect of this choice that no justice can be done to specific problems of specific groups.⁹ Of course it is still possible to use not only the general index but also specific indicators to focus on one group or another.

3 *The unit of measurement must be the individual, not a municipality or a country*

A third principle can be derived from the fact that the focus is on the life situation of individuals, not of a municipality or a country. The selection of the unit is highly dependent on the purpose of the research: country comparisons usually rely on country characteristics, while a study of the life situation within a country usually starts from the individual life situation. This means that the indicators have to be determined at individual level.

The advantage of starting from the individual life situation is that each preferred aggregation level can be analysed. A requirement with regard to the *data* is linked to this: the relationship between different indicators of the life situation can only be clarified at the individual level if all the necessary data are available per individual. This can only be achieved with micro data, that is, surveys or recordings, on condition that all required indicators are included in the same datafile. Consequently characteristics of countries and neighbourhoods only appear as background information. Sometimes percentages or averages are used for indices. The great advantage of this is that different data sources can be used together. But because the information is available at aggregated level, insights into the relationships at individual level are no longer possible.

The debates in the literature on the next two principles – in short, objective versus subjective, and opportunities versus realisation – are rather fiercer, which is why we consider them in somewhat greater detail below.

4 *Indicators must be objective, not subjective*

Which is better: an objective description of the *situation* in which people find themselves, or a subjective description of people's *opinion* of their situation? This key question divided the social indicators movement for a long time. The first, more objective, approach is used in the Nordic countries in particular. The key concept here is the standard of living, or level of living. This approach builds on the work of the economists Jan Drewnowski (1974) and Richard Titmuss (see Erikson 1993). Drewnowski's central argument was that wellbeing consists of objectively identifiable needs, and Titmuss developed the idea that the standard of living relates to the availability of resources. What matters, then, are objective indicators, or life opportunities and their determinants, not the evaluation of them (Erikson 1993). In the Nordic approach the indicators are concerned not only with outcomes, since these are determined in part by personal preferences, but also with the resources with which the outcomes can be influenced. This approach is informed heavily by the usefulness for social policy, in which the welfare state and the equitable distribution of prosperity and wellbeing are major issues (Schnabel 1983, Vogel 2002). After all,

policy may be able to influence the equitable distribution through key resources such as income, education and employment. Because policy relevance is important for the life situation index, the index must consist of descriptive indicators which relate to outcomes.

Some criticisms can be made of this 'objective' approach. For instance, there is no consensus on essential choices. Given the lack of objective criteria, it is not clear which dimensions should be selected and which developments are good or bad (Noll 2002b). Consensus on these aspects is difficult, probably even more so in the case of the selection of specific indicators within dimensions.

A second criticism is that objective indicators take little or no account of what people themselves regard as important; instead, the researchers or policy makers decide what is important. Consequently the supposedly objective indicators are not truly objective, because the researchers decide what is important. A normative element thus inevitably creeps into the objective indicators: there is no such thing as a value-free indicator (Cobb and Rixford 1998, Diener and Suh 1997, and Booysen 2002). In fact, one could go one step further and argue that survey data are always subjective because respondents answer the 'factual' questions themselves. Finally, there is a quite large grey area where it is difficult to determine whether an indicator should be classified as subjective or objective. An example is the measure for psychosomatic complaints ('VOEG-score' in the Netherlands), which was included in the life situation index for a while and is not really an objective indicator for health. This makes the distinction between objective and subjective rather artificial. For that reason we will henceforward use 'descriptive' (describing the situation) instead of 'objective' and 'evaluative' (evaluating the situation) instead of 'subjective'.

The evaluative approach is the opposite of the descriptive approach. It focuses above all on subjective wellbeing, sometimes called quality of life, which is less felicitous because this concept can cause considerable confusion (not least because it is also used by the objective approach). This approach, originally Anglo-Saxon, defines wellbeing in terms of satisfaction of needs. Only individuals can give an opinion on their wellbeing. Happiness, contentment and satisfactions are the overriding goals to aim for (Berger-Schmitt and Jankowitsch 1999, Layard 2005). This approach is rooted in the tradition of utilitarianism. Supporters of this approach argue that only individuals themselves can decide on their wellbeing: they are the only ones who are experts on the matter and in a position to report on it (Delhey 2004). Consequently the overriding goal of society should be to increase individual happiness.

What is meant by 'quality of life' is also a point of discussion in the evaluative approach. Is it satisfaction or happiness? Should the approach be cognitive or affective and emotional? And what exactly constitutes subjective wellbeing? There is no consensus on these questions. Some researchers distinguish between life satisfaction, pleasant affect and unpleasant affect (with 'affect' referring to moods and emotions) (Diener and Suh 1997), while others put the absence of distress first and link this to contentment and positive affect (Argyle in Berger-Schmitt and Noll 2000). Furthermore, within the

debate on subjective wellbeing a distinction can be made between satisfaction with life in general versus satisfaction with sub-domains such as health and housing (Veenhoven 1996). And cognitive evaluations can be distinguished from affective evaluations, with the cognitive dimension measured through contentment and the affective dimension through happiness (Glatzer in Berger-Schmitt and Noll 2000).

As with the descriptive approach, some criticisms can be made of the evaluative approach (see Cobb (2000) for a more detailed discussion of the criticisms, and e.g. Veenhoven (2002b) for a response to most of them). For instance, the degree of contentment is influenced, at least in part, by people's frames of reference, desires and aspirations (Layard 2005, Breda et al. 1997, Pommer and Van Praag 1978, SCP 1978). In that case the level of happiness or contentment will be relevant above all as a measure of adjustment to the existing situation, and is thus highly individually determined. This also makes it very difficult to analyse developments. If people are more satisfied now than in the past, is that because their situation has improved or because they have adjusted to their situation to some extent? Moreover, all this is more about relative aspects than absolute aspects. In other words, someone who earns little does not mind that much if other people earn even less (Layard 2005).

There are other criticisms of the use of evaluative indicators, such as the question whether people are able to distinguish between short-term feelings and long-term conditions, whether emotions can be quantified on an absolute scale, and whether happiness or any other reported emotion can be regarded as an evaluated situation. There may also be a difference between what people say they want to do and what they actually do. And it has also become clear that the responses to questions on contentment and happiness vary with the order of the questions posed, the time of day, the weather conditions and the respondent's mood (Schwartz and Strack in Alexandrova 2005: p. 203).

And finally, it is difficult to identify which factors will increase happiness. Studies show that differences *between* countries can be explained (by differences in income, democratisation, social security etc), but that differences *within* countries are far more difficult to explain, although it is known that personal characteristics (such as a positive self-image) and having a partner and friends contribute to satisfaction with life (Veenhoven 2002b, Layard 2005). This makes it more difficult to mark the points of departure for policy making. After all, the factors which influence happiness are primarily ones which concern the individual and not the government (Boelhouwer 2002b). Incidentally, it is difficult to see how government policy can be geared to individual wishes, since, almost by definition, it cannot be formulated in general terms (compare Van der Veen 1993: p. 35).

On the other hand, there has been growing political interest in evaluative indicators in recent years. Thus the Wellbeing Measurement Act was adopted in Canada in 2003, which is intended to develop measurements on the health and wellbeing of the country's citizens, communities and environment. Bhutan has perhaps gone furthest, by replacing gross domestic product as the ultimate policy objective with 'gross national happiness' (see <http://www.grossnationalhappiness.com/>). All government policy is aimed at

increasing the happiness of Bhutan's people. The British and French governments have also commissioned studies into how happiness and contentment can be given a place in the policy-making process (Stiglitz et al. 2009). Some researchers even argue that it is impossible to pursue social policy without evaluative indicators (among other things because social policy is also aimed at matters of mentality; objective indicators do not inform policy makers about public preferences, while happiness is the final output criterion; see Veenhoven 2002a).

In recent years there has been more policy-based interest in evaluative indicators in the Netherlands as well. Although until recently most government policy was formulated in terms of objective goals, since the terrorist attacks in New York in 2001 and several national tragedies (such as the murder of Pim Fortuyn in 2002 and the café fire in Volendam in 2001), politicians have been talking explicitly about opinions and perceptions (Boelhouwer and Roes 2004). Especially public safety perceptions now play a major role in policy making (Ministry of Justice 2007).

We can conclude, then, that increasingly both the descriptive approach and the evaluative approach are important for policy making. In the scientific debate the initially sharp opposition between the two approaches has also become blurred over the years.¹⁰ Increasingly both descriptive and evaluative indicators are considered, not only in social reports and monitoring systems, but also in the conceptualisation and operationalisation of quality of life (Noll 2002a). By now the inclusion of both descriptive and evaluative indicators is a more or less accepted approach in the study of the quality of life. That does not mean to say, incidentally, that all discussion has stopped, but this is now more about priorities than principles.

These days the main issue tends to be which indicators should carry the greatest *weight*, rather than what type of indicator should be chosen. Generally speaking, the preference for one type of indicator or another depends heavily on the aim of the research. In the case of the life situation index the aim is to inform policy making and to feed the public debate on social changes (Boelhouwer and Roes 2004). This suggests that the emphasis should be on descriptive indicators, on describing a situation rather than evaluating it. It is not about whether people are satisfied with their housing situation, but about the type of dwelling they live in. Where evaluative indicators can be used is to 'colour in' the objective situation, and vice versa (compare Finn 1998). It is possible, for instance, that a situation which may be deemed bad objectively is not perceived as such by those directly affected. A person may live in a dilapidated house, but may be satisfied with this; perhaps because his parents had lived there or because his neighbours live in even worse accommodation. By the same token, evaluations are often not very revealing if the objective circumstances are not known. An example is two people feeling cold, one because he has no heating and the other because he has chosen to go skiing; the first person's life situation may be bad, but the second person's is certainly not (taken from d'Irbane in Hagerty et al. 2001).

Another advantage of studying both descriptive and evaluative indicators is that it offers a means of examining the relevance of descriptive indicators for the respondents. Do they attach importance to these indicators? Evaluative indicators can also be used

in the assessment of observed changes (deciding whether they are good or bad), in the evaluation of policy and in the formulation of social objectives (Ekos 1998, SCP 2001: Ch. 1).

In the light of the outcome of the discussion about descriptive and evaluative indicators, we include both in the conceptual framework we use when describing the life situation. People's opinions about parts of their life situation and about their lives are included in the conceptual framework, but the life situation index as such is a descriptive measuring instrument. Since the life situation index has to be policy-relevant, it consists of descriptive indicators. The precise relationship between the descriptive indicators of the life situation index and the evaluative indicators used in association with it will be discussed in chapter 5.

5 Indicators must be aimed at output: realised wellbeing instead of social opportunities

The final major point of discussion, particularly within the approach which focuses mainly on descriptive indicators, relates to the choice between social opportunities on the one hand and realised wellbeing on the other. The approach which starts from social opportunities chooses indicators which say something about resources to improve the life situation, while the approach which starts from realised wellbeing consider the life situation on the basis of output indicators (Breda et al. 1997, Noll 2002a). Also in terms of the issue which of the two approaches should be given centre stage, it is important to bear in mind the aim of the life situation index, namely to provide policy-relevant information. A major element of social policy is the influencing of individual or collective resources (Vogel 2002). The government does this by, for instance, redistributing incomes and helping citizens to obtain incomes. In that way social opportunities constitute an essential element of the conceptual framework. But social policy in most welfare states is not restricted to offering people opportunities; it also formulates objectives in terms of realised life opportunities. The indicators of the life situation index are concerned with such opportunities; or to put it differently, what matters are output data, 'aspects which can be regarded as realised life opportunities as results of policy efforts and other factors' (Mootz and Konings-Van der Snoek 1990: p. 9). In short, what matters is not the number of doctors, but people's state of health, not the number of new-built homes, but people's accommodation.

The debate on social opportunities versus realised wellbeing received a new impulse with the capabilities approach developed by the economist Amartya Sen. In this approach, capabilities are the opportunities which people have to shape their own lives. In other words, capabilities are 'real opportunities for a person to 'do something' or 'be someone', or to put it differently, the opportunities which a person has to develop' (Robeyns and Van der Veen 2007). This may involve such divergent activities as going to a film, reading a book, being in good health or being socially integrated. These opportunities are reflected in realised capabilities, what Sen calls the 'functionings' (Sen 1993). The level of wellbeing is determined on the basis of the people's opportunities, the 'real achievable quality of life'; which is slightly different from the *effective* quality of life (or the 'functionings'; see Robeyns 2004). The crucial point of this approach is that individual wellbeing is not about the functionings which are eventually achieved. This

because the theory also recognises that people have different values and preferences and therefore attach different weights to the various functionings.¹¹ But these values and preferences are a given, not a subject of research: the point is to see whether people have the opportunities – the capabilities – to lead the lives they aspire to (Berger Schmitt and Noll 2000).

Sen thus opts for the social opportunities approach, and commits himself quite strongly to it, arguing that 'the state may have reason to offer a person adequate opportunities to overcome hunger, but not to insist that he must take up that offer and cease to be hungry' (Sen 1993: p. 36). What matters above all are the opportunities which people have; whether they use them is their own choice. This approach builds a bridge between the descriptive and evaluative approaches: it is about the opportunities which people have, but they themselves decide to what extent they use them. Sen's capabilities approach differs from the evaluative approach in that it does not regard happiness as the most important value, but as only one of the many values which a person may cherish. And it differs from the descriptive approach in that Sen regards resources as supports for and influences on the capabilities (Sen 1993).

One problematic aspect of the capabilities approach is that it makes it very difficult for the government to say anything meaningful in general terms about the life situation of groups. After all, policy must focus only on opportunities or capabilities (income, education, knowledge, social networks, social skills etc), not on what happens with them. Consequently policy commitments to general goals such as 'improving the life situation', 'reversing social exclusion' or 'fighting social deprivation' are only appropriate through the provision of opportunities.

There is also the issue of the basis on which the opportunities or capabilities are determined. Sen defines quality of life as 'the capability to achieve valuable functionings' (Sen 1993: p. 31). Since these are different for each person, it is quite possible that the capabilities required by one person are very different from another's. Moreover, as mentioned, social policy in most welfare states is not restricted to offering people opportunities; it also formulates objectives in terms of outcomes, or realised life opportunities. For instance, in the Netherlands the government offers citizens not only an equal opportunity for adequate housing, it also provides citizens directly or indirectly with a high-quality and affordable home (SCP 2001: Ch. 1). What is more, government policies are also concerned with the choices which people make. The government believes it is important that people engage in sport, visit the theatre or participate socially. This is most evident when the government extends subsidies (to cultural institutions and sports organisations, for instance); but it is also true in the health sphere, where the government wants people to make healthy choices (Tweede Kamer 2005). All these efforts are also about promoting the wellbeing, or improving the life situation, of the population. Furthermore, the government acts supportively to prevent social disadvantages from developing, and where these do develop, to compensate them as much as possible.¹² Realised wellbeing is thus an important part of social policy. It is not only a question of people having opportunities, but also a question of them using these opportunities. For this reason we choose for the life situation index only such indicators which

relate to realised wellbeing (for a detailed discussion of the relationship between the life situation index and the capabilities approach, see Robeyns and Van der Veen 2007 and Boelhouwer 2007a).¹³

3.4 In summary

In the literature one can find many different terms under the broad banner of 'quality of life'. In this study we have opted for 'life situation'. The discussion on the definition of the life situation showed that the concept is a wide-ranging one, that it includes several dimensions. The life situation relates to a state of affairs and to both material and non-material aspects.

The overriding goal of the life situation index is to identify social developments for the purpose of policy, more specifically social policy, aimed at preventing social disadvantages, and where they exist, to overcome them. In addition to policy relevance, five objectives can be distinguished:

- 1 to describe the life situation as a whole;
- 2 to assess this situation in terms of positive and negative;
- 3 to create a time series to observe changes;
- 4 to track the development of sub-indicators over time;
- 5 to place the description of the life situation in a broader framework of background information.

The indicators of the life situation must fulfil five criteria, in addition of course to the usual criteria applying for indicators in general (such as measurability and reliability).

The indicators must:

- 1 be interpretable in terms of positive and negative;
- 2 apply to everyone;
- 3 be measured at the individual level;
- 4 be descriptive;
- 5 be focused on output and realised wellbeing.

The description of the life situation takes place in a broader framework of background information. This information does not need to comply with the above principles. For instance, they also include opportunities available to people (resources which are regarded here as input indicators) and evaluative indicators.

4 Domains and indicators for the life situation

This chapter describes the content of the index: what domains and indicators have we chosen? The basic principles set out in the previous chapter are important in this respect because they demonstrate that the life situation is described in policy-relevant, non-value free terms. However, they do not provide much to go by in the actual choice of indicators and domains.

4.1 Approaches used when choosing domains and indicators

Ideally, domains and indicators are chosen on the basis of a theory; however, we have already seen that there is no generally-accepted theory for choosing domains and indicators for the life situation. Nevertheless, we could also allow such a theory to 'come into existence' from the data: we would then start to collect descriptive data, following which we would devise domains in order to ensure an appropriate categorisation of the data, and finally, we would arrive at an exhaustive analysis of social change (Sheldon and Freeman, in Cobb and Rixford 1998). In this respect, it is important to clarify whether there are any interrelationships, and if so, the nature of such interrelationships: is there any question of cause and effect? Some people maintain that this would give rise to a theory because causal pathways reveal the nature of relations between the indicators (Hagerty et al. 2001). According to this line of reasoning, we may regard the conceptual framework used when describing the life situation index as a theory for the life situation. After all, this framework contains a description of the relationships between the index, the backgrounds, the environment and satisfactions. However, even if we do base a theory on data in this way, we still do not obtain an answer to the question of *what* data should be compiled, and on what basis the choice ought to be made.

One line of approach would be to choose the indicators in accordance with the targets set by politicians and policy. These targets can be inferred from policy documents (see SCP 2005, and Berger-Schmitt and Noll 2000, who adopted this approach when devising a European social indicators system). A major drawback to this approach is the risk that indicators are chosen solely in response to matters of (political) importance *at any point in time* and to political priorities that may vary considerably each time that new policy-makers (governments) come to power. If we adopt the approach described above and political priorities subsequently change, the indicators previously chosen may no longer have a great deal of validity. In that case, we would have to choose new indicators, which would make it impossible to build up a time series. As a result of this drawback, the Scandinavian approach also includes domains and indicators that are not directly politically relevant, but constitute supplementary information (like social contacts, see Vogel 2002: p. 96).

Another possibility is to consult experts or the public on the choice of domains and indicators (Cobb and Rixford 1998). This seeks to turn the choice of indicators into a more or less democratic procedure and to strive for consensus. However, it frequently transpires that this does not achieve the desired result, because it gives rise to the idea of

non-normative indicators, and thereby ‘tends to make indicators politically conservative in the sense that they pose only a slight challenge to the status quo’ (Cobb 2000: p. 24). A third option would be to choose indicators that are statistically closely interconnected, by performing empirical analysis (Booyesen 2002). However, if this is not based on any conceptions, it would be more likely to result in good luck than in good management when seeking indicators. In view of this, it would be better to examine the influence on or the relationship with a proxy for what we are measuring, such as happiness, satisfaction or income. It would be even better to apply a central concept as a first (and not unimportant) reference point for choosing domains and indicators (see also Pattanaiik 1997).

4.2 Domains for the life situation

Preference was given to this latter option in the life situation index: all of the domains and indicators to be chosen had to relate to the central concept: the life situation. Since we decided to give the concept a broad-based substantiation as well, an additional step had to be taken to enable us to make an actual choice of domains. When taking this step, the SCP used the prevailing national and international literature at that time, which partly arose from discussions within the OECD, as a basis. However, our ultimate choice was partially pragmatic as well, based on the plausibility and face validity of a domain. The point here was whether it would be likely – in the researcher’s view – for a given domain to form part of the life situation, and what this should generally be taken to mean. This procedure would not enable us to assess whether we had made the right choice until *afterwards*: such would be the case if the results were (statistically) acceptable and plausible (SCP 1976, SCP 1988).

In addition, the choice of domains and indicators is prompted by the policy relevance that they must have, as we explained in the previous chapter. When making this choice, it is not so much specific policy documents that are taken into consideration, but rather the welfare state as such, which may be regarded as a guideline; in a welfare state, the government is primarily responsible for a number of basic facilities such as health care, education, job opportunities and a social security system.

This resulted in a choice of six domains in 1976, which combined to form the life situation index:

- 1 disposable income;
- 2 work;
- 3 free time;
- 4 education;
- 5 housing;
- 6 health.

Sixteen indicators were subsequently selected within these domains (SCP 1976). The choice of indicators was partly based on the prevailing national and international literature at that time. Moreover, the SCP took part in international scientific discussions, particularly those held by the OECD. These discussions led to a list of social

concerns being published by the OECD in 1973. The list was compiled as a result of a discussion among ministers in OECD countries, during which it was agreed that (economic) growth is a *means* of creating improved living conditions. In order to obtain an understanding of this, a special working party on social indicators was set up whose aim was to develop a set of indicators that were 'of sufficient importance, present or potential, to the governments' (OECD 1973: p. 3; for the history of this working party, see also Oudhof and Ankersmit 1999).¹⁴

The basic principle was that the social concerns must be of importance to government policy, and must relate to objectives and not to means (OECD 1973). These concerns were intended to provide a general broad-based outlook on wellbeing, which could only be achieved by assuming broad value judgements on what was important with respect to wellbeing. This resulted in a division of wellbeing into eight domains, which included 24 fundamental concerns that were in turn divided into sub-concerns. The eight umbrella domains that the OECD arrived at are as follows:

- 1 health;
- 2 education;
- 3 employment (and the quality of work);
- 4 time and leisure;
- 5 command over goods and services;
- 6 the physical environment;
- 7 safety;
- 8 social participation.

The social environment in which people live was also added to this list at a later date (in 1976).

It has already been suggested that the choice of domains could also be based on government policy. One might contend that the defining of these policy objectives would automatically give rise to a conceptual framework: after all, the choice of indicators follows on from these objectives. Although we want the indicators to be policy-relevant, this approach can result in strongly-fluctuating indicators depending on the political situation. This can be obviated by referring to the Constitution, which provides a more stable basis for areas in which the government should play an active role. There are a number of objectives in the Constitution that are relevant to the life situation, for example in Article 22:

- the authorities shall take measures to promote public health;
- it shall be the concern of the authorities to provide sufficient living accommodation;
- the authorities shall create conditions for social and cultural development and for leisure activities.

Other articles deal with the concern to be borne by the government with respect to:

- providing sufficient employment (Article 19);
- enhancing the socio-economic security of the population and achieving the distribution of wealth (Article 20: this also includes the right to social assistance and social security);

- keeping the country habitable and protecting and improving the living environment (Article 21);
- education (Article 23).

If we take these articles in the Constitution instead of current policy documents as a starting point, this provides a more stable basis for the (policy-relevant) choice of domains. Nevertheless, we cannot entirely ignore domains that play a role in the prevailing political and social debates, especially if this continues for a long time.

If we compare the six domains chosen by the SCP in 1976 with the domains selected by the OECD and the relevant articles in the Constitution, we see that these overlap to a considerable degree (see table 4.1). The most striking difference is the absence of safety in the Constitution and in the life situation index. We will be discussing the relationship between safety and the life situation index in more detail in chapter 8.

Table 4.1

Domains on the OECD list, in the Constitution and in the life situation index

OECD	Constitution	SCP 1976	SCP since 1997
health	health	health	health
education	education	education	*
job opportunities	job opportunities	job opportunities	*
goods and services	distribution of wealth	disposable income	ownership of durable consumer goods
physical environment (including housing)	living accommodation	housing	housing
safety			*
time and leisure	leisure activities	free time	leisure time activities
social participation (social environment)	social and cultural development		social participation
			*
			mobility
			holidays
			sports

* Although education, work, safety and the social environment are admittedly not included in the life situation index itself, the conceptual framework does devote attention to these matters (see chapter 5).

For the most part, the SCP based its choice of domains on the OECD list, and moreover, this choice shows many areas of overlap with generally-accepted standards of what is important (as laid down in the Constitution). However, in due course a number of changes were made in the domains that make up the life situation index. There is no master plan for describing the life situation, and the substantiation of this concept changes over time. Nevertheless, this does not automatically mean that the ‘issues of the day’ are unquestioningly followed, but it does mean that attention for a specific aspect at a given

moment does not always have sustainability value. Moreover, we do not rashly proceed with the implementation of new concepts and domains because considerable added value can be obtained by following the life situation in the course of time.

The life situation index has comprised eight domains since 1997:

- 1 health;
- 2 housing;
- 3 mobility;
- 4 holidays;
- 5 socio-cultural leisure activities;
- 6 (social) participation/social isolation;
- 7 ownership of durable consumer goods;
- 8 sports.

The difference between this and the original six domains is largely due to the idea that the situation in which people find themselves must be disconnected from the evaluation on the one hand and its determinants on the other. This substantive consideration resulted in evaluative as well as determining indicators being left out of the index. So, education and work have no longer been included in the index since 1990, although they are regarded as resources for the life situation (together with income and health). The approach is shown graphically in the figure with the conceptual framework, in chapter 1. We will be discussing the components of this framework in the next chapter, and we will also be examining the decision to distinguish resources from the life situation index itself. We will first take a brief look below at the domains included in the life situation index since 1997.

Health and housing

Health and housing are two domains that can be found in the Constitution as well as in the OECD list. In addition, they are domains that will probably only be disputed by a very few people, because they are fairly basic elements of a welfare state. After all, good health and satisfactory housing may be regarded as basic conditions for a reasonable standard of living in Dutch society.

Mobility

Although *mobility* is viewed as a component of the life situation, it does not occur in the Constitution or on the OECD list. The OECD admittedly devotes attention to travelling time to and from work, but mobility is more broadly interpreted in connection with the life situation. Having a car is considered to be an indicator for a good life situation because a car increases the options for mobility. Mobility is important for instance for maintaining social contacts and for recreational activities. However, the negative aspects of driving a car, such as the effects on the environment, are not taken into account. The prevailing idea to date has always been that the individual mobility opportunities provided by owning a car are of greater value for the individual life situation than the negative effects of driving a car on the environment. The debate on the envi-

ronmental impact of car use has however resulted in the inclusion of public transport season tickets in the index.

Holidays

We regard the *holidays* domain as forming part of a ‘reasonable standard of living’, and it is also an indicator for deprivation (in the event that people cannot afford to go on holiday). The 1984 Social and Cultural Report accounts for the choice of this indicator as follows: ‘We included this indicator because holidays are one of the first items that people economise on in the event of decrease in income’ (SCP 1984: p. 417, cf. also Schnabel 2004). The European Court of Justice’s ruling in 2006 that annual holidays are a social right demonstrates that holidays are more than just a luxury nowadays, because they have a positive effect on employees’ health, for example.¹⁵ Incidentally, holidays are also mentioned on the OECD list: as part of people’s free time in 1973 and as part of the ‘quality of work’ in 1982 (OECD 1973 and OECD 1982).

Social participation and leisure activities

Since they are both connected with free time, the *social participation* and *socio-cultural leisure activities* domains are closely interrelated. However, they do differ in the sense that we cannot say beforehand whether socio-cultural activities will result in social contacts. Such activities include membership of a society (a passive activity), for example, and visits to museums or the theatre (something that people can very well do on their own). With respect to the social participation domain, this includes activities that may be expected to lead to social contacts: this refers to doing voluntary work and to a number of indicators relating to the presence of friends (SCP 1998a).

Ownership of durable consumer goods

The *ownership of durable consumer goods* is included in the life situation index because this gives a good indication of the question whether people are able to maintain a ‘reasonable’ standard of living, or even meet basic needs (depending on the choice of indicators; see also Berger-Schmitt and Noll 2000). In a certain sense, this can be interpreted as the ‘distribution of wealth’ as stated in the Constitution. The OECD list explicitly cites the ownership of consumer goods in the ‘command over goods and services’ domain.

This domain frequently gives rise to discussion: shouldn’t durable consumer goods be more generally regarded as (unnecessary) luxuries? Why should the life situation of people with cars and video recorders be considered better than those of people who do not have any of these possessions, even if they have the *same income* (de Beer 2001)? Isn’t it true that different people make different choices, and that being the case, wouldn’t it be better simply to take their incomes as standard? Income is not included in the index, however, because we consider this to be a resource: input for the life situation. The life situation index itself, by contrast, consists of output indicators such as durable consumer goods. In addition, (household) consumer goods play a role in the amount of free time that people have because they ensure ‘a saving of human time and energy, or the creation of new forms of comfort and relaxation’ (De Hart 2002: p. 36). Moreover,

consumer goods tell us something about the distribution of wealth which we would not learn from examining people's income alone. That is one of the reasons why, for instance, research into poverty also takes durable consumer goods into consideration, since they are regarded as an indication of prosperity (Gross 1966, Atkinson et al. 2002, SCP/Statistics Netherlands 1999). This is why we have decided to include durable consumer goods in the index instead of income.

Sports

Finally, there is the *sports* domain, which has been included as a separate domain in the life situation index since 1997. The reason for including it separately is that it relates to a number of other domains such as health and social participation. Moreover, sports are sometimes considered to be an integrating and uniting factor (Ministry of Health, Welfare and Sport 2008). Sports are therefore more than just 'fun', and should be included as a separate domain.

A number of domains may be said to be interrelated. For example, holidays are related to health and the ownership of durable consumer goods, while this latter domain is in turn related to mobility. These complex interrelationships make it difficult to combine domains: if we include sports under participation, for instance, this would result in data that are hard to interpret (after all, the relationship with health will also be evident in the index). We will be returning to this when discussing the index construction in chapter 6, but first, we will look at a few more points for discussion.

Points for discussion

One of the points for discussion that regularly comes up concerns a domain that is included on the OECD list but not in the life situation index. This domain is safety, which is currently a matter of considerable political and social interest. Although attempts have been made in the past to include safety (via indicators on victimisation) in the index, these were unsuccessful. It turned out that there was no unambiguous and logical relationship between victimisation and the life situation index. We will be returning to this when discussing the index's stability and sensitivity (paragraph 8.3).

The fact that mobility can contribute towards maintaining social contacts or taking part in recreational activities implies that this domain is the odd man out in a certain sense: shouldn't these indicators be more readily regarded as a resource? After all, they provide the *opportunity* to maintain social contacts or to visit cultural events. However, this would not take account of the special significance that a car has for many people. A car not only ensures mobility, but it also creates a certain 'sense of freedom': the ability to travel about wherever and whenever one likes. One alternative would be to include the indicator in the 'ownership of durable consumer goods' domain, since it concerns actual ownership of a car, not its *use*. However, we could also argue that mobility can relate to indicators in other domains, such as maintaining social contacts. This means that the indicators differ from the other indicators relating to 'ownership', since they do not share these interrelationships.

The discussion has not resulted in a change in the role of mobility in the index. However, in addition to the indicators currently included, we could examine the possibilities for incorporating other mobility indicators such as bicycles or motorcycles, or even car sharing.¹⁶

Furthermore, the absence of working conditions in the index sometimes gives rise to discussion too. After all, working conditions are not only essential with respect to labour force participation, but also with respect to health, for example. However, they are not applicable to all members of our society. If we were to include them anyway, this would actually mean that a separate operationalisation of the life situation would be required for employed and unemployed persons. And since this conflicts with the basic principle that indicators must apply to everyone, this domain has not been included in the life situation index.

4.3 Indicators for the life situation

We have already looked at some of the indicators chosen for each domain in the foregoing, and we have also described that the choice of indicators has been subject to changes over time. Although we strive to seek comparability over time for each change – since we want the time series to be as long as possible – we did not always succeed in this. In addition to a number of minor alterations, some large-scale changes were also implemented (see Boelhouwer and Stoop 1999 for an extensive discussion on these changes). Changes are due to a number of factors, including:

- changing times: matters such as safety are of more interest now than 20 years ago;
- obsolescence: slide projectors were formerly considered to be an indicator for the possession of durable consumer goods, but these have now been replaced by personal computers;
- debatable indicators: for instance, the significance of car ownership (see the discussion in the preceding paragraph);
- different views: education and work are now regarded as resources instead of part of the index;
- changes in data collection: methods of conducting the survey have changed several times, which has also affected the questionnaire.

Past experience shows that the importance of one sole indicator for the whole is of far less significance than the total combination of indicators. For example, it emerged that the exact consumer goods included did not influence the interrelationships between the indicators, or the entire combination of indicators either (the life situation index). Even leaving education and work out of the index did not have much effect on the end result. The substantive decision to move these indicators from the index to the resources had hardly any impact on the relationship between the other indicators, and therefore had hardly any impact on the results (see also chapter 8).

Appendix A contains a comprehensive overview of all indicators that have formed part of the index since 1974, as well as the changes that have occurred over time. We will be

describing the indicators chosen within the eight domains below. The basic principles discussed in chapter 3 apply to the choice of these indicators. These indicators must:

- 1 be interpretable in positive as well as negative terms;
- 2 apply to everyone;
- 3 be measured at the individual level;
- 4 be descriptive;
- 5 focus on output and realised wellbeing.

An overview of the indicators chosen for each domain is given below.

The *health* domain consists of indicators relating to obstacles experienced as a result of one or more long-term illnesses, disorders or handicaps. With respect to these impediments, we have differentiated between those experienced when performing daily activities at home and when engaging in leisure pursuits.

The indicators in the *housing* domain concern the actual dwelling: the type of home, whether it is owner-occupied, the number of rooms, and the size of the living room. These indicators should cover the most important aspects of a dwelling. They include (some of) the factors in the Dutch points system for rented housing, and therefore give an idea of the quality of the dwellings (including owner-occupied homes). We could also consider including indicators pertaining to other quality-related factors, such as central heating, insulation and bathroom fixtures (as in the points system). However, this would not result in a great deal of added value, since these factors are widespread in Dutch housing, and moreover, any differences correspond with the question of ownership (Kullberg and Ras 2007). With respect to the indicators for the *durable consumer goods* domain we selected a DVD player, personal computer, microwave oven and dishwasher as suitable items. These are goods which may be regarded as part of a 'reasonable standard of living'.

The *holidays* domain not only comprises the question of whether people have been on holiday or not (in the past 12 months), but also whether this holiday was taken abroad. Although holidays abroad used to be considered a luxury, nowadays they are regarded more and more frequently as part of a 'good standard of living': see the discussion in the preceding paragraph.¹⁷ A holiday is defined as 'a sojourn outside the home for recreational purposes, comprising at least four consecutive overnight stays'.

Mobility relates to owning a car or a public transport season ticket. We assume that this helps to give many people (a sense of) freedom because it enables them to travel about when and where they like. This is important for example for social contacts with people living a long way away, as well as visits to cultural events and sports activities.

The *socio-cultural leisure activities* domain consists of activities which do not necessarily result in social contacts because they can also be carried out just as well individually. The indicators represent social commitment and people's cultural and individual development. This refers to the diversity in:

- socio-cultural activities. This comprises ten activities: classical concerts, pop concerts, operas, theatre, ballet, cabarets, musicals, films, museums and dances or house parties. The indicator used is a sum score of these activities.
- membership of societies. This comprises seven types of society: singing, music or theatre; sports; hobbies; political organisations; trade unions, employees' or employers'

organisations; societies connected with religion; and specific societies or organisations for ethnic minorities. It includes an option for stating the number of 'other organisations'. The indicator used is the number of societies a person belongs to.

- number of hobbies. This refers to the total number of hobbies based on a list of examples (playing a musical instrument, singing, ballet, acting, painting or drawing, handicrafts, do-it-yourself activities, collecting, computers, walking or cycling).

Although the main point in this domain is whether or not people participate in such activities, the diversity of activities is also important. We have therefore provided a broad framework for 'social and cultural development', as the Constitution formally puts it (cf. SCP 1976).

Social participation contains indicators which generally *do* focus on social contacts. This domain comprises two indicators:

- voluntary work. This includes ten organisations and societies: singing, music or theatre; sports; hobbies; political organisations; trade unions, employees' or employers' organisations; societies connected with religion or beliefs; schools, day-care centres or play groups; helping neighbours, senior citizens and handicapped people; organisations with social objectives; residents' associations or community centres; and specific societies or organisations for ethnic minorities. It likewise includes an option for stating the number of 'other organisations'. The indicator used is a sum score of these societies.
- a social isolation scale consisting of six items:
 - There are people I feel I can communicate with.
 - I feel isolated from other people.
 - There are people I can turn to.
 - There are people who really understand me.
 - I am one of a group of friends.
 - I only have superficial social contacts.

The indicator used is a sum score of these items.

With respect to social isolation, the most important point is the intensity of social contacts, or in other words, the support people receive if they need it. As far as the life situation is concerned, we consider the intensity of such contacts to be more important than for instance saying hello to one's neighbours every day, or only seeing one's family at funerals. The scale used to determine social isolation consists of a selection of items taken from the more extensive UCLA Loneliness Scale devised by the University of California (Russell et al. 1978).

Finally, the *sports* domain contains the question of whether people practise a sport or not, the number of sports practised, and the frequency with which the sport is practised. We have already dealt with the reason for not incorporating sports into another domain; this is because we cannot make an unambiguous choice on which domain should include sport. Sports are related to health, and may also relate to social participation.

If we take a critical look at the indicators, we see that not all the indicators are strictly individual characteristics (which is one of the basic principles), but are sometimes

household characteristics too. The indicators relating to housing, car ownership and ownership of durable consumer goods are relevant for the *households* to which individual people belong. We have nevertheless included these indicators because all members of the households benefit from the items in question, regardless of whether they are the actual owners.

4.4 Putting the choices into perspective

From the description of the choice of domains and indicators in the preceding paragraphs, it is clear that there is no ‘gold standard’ for these choices. Moreover, choices can change over time. This is not always a problem, for instance because replacing obsolete indicators with new ones does not affect the validity of the index.

The choice of indicators and domains has partly been made on the basis of debates in the international social indicators movement, and on the basis of plausibility and face validity. In order to discover something more about plausibility, we can examine whether the choice is supported by secondary material, by comparing the choices in the life situation index with choices made in other countries in surveys with more or less the same objective, although this does not automatically mean that these countries have compiled indices as well. We can also look at what the public *itself* considers important, and whether this differs considerably from the choices we make.

We can use both these methods to check whether other people feel that the domains and indicators included give us any information on the life situation, assessed in terms of the role these domains play elsewhere, and assessed in terms of the importance that the public attaches to the domains. What this actually means is that the choices made are benchmarked externally. Although the choice of indicators for the life situation will always remain a subject for discussion, it is nonetheless important that broad-based support for the relevance of these indicators can exist.

The recent interest in social indicators is also reflected in three other concepts which play a major role in the political and social debate and are related to the life situation: social cohesion, social exclusion and social capital. These three concepts are also contributory factors to the social domain (for a detailed discussion and comparison, see Berger-Schmitt and Noll 2000 and Fahey et al. 2003). Because they play a role in the debate, there is a growing need to be able to measure and operationalise these concepts too (see box 4.1 for a comparison between these concepts and the life situation).

Box 4.1 Relationship with social cohesion, social capital and social exclusion

Social cohesion relates to relationships between people in a society and the binding effects of these relationships (Berger-Schmitt and Noll 2000, SCP 2008). Social cohesion also refers to the orientation on collective values and standards (De Hart 2002).

A number of other elements invariably emerge in any discussion on social cohesion.

For instance, there is a correlation with social exclusion, with participation and solidarity, both with society and with groups: it is all about ‘belonging’ (Berger-Schmitt and Noll 2000: p. 14, SCP 2008: Ch. 1).

The concept of *social exclusion* has its origin in France, where it was used in debates on poverty and was defined as a rupture of the relationship between the individual and society (Berger-Schmitt and Noll 2000). Social exclusion is strongly correlated with discussions on poverty, but turns this into a broader and more extensive concept. Moreover, poverty is generally treated as a statistical concept, while social exclusion also considers the process-based aspect of the phenomenon. There is also a difference in the underlying idea: poverty research is aimed primarily at distributional issues (lack of resources among individuals or households), while social exclusion looks more at relational issues (inadequate social participation and integration due to the denial of access to social rights (Berger-Schmitt and Noll 2000, Jehoel-Gijsbers 2004).

A distinction should also be made between the situation of social exclusion and the risk factors which lead to social exclusion (Jehoel-Gijsbers 2004).

The third concept is *social capital*, which relates to the density and quality of relationships and interactions between individuals or groups. Another aspect is the mutual feelings of commitment and trust due to common values and standards, a sense of belonging and solidarity which are supposed to be the fundamentals of a society’s internal coherence (Berger-Schmitt and Noll 2000). Robert Putnam has ensured that the concept is widely used (Putnam 2000). Social capital relates to ‘horizontal societies’ between people, to ‘networks of civic engagement’ and to the standards and rules which flow from them. These relationships can manifest themselves at three levels: at the micro level (between people: family, friends, neighbours; this is also called bonding social capital); at the meso level (intermediary organisations and societies: this is also called bridging social capital); and at the macro level (social institutions) (Berger-Schmitt and Noll 2000).

According to Putnam, bonding social capital is more about stressing the exclusivity of homogeneous groups, while bridging social capital is more about the connection between people of different social or demographic backgrounds (De Hart 2002: p. 17).

The three concepts considered above are all closely related to each other. Social cohesion, social exclusion and social capital can all be linked to aspects such as social relationships and social connections, to values and standards, solidarity and so on.

What is more, the same indicators are often used in association with the three concepts (De Hart 2002). Comparing commonly used indicators for the concepts with the indicators of the life situation index we see that here too some of the same indicators are used.

One common point is that all the concepts pertain, among other things, to social relationships and networks. Promoting social relationships and combating exclusion is also a major priority area of social policy, not only in the Netherlands but in Europe as a whole; this has clearly emerged from the Treaties of Maastricht and Lisbon. Participation (‘joining in’) has meanwhile become an important policy objective in the Netherlands,

as we can see from the Social Support Act for example: “Joining in”: this is the shortest possible summary of the Social Support Act’s social objective’ (Ministry of Health, Welfare and Sport 2005a: p. 7). In this sense, joining in not only refers to undertaking paid employment, but also to voluntary work or taking an active part in societies, community centres and schools. Promoting cohesion in combination with combating exclusion should obviate the potentially adverse effects of cohesion: cohesion among individuals or groups should not lead to the exclusion of others.¹⁸

The relationship between the three concepts and the ‘social participation’ life situation domain is the most obvious: this domain comprises voluntary work and social exclusion, both of which are characteristic of social relationships. In addition, both factors form part of social policy, as evidenced for instance by the Ministry of Health, Welfare and Sport’s annual budgets.

The ‘socio-cultural leisure activities’ domain includes membership of organisations and therefore relates to social cohesion (De Hart 2002). Here, the social commitment pertaining to membership is more important than the fact that such membership leads to activities or social contacts. Entertainment activities such as visits to museums or the theatre come under this domain as well, and these activities are also important with respect to cohesion. Here, too, the most important point is not so much the resulting social contacts, but the ‘sense’ of community, social integration and individual development. This likewise applies to another component of the ‘leisure activities’ domain, i.e. hobbies. Hobbies also include participation in amateur art, which contributes to individual development as well as to social cohesion (see also De Hart 2002).

Comparable monitors and systems of social indicators

In order to benchmark the choice of domains of the life situation index, we first examined indices, monitors and systems for social indicators available in other countries. The Belgian standard for wellbeing is closest to home; generally speaking, this standard is divided into the same domains as those in our own life situation index (i.e. housing, health, social participation and sociableness/recreation).¹⁹ However, this is not surprising, since the Belgian standard for wellbeing continues along the same lines as the Dutch life situation index to a substantial extent. One remarkable fact is that the justification of the domains in the Belgian standard for wellbeing is generally quite brief as well. For example, the reason given for including the ‘housing’ domain is that ‘people’s housing conditions indubitably constitute an important component of the life situation achieved’ (Breda 1997: p. 31). Although – intuitively speaking – this is certainly the case, it is by no means a proper substantiation.

Another comparable index was compiled by the EuReporting project, and it has been available since 2005. However, this index does not differentiate between the life situation and resources, which means that domains from both groups have been included. The index (known as the ‘total life situation’) consists of seven domains in all: income and standard of living; housing; living environment; education; health; social relationships; and work. There are two major differences: the life situation index devotes attention to leisure activities and voluntary work, while the EuReporting index explic-

itly devotes attention to the living environment (this characteristic relates to people's environment in connection with the life situation index; see <http://www.gesis.org/en/services/data/social-indicators/eusi/>).

These two indices closely resemble the life situation index. However, there are still a great many more, and the number of indices is rapidly increasing. We have used three general studies of quality-of-life indices – by Hagerty et al. (2001), Booyesen (2002) and Sharpe and Smith (2005) – as a basis to compare the choice of domains for the life situation index with choices made by others. Using the dividing lines we discussed in chapter 2 – Is the index made up of subjective or objective indicators?; Should the index focus on a sub-area, a target group, or all?; Are comparisons made between countries or not? – we can divide the indices into five clusters:

- 1 Firstly, a number of indices concentrate on describing the quality of life in a **subjective sense**: contentment with (aspects of) life, like the Australian *Personal Wellbeing Index* and the *International Wellbeing Index*. These include evaluative questions on the standard of living; health; achievements in people's lives; personal relationships; safety; feeling part of society; and security for the future (see also Cummins et al. 2004b and Lau 2004).
- 2 Secondly, some indices focus on a **part of the life situation**, such as indices for social capital. These indices primarily devote attention to participation (social, societal and political) and confidence. Examples include the World Bank's *Social Capital Assessment Tool* (see <http://go.worldbank.org/ven70uw280>) and Putnam's index for social capital (Putnam 2000). Health-related research also provides many examples of indices such as the SF-12 index (Ware et al. 2002), which comprises a mixture of physical functioning and mental functioning, or the *Health Adjusted Life Expectancy*. This latter index compiled by Statistics Canada combines life expectancy with health experiences (Statistics Canada 2005).
- 3 Thirdly, a number of indices centre on **specific social groups**, such as the Annie E. Casey Foundation's *Kids Count Child Wellbeing Index* (O'Hare et al. 2004).
- 4 Other indices elaborate on **economic indicators**. Some well-known examples of these are the *Index of Economic Wellbeing* (Sharpe and Smith 2005) and the *Genuine Progress Indicator* (Venetoulis and Cobb 2004, Finn 1998).
- 5 Finally, the fifth type of index uses indicators at **national level**. Examples include the *Index of Social Health* or the *Estes Index of Social Progress* (this lists ten domains: education, health, the status of women, defence spending, economy, geography, political participation, cultural diversity and welfare facilities; see Estes 1988). Another example is the previously-mentioned *Human Development Index*, which comprises income, education and life expectancy (UNDP 1990).

On the face of it, there seems to be little consensus on the domains used in various indices. However, if we take a closer look, we see that this is not entirely true: most of the domain names can be classified into seven domains (Cummins in Hagerty et al. 2001). According to this classification, 83% of the original 173 domain names used can be divided into groups (comprehensive surveys such as the Eurobarometer and the Swedish

and German monitors, which collect indicators but do not devise indices, were also examined here). These seven domains are listed below in order of importance:

- 1 relationships with family and friends (social contacts);
- 2 emotional wellbeing (including free time and ethics);
- 3 material wellbeing (having financial and material resources at one's disposal; consumption);
- 4 health;
- 5 work and productive activities;
- 6 feeling part of (local) society;
- 7 personal safety.

If we compare these seven domains with the domains in the life situation index, we see a considerable degree of similarity. For instance, the 'housing' and 'mobility' life situation domains and the ownership of consumer goods are classed under 'material wellbeing', while leisure activities, sports and holidays may be included under the heading of 'emotional wellbeing'. Participation can be partly classed under 'relationships with friends (social contacts)' and partly under 'feeling part of society'. However, one difference is that the life situation index differentiates between the life situation itself and the deciding factors (resources).

We can also compare the life-situation domains with domains included in social monitors and indicator systems that focus on the use of descriptive indicators to describe the life situation. A comprehensive overview and specification of European monitoring systems can be found in Berger-Schmitt and Jankowitsch (1999). A great deal of similarity can generally be found in the content as shown in table 4.2, which includes a number of social monitors.

There was also a large degree of similarity between the choices of domains in various countries in the 1970s:

I was very intrigued by the fact that 'my' list was very similar to the lists developed in other countries, even if the political systems and cultures were very different. [...] I think that the lists also reveal a high degree of universalism in what is considered as social concerns in all countries. (Johansson 2002: p. 25-26)

We may conclude that domains included in the conceptual framework are very similar to domains included in comparable monitoring systems. The life situation index comprises a limited part of the domains included in other monitoring systems. Again, this is due to the differentiation between the index itself and the resources.

Table 4.2

Overview of domains in the life situation index and in various indicator systems

	conceptual framework for the life situation ^a SCP	living condi- tions/ ULF Sweden	European system of social indicators EU reporting	living conditions in Europe (Eurostat 1998) Eurostat	living conditions in OECD countries OECD	European Foundation for improvement of living and work- ing conditions EU
population/demography		x	x	x	x	X
labour market/work	x	x	x	x	x	X
income	x	x	x	x	x	x
transport/mobility	x	x	x			x
housing/accommodation	x	x	x	x	x	x
health	x	x	x	x	x	x
education	x	x	x	x	x	x
participation	x	x	x	x		x
environment			x			x
safety/crime	x	x	x	x	x	x
leisure activities/media	x	x	x			x
happiness/subj. indicators	x	x	x			
culture and identity						X

a **Bold type:** this domain is included in the life situation index.

We have hitherto dealt with indices and social monitors whereby researchers ultimately decide what domains are included. The question is whether this choice also gives an idea of what people *themselves* consider important. This is relevant because the main point would not then be that the domains are policy-relevant, but that they are important to people. It provides information on the extent to which people can identify with the index and with the perceived relevance of the indicators chosen. That is the reason why we have compared the choice of domains with matters that are important to the public. However, a major constraint here is that we are dependent on existing and available terms of reference; we did not conduct a separate survey focusing on the domains in the life situation index.

Preferences among the public

We initially looked at questions relating to what people consider important *in their lives*. The SCP survey on Cultural Changes in the Netherlands included a question on the importance of a number of matters in life. From the responses, it emerged that most people considered good health to be the most important, followed by a nice family and a good marriage (see table 4.3). These responses did not change between 1995 and 2000 (the last year for which data are available).

Table 4.3

Percentages of what people consider most important in life

	1995	2000
good health	54	59
a nice family	18	18
a good marriage	14	11
a large circle of friends and acquaintances	6	4
a sustaining religion	5	4
a good income	2	3
enjoyable work	2	1
a great deal of free time	1	1

Source: SCP (CV'95, '00)

The same question, i.e. what people considered to be most important in life, was also asked in a large-scale comparative study across Europe (the European Social Survey), but this study did not include health in the list of options that respondents could choose from. As a result, it transpired that family, friends and free time were considered to be the most important domains by far (table 4.4).

Table 4.4

Please indicate how important these matters are in your life (graded between 0 and 10, for the Netherlands)

	graded between 0 and 10
family	8.6
friends	8.3
free time	8.2
work	6.8
politics	5.0
organisations one can join	5.0
religion	4.4

The exact question was: 'Looking at this card, how important is each of these things in your life?'
0=extremely unimportant; 10=extremely important.

Source: European Social Survey'02 (SCP adaptation)

We can add some details to the picture by examining what is considered necessary for a *good* life. Allardt (1993) contends that solely devoting attention to people's standards of living ('having') is too limited; we should look at other aspects as well, such as 'loving' (relationships with others) and 'being' (the degree of integration into society). Moreover, objective as well as subjective indicators are required for each of these three dimensions.

The Eurobarometer has data on this approach: this is a European comparative study that includes (one-off, unfortunately) factors based on Allardt's view.

In general, 'having' factors are considered more important in Europe than 'loving' and 'being' factors (see table 4.5). However, it has emerged that these factors are classified differently in the Netherlands. The most important items with respect to a good life here are leisure time, seeing one's friends and being able to help others (Alber and Fahey 2004, Delhey 2004). The fact that leisure time occupies first place in the Netherlands is quite remarkable: Sweden is the only other country to put this item first. In most EU countries, leisure time is not even in the top three: work is considered to be the most important item. The differences between the Netherlands and Europe can be attributed partly to the relatively low level of unemployment in the Netherlands (if employment is taken care of, leisure time can become more important) and to the social relationships in Dutch society, in which the proportion of people living alone is rising, and where there is no social obligation to have children.²⁰

Table 4.5

What is absolutely essential for a good life? (in percentages)

	EU-25	The Netherlands
having		
a good job	91	74
sufficient accommodation (everyone has their own space)	89	74
a good education	84	74
sufficient leisure time	83	92
going out with family or friends	79	73
at least 1 holiday a year	69	64
loving		
living with partner	80	56
seeing friends regularly	72	85
on friendly terms with the neighbours	69	61
having children	60	31
being		
able to be useful to others	80	82
recognized by society	67	72
a successful career	54	34
participation in associations and organisations	23	31

The exact question was: 'For each of the following, please tell me if you think it absolutely necessary to live properly nowadays or not?' Delhey defines the question as 'necessities for a good life.' Fourteen options were included. However, 'not absolutely necessary' naturally does not mean that people do not consider it important.

Source: EU-25: Delhey 2004: p. 12 ; The Netherlands: EB56.1 (SCP edition)

One can also directly ask people how they define wellbeing. This was done in the study on Cultural Changes in the Netherlands in 1979 and 1983. The answer to this question

reveals that a reasonable material standard of living occupied first place in 1983, although this was health in 1979 (see table 4.6). Since this question was not repeated at a later date, it is not clear whether this was due to a trend, or whether the economic crisis at that time influenced people's responses. It is, however, evident that wellbeing and satisfaction are linked to one another: contentment and happiness score high as responses to the question of what constitutes wellbeing. It is also clear that wellbeing has a material and a non-material side.

Table 4.6

Wellbeing is ... (in percentages stated by the respondent, more than one factor can be chosen)

	1979	1983
a reasonable material standard of living	41.6	42.7
health	51.5	34.5
contentment	32.7	32.5
happiness	30.2	29.5
good relations with other people	25.5	25.3
a satisfactory (family) life	23.3	24.0
social security benefits	20.6	19.6
no unemployment	18.2	19.1
no environmental pollution	13.9	12.3
opportunities for recreation	12.6	8.0
a high material standard of living	5.7	4.0
other responses	8.5	11.0
don't know what wellbeing is	4.5	3.2

The question was: 'What is your idea of wellbeing? How would you define wellbeing?'

Source: SCP 1984: p. 281

It is remarkable that a material standard of living has a high score with respect to wellbeing, and not a social network as was the case for the other questions. One reason for this could be that a social network (family, friends) was not explicitly included, although it could come under the heading of 'good relations with other people' or 'a satisfactory (family) life'. However, the different options for responding render it impossible to make a proper comparison, although it seems as if people consider material factors to be more important if the word 'wellbeing' is used than if the question is about life in general. This also emerges from the responses to another question, posed in the Eurobarometer, which is the most specific question on the importance of certain factors with respect to the life situation. This question explicitly deals with the quality of life, and what contributes the most to its present level. Table 4.7 shows that health is far and away the most important factor here, and that income is at least as important as a social network.

Table 4.7

Which three factors contribute to your life situation? (1999, in percentages)

being in good health	80
having sufficient income to meet my needs	35
having family members who are there when I need them	35
having friends who are there when I need them	26
having little stress or worry	24
satisfactory job	16
satisfactory environment	15
a nice home	14
enough free time for myself and my family	13
access to good health services	11
living in a safe area	10
access to education, or training facilities	5
access to good transport facilities	4
access to social and cultural activities	2
access to new information technologies	2

This question was included in the Eurobarometer: 'In your opinion, which three factors contribute most to your current quality of life?' Respondents could choose 3 items out of a total of 16.

Source: EB52.1 (SCP edition)

The survey subsequently asks which factors contribute the most to *improving* one's life situation. Health no longer occupies first place in the top three responses; this has been replaced by (a higher) income, while health occupies second place and less stress comes third. These are followed by a better job, more free time and improved health care facilities (Delhey 2004).

On the whole, the domains in the life situation index correspond to those aspects of life that people consider important. However, it is difficult to arrive at any conclusions because the question is phrased differently each time, and because the factors that people consider important depend on the lists of available options. Nonetheless, three factors (health, a reasonable standard of living and a social network) continually recur. It is remarkable that neither leisure activities nor voluntary work are included on the lists of options, despite the fact that these factors are indeed considered relevant to policy.

We cannot really say whether lists of options drawn up in advance actually result in the most important domains. The question is whether people would give the same responses if open questions were asked. A Canadian study on factors that are important with respect to the life situation does include an open question: 'In thinking about quality of life issues, what are the five most important items or factors that you think contribute to your personal quality of life?' The domains cited do not essentially differ from domains that form part of a fixed list, as was the case in the questions discussed above: the only

domain that was added was the environment. The most important factors are as follows (CPRN 2001: p. 30):

- health care;
- the environment;
- family and friends;
- education;
- work;
- general values (including freedom, democracy and social participation);
- personal wellbeing (including free time and a balance between family and work).

Incidentally, this Canadian question asked what factors *contribute* to the life situation, which is slightly different to asking what the life situation *is*. The environment definitely contributes towards favourable life situations (e.g. because clean air is beneficial to one's health), but it is difficult to find indicators relating to the environment at individual level. Rather, these generally refer to features of one's environment (such as nuisance or odour).

4.5 In summary

This chapter operationalises the 'life situation' as a broad-based concept on the basis of eight domains:

- 1 health;
- 2 housing;
- 3 mobility;
- 4 holidays;
- 5 ownership of durable consumer goods;
- 6 socio-cultural leisure activities;
- 7 (social) participation/social isolation;
- 8 sports.

The choice of these domains was partly based on their relevance to policy (thereby taking the Constitution and the political and social debate as starting points), and partly on discussions in the international social indicators movement. However, the face validity of the eight domains plays a major role as well: these are the core domains with respect to what is generally understood by the life situation in a welfare state. The same considerations came into play when choosing the indicators selected within the domains.

The choice was subsequently benchmarked against international indices and monitoring systems, and against what people *themselves* feel is important. Such benchmarking is not easy because each index and each monitoring system has its own starting points and objectives. For instance, different choices are made if descriptive indicators are used than if evaluative indicators are used, although it transpired that the same domains were chosen on the whole.

The most important difference is that the life situation index does not include any domains or indicators relating to determinants of the life situation. We refer here to education and work, for instance; the SCP regards these determinants as resources that can be used to improve one's life situation. Furthermore, descriptive indicators are included in the index, while evaluative indicators are not.

5 A conceptual framework for the life situation

One of the basic principles of the life situation index is to place the description of the life situation in a broader framework of background information. This chapter examines the various components of this framework and the relevant choices made. One major starting point with respect to the conceptual framework is that all the components included relate to individuals in principle. This prevents them from being about Dutch society at macro-level; for example, they are not concerned with the degree of freedom of speech or with the democratic structure of the Netherlands. Since this study regards such characteristics as facts, they apply equally to everyone. In this study we are primarily interested in differences among groups with respect to developments in the life situation in the Netherlands. However, these macro-indicators are of importance in *international comparative research* (see e.g. Veenhoven 2002b and UNDP 1999). Individual human beings' immediate environment interposes between the micro-level of individuals and the macro-level of society. A number of indicators that we use to describe the life situation within the broader framework relate to this level. For example, we look at people's living environment: what kind of dwellings are there in the neighbourhood where somebody lives, and what other people live there?

5.1 An explanatory model or a conceptual framework ?

The development of an 'explanatory model' was discussed fairly soon after the introduction of the life situation index. This model was supposed to fulfil a number of requirements (SCP 1978: p. 179):

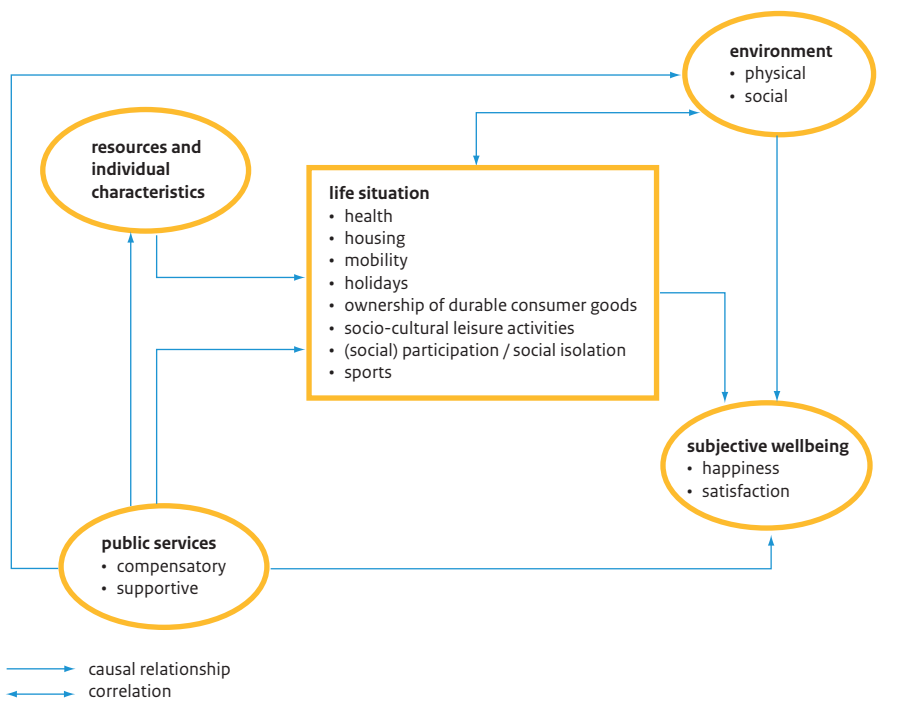
- 'It must serve as the basis for a cohesive definition of the social and cultural terrain.
- It must be suitable for compiling regular reports, i.e. it should not focus too strongly on long-term effects.
- It must contain a certain degree of empirical validity and practical utility.'

The endeavours made at that time were not very successful, mainly because the model used was actually intended as an explanatory model for stress, and was therefore not intended as an explanatory model for wellbeing or the life situation. This model turned out to be empirically untenable as a result.

No real explanatory model has been further elaborated since that time, although a clearer distinction between input and output indicators was introduced in 1989 (see Mootz and Konings-Van der Snoek 1990: p. 13 et seq.). Ever since then, the life situation index has consisted of indicators that can be interpreted as 'opportunities taken in life', such as leisure activities (output). Indicators that contribute to taking opportunities in life (like education and work) have been deleted from the index. These have been regarded since 1989 as resources that can be used to improve one's life situation (input). Since 1988, moreover, not only has the actual situation in which people find themselves been investigated, but a link has also been established with its evaluation: are people satisfied with what they have and with what they do? Are they happy?

In 2001, these developments resulted in a conceptual framework built up around the aforesaid elements: the life situation, resources and satisfactions all constitute a separate unit within the framework. This conceptual framework enables us to give substance to one of the basic principles, i.e. that the definition of the life situation must be placed in a broader framework of background information. Figure 5.1 gives a diagram of the conceptual framework.

Figure 5.1
Conceptual framework for the life situation



The conceptual framework focuses on people's life situation, measured by the life situation index. The basic principle is that the life situation is influenced by resources and individual characteristics; we have assumed a causal relationship here. Resources refers to education, work, income and health, while individual background characteristics such as age and composition of the household also come into play.

In addition to resources and individual characteristics, the environment also plays a role in people's life situation. This refers to the physical environment (what city and which neighbourhood people live in) as well as the social environment (what is the population composition in the neighbourhood, and how safe is it). We have not assumed a causal relationship here because it is difficult to see how the neighbourhood can influence the individual life situation.

As we have already said, the actual life situation is separate from satisfaction with it. However, evaluating the situation does form part of the conceptual framework: we have assumed that the quality of the life situation influences happiness and satisfaction (as proposed in Hagerty et al. 2001). We can test the tenability of this assumption by carrying out an empirical analysis (see chapter 7).

The last unit in the conceptual framework relates to the utilisation of public services. The idea here is that the government takes supportive action to help prevent social deprivation, and endeavours to compensate such deprivation if it does arise.

5.2 Relationship between the life situation and resources

In the conceptual framework, resources are set apart and regarded as determinants of the life situation (together with the personal characteristics). This refers to resources in which government plays a role and which relate to the life situation. With respect to improving the quality of the life situation, education, health, work and income are especially relevant. The government endeavours to create (positive) preconditions for a favourable life situation by pursuing policy in these areas. For the rest, the question of whether having resources at one's disposal actually does result in an improved life situation will depend on people's own behaviour and the choices they make, as well as on personal characteristics (such as their age and household situation). Nevertheless, we cannot always draw a clear dividing line between resources and index. We will be taking a brief look below at the ideas behind the inclusion of each of the four resources.

Resources: income, education, work and health

Education is perhaps the least debatable of the resources included. Most people feel that one's level of education makes a significant contribution to taking opportunities in life. Moreover, a higher level of education also increases the chances of employment and thereby a higher income as well (these are likewise considered to be resources).

Income is regarded as a resource because it can be seen as a condition for spending, for example on consumer goods or on membership of societies (SCP 1988). In chapter 3, we put forward the basic principle that the life situation index must consist of realised well-being, i.e. output indicators. In that case, income is input, and purchases made with this income are output (cf. UNDP 1990: p. 10).

This facilitating role is also important with respect to including paid employment as a resource. Employment enables people to establish social contacts more easily, for example, because having a job provides additional opportunities that are denied to unemployed persons. In addition, employed persons generally have a higher income than unemployed persons. However, other studies regard having a job as *part* of the life situation itself (see e.g. Berger-Schmidt and Noll 2000), the idea here being that employment is an important or even decisive daily occupation for many people. However, research has shown that the causation between work and wellbeing is questionable, and that it is impossible to state with any certainty that work results in a greater degree of wellbeing or in more social contacts (De Beer 2001, Atkinson et al. 2002). There is therefore no unequivocal relationship between work and the life

situation index. One argument in favour of including paid employment in the index is that work provides social contacts and social participation, but we could also contend that since work results in income, it should not be included in the index. If we look at paid employment within its facilitating role (as input-variable), it is better to class it as a resource than as part of the life situation index. Moreover: paid employment is not applicable to everybody as most of the elderly don't (have to) work.

Since 2005, health – which is the final resource – has not only been part of the life situation; it has also been a resource. Up till that time, the state of people's health was considered to be (at least partially) the outcome of personal determinants (resources), social circumstances, personal choices and government policy. But this viewpoint takes no account of health-related factors that cannot be influenced by the person in question or by the government (such as congenital diseases, disorders or handicaps, or symptoms of old age). That is why health indicators have not only been regarded as part of the life situation but also as resources since 2005. Affliction or non-affliction with long-term illnesses, disorders or handicaps has been classified as a resource (since long-term illnesses can lead to a lesser degree of participation), and whether or not these afflictions actually constitute a hindrance to people forms part of the index. This fits in with the World Health Organisation's basic principle that 'disability and functioning are viewed as outcomes of interaction between health conditions (diseases, disorders and injuries) and contextual factors' (WHO 2002: p. 10). Finally, the question of how healthy people *feel* forms part of the evaluative indicators unit.²¹

The relationship between health and paid employment is not unequivocal. Research has given indications that this relationship is a reciprocal one: poor health can result in unemployment as well as resulting from it (De Beer 2001). Health also has a complex relationship with a number of factors in the life situation index; for example, bad housing may be regarded as a result of too few resources (money in this case), but at the same time, it has a negative effect on people's health.

If we make a distinction between resources and the life situation, it becomes evident that the life situation not only depend on personal characteristics, but also on the resources (social opportunities) available to people. In addition, making this distinction enables us to examine the extent to which people actually take advantage of the social opportunities they are given. Their relevance to policy is important here, because the government is largely responsible for providing these social opportunities. If the causation between the characteristics is abandoned, and the resources are included when measuring the life situation, the option for analysing this policy-relevant line of approach will no longer be open.

Resources not included: self-reliance and social skills

Besides the resources discussed above, there are a few more that might be relevant. We will examine two that have not as yet been included in the conceptual framework: self-reliance and social skills (see also SCP 2001).

Self-reliance is a concept that is becoming increasingly popular, particularly since 'personal responsibility' became a major issue in the Dutch political debate. Self-reliance can be interpreted in a limited fashion; in that case, it relates to being able to function if one has physical or psychological problems, a handicap, a disease or a disorder. The Netherlands Council for Social Development (RMO) has adopted this line of approach; it has linked self-reliance to independence, and describes it as one of the four components of social integration (RMO 1998). Linking this concept to knowing one's way about in society gives it a more extensive interpretation; 'social reliance', in which matters such as speaking Dutch, ICT skills and being able to fill in forms play a role (Jehoel-Gijsbers 2004, Roes 2000, RMO 1998). Integration into society is relevant with respect to both interpretations of self-reliance, in which people with a (health) impairment and ethnic minorities can both be included under the heading of 'socially high-risk groups' (SCP 1998a). The government has adopted an even broader approach: 'The government defines self-reliance as the ability to arrange one's life without requiring help from others' (Ministry of Health, Welfare and Sport 2005b: p. 9-10).²² The lines of approach for self-reliance cited above show that there are two ways in which we could connect self-reliance with the life situation index. On the one hand, self-reliance can be interpreted in the sense of the capabilities proposed by Amartya Sen: the important thing is that people are *capable* of participating in society. In that case, self-reliance should be classed as a resource, since resources are conditions for being able to participate. On the other hand, self-reliance may be interpreted in terms of integration; actually functioning within society. This refers to participation, for example as a member of a society or by doing voluntary work.

It is difficult to determine its exact place in the conceptual framework because self-reliance can be increased by making use of resources. For example, the higher the level of education, the more skills people will develop, which will in turn increase the degree of self-reliance. So we see that self-reliance is fostered by removing impediments to health and by improving one's income position (see also Mogroep 2004), which is important for people with mental health problems, for instance.

Self-reliance can be included in the conceptual framework in the same way as health, i.e. as part of the resources and as part of the life situation index. Relevant factors like social and societal participation are already included in the life situation index. However, there are also factors relating to the necessary skills for participation, such as speaking Dutch and being able to fill in official forms, which should be classed as resources.

We can extend this line of approach still further by devoting attention to social skills or social competences. Generally speaking, the greater the skills and competences, the greater people's ability to function in society. Social competences are important with respect to self-confidence, social relationships and the labour market, and more generally with respect to social participation and self-reliance (for explanations of social competences, see Van der Wal 2004 and Appelhof and Walraven 2002). However, the operationalisation of the concept in specific and usable indicators or measuring instruments has by no means been fully developed at this stage. Moreover, it is difficult to arrive at indicators other than *opinions* on whether or not people possess competences; it

usually concerns self-report studies. It would, however, be good to add the possession of self-confidence to the resources.

Education, income, work and health constitute the resources that influence the quality of the life situation. Since it is important for people to be self-reliant and self-confident in today's society, it would be a good idea to add these factors to the resources.

5.3 Relationship between the life situation and environments

People's environments comprise their social environment (social networks) and their physical environment (the neighbourhoods people live in). The fact that the life situation index is determined at individual level enables us to include each of the desired (geographical) combined levels in the analyses. A number of reports indicate whether there is a difference in the life situation with respect to the relevant provinces and the different parts of the country, and also whether there is a difference between town and country (see Steenbekkers et al. 2006). At a lower scale level, these reports also look at people's places of residence: are there any differences in the life situation between a big city and a small village?

Living environment

The lowest scale level is the living environment, or the neighbourhood where people live. In this respect, the question we would like to answer is whether there is any relationship between people's individual life situation and the neighbourhoods they live in. Is the life situation better in neighbourhoods with a lot of owner-occupied homes and single-family houses, or in neighbourhoods with a large number of flats and rented homes? What kind of public services are there in the neighbourhood? Is there any relationship between the individual life situation and the degree of deterioration or nuisance, and the safety of the neighbourhood?

Besides the relationship between these physical characteristics of neighbourhoods, we examine the relationship between the life situation and the socio-demographic features of a neighbourhood: does it make a difference if there are a lot of people with high incomes living in a certain neighbourhood, or if there are a great many singles, or senior citizens, or young people living there? We also consider the socio-economic status of a neighbourhood: is there a relationship between the life situation and a concentration of underprivileged residents in a given neighbourhood?

When studying the relationship between the life situation and environments, the key question is the nature of the interaction between these two. One issue in this respect is whether there is any question of a causal relationship. Does the neighbourhood, or rather, do its physical and social features, influence the life situation in the same way as it influences the degree of safety (Wittebrood 2006)?

Indicators for the social environment

Besides their physical environment (city and neighbourhood), people's social environment is also important with respect to their life situation. The role of the social

environment in the conceptual framework is slightly more complex than the role of the neighbourhood where people live. This is due to the fact that a number of indicators pertaining to social relationships are included in the life situation index itself: the extent to which people are socially isolated or take part in social activities that can lead to social relationships (such as sports and voluntary work). However, these indicators are limited to the actual presence of a social network, and do not actually tell us anything about its use. In addition to the presence of a social network, the indicators included also deal with the *quality* of this network: the extent to which people consider it worth while to make use of this network when it is needed (see chapter 4 for the precise indicators). As far as the life situation is concerned, it is important that people feel that they are part of a group in which they feel comfortable. However, the indicators included do not tell us nearly as much about the *quantity* of the contacts, i.e. actual use. It is these very features that are discussed in the 'social environment' unit in the conceptual framework, where we look at the frequency of people's contacts with family, neighbours, friends or acquaintances.

5.4 Relationship between the life situation and satisfaction and happiness

We have already examined the relationship between descriptive and evaluative indicators in paragraph 3.3. This has revealed the fact that discussing both types of indicators is important in order to gain full insight into the quality of life. Although we use the life situation index to focus on descriptive indicators, we also devote attention to evaluative elements in the conceptual framework. In this respect, the evaluative indicators are used to fill in the objective situation.

However, the relationship between evaluative and descriptive indicators is not a very strong one. As a matter of fact, this conclusion has been generally accepted since the beginning of the social indicators movement in the second half of the twentieth century (Diener and Suh 1997, Pommer and Van Praag 1978, Breda et al. 1997). The results for the life situation index likewise suggest that the link is not very strong: the correlation coefficient between the index and happiness is approximately 0.35 (see various volumes of the Social State of the Netherlands).

We not only see a weak link between indicators that we would not expect to relate much to one another (such as sports and satisfaction with one's home), but also between indicators that one might expect to relate to one another (Hagerty et al. 2001, Breda et al, 1997). For instance, the relationship between satisfaction with one's friends and the 'participation' life situation domain (which includes indicators on people's circle of friends) is not particularly close, and this also applies to the correlation between the 'housing' domain and satisfaction with one's home (the correlation coefficients are 0.33 and 0.28 respectively (SCP 2003: appendix 12.12)).

There are a number of reasons for the weak link between descriptive and evaluative indicators, even if they are more or less directly connected with one another. The most important reason is that people soon adapt to (new) situations (see e.g. Diener and Suh 1997, Cummins 2000, Layard 2005). Moreover, satisfaction does not so much relate to objective matters, but rather to personal characteristics. There is even a research school that uses the word 'homeostasis' in this respect: the quality of life as people experience

it is a process in the human brain that ensures that individual wellbeing is always approximately 75% of the scale maximum, regardless of the way in which quality of life is measured (Cummins 2000).

Although the link between descriptive and evaluative indicators is a weak one, and we are aware that evaluative indicators are mainly determined by personal characteristics and social relationships, it is nevertheless important to examine both types of indicators in the model for the sake of completeness. After all, the fact that the evaluation deviates from the actual situation may be interesting, for example because this gives us a significant insight into human behaviour. In addition, it tells us something about people's ambitions and expectations, which can be important to politicians when formulating policy (e.g. with respect to public acceptance of policy or future policy plans). These are the reasons why the conceptual model includes descriptive as well as evaluative indicators. We can even go one step further by presuming a causal relationship: the higher the life situation level, the happier and more satisfied people will be (cf. also Hagerty et al. 2001, who suggest that the life situation index may be the best means of predicting happiness).²³

5.5 The role of public services

The last unit in the conceptual framework relates to public services. The public services system, which includes the health care system and social security, is an important factor in today's society, and more generally, in a welfare state (Schnabel 1983, RMO 2004, Schnabel 2004). The conceptual framework for the life situation only includes public services that relate to the life situation or to resources. The latter can have a specific compensatory or supportive role. If we assume that one of the government's major universal policy objectives is to provide all citizens with equal opportunities (such as access to resources), the government takes supportive action in order to prevent social deprivation (by helping people to find work and by redistributing incomes, for instance). If people are still lagging behind, the government compensates this as far as possible through income support or housing allowance, among other things (SCP 2001 and SCP 1999).²⁴ However, the central government is not always responsible for providing public services. Public services are more and more frequently delegated to municipal authorities; one example of this is the Social Support Act, which gives municipalities responsibility for implementing local public services with the aim of ensuring people's participation (Ministry of Health, Welfare and Sport 2005b).²⁵ The public services provided are aimed not just at people's resources, but sometimes also directly at their life situation. This is the case, for example, with social and cultural participation, where the government attempts to encourage participation by subsidising theatres and museums, among other things. In general, public services (and their subsidies) are aimed at people who are relatively socially disadvantaged or who are potentially liable to become so (those on low incomes, those who are poorly educated, and those who are unemployed).

The focus is on the use made of these public services and what effect this has on the life situation. However, we now encounter two problems: firstly, that the use of a number of public services is part of the index itself. This applies to visiting cultural facilities such as museums or concerts, and it also applies to public transport. Since these facilities form part of the index, it is impossible to examine their relationship with it.

The second problem is that the question of the effect that the use of public services has on the life situation can really only be properly investigated if the same people are studied for a longer period of time. Unfortunately, we do not have such (panel) data at our disposal, which means that we cannot answer the question of whether the use of public services results in an improved life situation. We are forced to limit our analyses to studying people who do use the public services in order to answer the question of whether their life situation is less favourable than those of people who do not make use of the public services. And this has indeed turned out to be the case: the life situation of people who benefit from supportive, compensatory or health care facilities is less favourable than those of people who do not make use of these public services (see chapter 7). However, we are still not clear about the actual effect of these public services themselves.

5.6 The welfare state and the changing role of the government

In the preceding paragraph, we discussed the role played by public services in people's life situation. However, we have not yet touched on one relevant context factor relating to this, i.e. the changing or changed role of the government and that of welfare state arrangements. All components of the conceptual framework assign a major role to the government and government policy. This is partly because the definition of the life situation fits in with the tradition of social monitoring: identifying and describing social developments and providing information on social structures, social processes and the consequences of social policy. This tradition has long been more deeply rooted in welfare states, or in countries where improving living conditions, particularly for groups that are lagging behind, is considered to be one of the core objectives in government policy. In addition, the attention devoted to the government and its policy in the life situation index has evolved from one of the scP's major tasks: compiling reports for policy purposes, which originated at the time that the scP was established. In the Netherlands, the welfare state was at its peak in the 1970s: there was an extensive network of social security and welfare facilities, and the government devoted considerable attention to education, housing and health care (Van Praag and Uitterhoeve 1999, Schnabel 1983). Although the aforesaid network and attention still exist, a number of changes have been made in and to the welfare state since that time.

The question is whether these changes should affect the content of the life situation index or the conceptual framework. In this paragraph we will first discuss the changes made in the welfare state, following which we will examine their relationship with the life situation index and the conceptual framework.

The role of the government in a welfare state

Although most people have their own ideas with respect to the concept of a welfare state, it is difficult to give a precise definition of ‘the’ welfare state, since there is no blueprint for it. A commonly-used definition is the one made by Thoenes in 1962: a welfare state is ‘a form of society characterised by a system of government care created along democratic lines, which guarantees the collective social wellbeing of its citizens while simultaneously maintaining a capitalist production system’ (Thoenes 1962, quoted in SCP 2002). While Thoenes spoke of *collective* wellbeing in 1962, Van Doorn referred to a *specific group* in 1977 by stating that ‘the primary function of welfare states is to give economically deprived groups something to hold on to’ (Van Doorn 1977, quoted in the Advisory Council on Government Policy (WRR), 2006: p. 24). Be that as it may, it is clear that governments in welfare states assume a major role in promoting their citizens’ prosperity and wellbeing. This interpretation of the government’s role in a welfare state contains a certain degree of faith in the extent to which society can be engineered: the government can steer society in the desired direction.

In actual fact, the government did not start regulating a large number of matters as part of what later became known as the welfare state until after the Second World War. Before this time, the family and the church were the main sources of support for people, especially those who did not have a job or who were in poor health. After (and as a result of) the second world war, a sense of ‘national solidarity’ came into being, and ‘for the first time in their lives, people started reasoning in terms of basic social rights, converted into minimum standards of education, housing and health care’ (WRR 2006: p. 47, cf. RMO 2004 and Schnabel 1983).

Initially, the welfare state was primarily intended as a source of support to people in difficulties. However, in the 1960s and 1970s, a point was reached in which support was not only available to this group, but also to large groups of other Dutch citizens, i.e. the ‘middle classes’ (Schnabel 2004). The welfare state became ‘almost synonymous with civilisation’ (WRR 2006). The increase in prosperity was responsible for the fact that a far larger group received support: there was not only more money available, but more people had become aware of the problems caused by unemployment, poverty and socio-physical segregation (Van Praag and Uitterhoeve 1999).

Because of the high level of collective schemes in the 1970s, there was less and less room for or need of private initiatives. The claims to these public services increased to such an extent that the available public services were eventually adjusted, which primarily meant that they were cut back and reduced.²⁶ Efficiency became the watchword in these adjustments to an increasing extent, and activation (that is, helping people back to work) was added to this as the dominant principle in the 1990s (WRR 2006). This can also clearly be seen in the shifts in the social security component of the welfare state, where income protection developed into participation and subsequently into employability, i.e. the prevention of unemployment (WRR 2006). In addition, more and more obligations came into existence besides people’s rights (to benefit). Government policy started to focus

on 'participation' as a motto for Dutch people; this actually meant participation on the labour market.

Moreover, the increase in prosperity meant that more and more people wanted the best for *themselves*, and they started looking out for schemes and provisions that would benefit them more than the collective ones. Nowadays, many people have supplementary provisions in addition to the collective ones, and there is a great deal of demand for more than just the minimum (Van Praag and Uitterhoeve 1999, Schnabel 2004). Those who are able to afford it pay for more. This has not only resulted in more free choice, but also – consequently – in more differences and more inequality (Schnabel 2004). Furthermore, a greater freedom of choice for the public has resulted in a gradual erosion of the idea that insurances are based on the principle of solidarity, and the welfare state is becoming increasingly austere every year.²⁷

However, increasing reliance on the available facilities is not the only factor that necessitates alterations in the welfare state. The social debate is also responsible for this: people want more personal choices and less 'meddling' on the part of the government. The community is no longer primarily responsible for citizens and their welfare; this responsibility is now borne by the citizens themselves. 'In this respect, the risk that people will make unwise choices, or will not be able to choose sensible options due to a lack of means, has been accepted to a certain extent', that is, accepted by the government (Schnabel 2004: p. 25). It is evident that government intervention, an open market and personal options are not always mutually compatible.

Changes in society and in the welfare state

The changes in the welfare state are not a separate development; they fit in with the changes in society. A number of significant developments have taken place since 1970, some of which were set in motion at a previous date but which gathered momentum after 1970 (Idenburg 1983, Vuijsje and Wouters 1999, Van Praag and Uitterhoeve 1999, RMO 2004). These developments can be summarised in five terms: individualisation, informalisation, computerisation, intensification and internationalisation (Schnabel 2000). With respect to individualisation, this does not so much refer to 'everyone for themselves', but far more to the increasingly independent relationships among people. In addition, these more independent relationships vary more frequently and are more numerous than they were during the pillarisation period (Vuijsje and Wouters 1999). In this connection, the term 'loose-knit communities' is also used to describe large-scale networks that may change over time (WRR 2006). People's attitudes to one another are also changing: they now pay much closer attention to themselves and to others (informalisation). The processes of individualisation and informalisation are enhanced by computerisation.

Intensification refers to the importance perceptions have in our daily lives: we want to do more and more and at the same time we want to have better and more intense experiences.

Internationalisation influences the Dutch welfare state because an increasing amount of scope for policy is being taken over by the European Union, as well as by the internationalisation of the labour market, for example (WRR 2006, RMO 2004).

In addition, changes in the administrative system have led to withdrawal on the part of the (central) government. First of all, government policy is becoming increasingly decentralised; the central government is shifting responsibility for policy on to provincial and municipal authorities. One recent example of this is the introduction of the Social Support Act, which means that the central government has hived off practically all of its welfare policy. Moreover, the government is outsourcing and privatising many of its tasks which it does not regard as 'principal' ones. This even goes so far as to include public safety: the government is no longer the only party responsible for this, but private enterprises are as well, to an increasing extent (RMO 2004). However, the government still acts as director and producer in all these developments, which has resulted in an increased need for information: who is doing what, and how and why are they doing it. More and more data have to be available at an increasingly lower level in order to be able to respond adequately to this need (RMO 2006).

Even though it is reducing its role, the government is not only director and producer, but also continues to set preconditions, which has resulted in an increased degree of regulation; for instance, regulations with which private initiatives have to comply. This process can be described as a development 'away from substantive regulations towards procedural guidelines' (Vuijsje and Wouters 1999, cf. Idenburg 1983).

Another change is in the expectations people have of the welfare state. What people expect nowadays is quite different to what they expected in the past: the present-day welfare state not only has to look after citizens and make sure they are insured, but it also has to help people take advantage of opportunities, and stimulate them and enable them to develop themselves (WRR 2006). When people were asked in late 2009 what they thought the government should spend more money on, employment, healthcare and education were the three most common responses (COB 2009 | 4).

Today's welfare state

A significant change is therefore that the government prescribes to a lesser extent, and allows citizens to make personal choices without telling them what is 'good' for them. In the light of this, the welfare state should be structured differently as well. In a study compiled in 2006, the RMO advocates a new approach to the welfare state, in which the government no longer guides people towards desirable outcomes, but towards avoiding undesirable outcomes. The idea here is that citizens are well aware what they themselves consider desirable, that this may vary according to people's own wishes, and that the government is not the only player in this respect: private initiatives may also be involved. The government wants to do more than it is able: 'We see time and again that social problems obstinately persist in spite of government policy' (RMO 2006: p. 35). In 2006, the WRR advocated that the welfare state be reassessed on the basis of the four principles: care (health care), insurance (social security), elevation (education and child

care) and unification (ensuring cohesion and few differences of opinion). It recommended a shift away from the focus on care and insurance (which have long been considered as a welfare state's core tasks) towards unification and elevation. In particular, the unification principle requires attention; not only unification among levels of education and generations, but especially among ethnic groups. Others besides the government can play a major role here, such as community-based organisations (WRR 2006). According to the WRR, the welfare state is becoming increasingly dominated 'by equal opportunities, and less by equal outcomes.' (WRR 2006: p. 258).

The studies conducted by the WRR and the RMO both recommend less government interference and more freedom of choice for citizens. In that case, however, there should be limits attached to greater freedom of choice: the differences in outcomes should keep within collectively-endorsed boundaries. Moreover, people do not feel that an extensive range of choices is necessary. The number of choices should be restricted as well: there should not be too many choices, and they should not be too radical either. There should be a limited number of options in addition to the basic schemes, instead of drastic system changes. We can take health care insurance as an example: this currently consists of a basic package for everyone with optional supplementary cover for anyone who wants it. However, in general (although this applies to a lesser extent to the fairly comprehensive health care insurance) there is a risk that providing limited basic packages while considerably increasing the number of additional insurances (to be chosen by the insured parties) at the same time will adversely affect the position of people on the fringes of society (RMO 2004).

It seems however as if there has been a reverse trend since the 1990s, in which the government wants to assume more control, or at least partial control (Vuijsje and Wouters 1999, Van Praag and Uitterhoeve 1999). This trend has continued at an accelerated rate since the turn of the century: there is a greater advocacy for intervening in children's upbringing and in people's personal lives, and for obligations with which citizens must comply (such as clothing regulations or the ban on smoking).

The changing role of the government and the life situation index

What effect do the developments outlined above have on the life situation index? The developments in the welfare state *arrangements* are not in themselves important as far as the life situation index is concerned; it might affect the context, but that is all. After all, the type of public services provided and the way in which this is done can only have an indirect effect on the life situation.

However, the ideas on which (some of) the changes are based may directly affect the life situation index. This refers to the ideas that focus on less government interference and more freedom of choice for citizens, or on guiding people away from undesirable outcomes. This directly affects the life situation index because the index is more oriented towards what the government considers important than towards what people themselves feel is important. After all, the indicators in the life situation index have normative overtones (derived from government policy): for example, sports and voluntary work are good for you, and you will be worse off if you do not do these things.

The debate on the effect of government withdrawal on the substantiation of the life situation index considerably overlaps with the debate on the *capabilities* approach (which we discussed in chapter 3). This approach centres on the opportunities that the government provides for its citizens; they themselves can choose whether they want to take advantage of these opportunities. We concluded that this disregards the importance that governments in welfare states attach to *opportunities taken in life*: realised wellbeing is an important component of social policy. If the government withdraws and gives citizens more scope for making personal choices and assuming personal responsibility, this idea will come under pressure.

The effect of government withdrawal on the life situation index will not be too drastic for a number of reasons. First of all, we demonstrated in paragraph 4.5 that what people themselves consider important does not differ all that much from what is included in the life situation index (which is based on what the government considers important). Moreover, the question is whether we can draw a clear dividing line between policy focusing on avoiding undesirable outcomes and policy focusing on promoting desirable outcomes. Encouraging people to exercise and practise sports (in itself a desirable outcome as it is 'fun') is also intended to combat health problems (avoiding undesirable outcomes). Furthermore, the government in a welfare state is (in any event ultimately) responsible for citizens' prosperity and wellbeing: however much the government may withdraw, it will always remain responsible for the most deprived groups of people (cf. Schnabel 1983)²⁸. In the third place, let us suppose that the government elects to guide the public towards avoiding undesirable outcomes; in that case, it will endeavour to minimise the risks as far as possible. These risks include the fact that too many people are mainly concerned with themselves (which puts pressure on collectivity and solidarity, because not enough people use the basic packages), or that people do not insure themselves or not sufficiently, which would result in the undesirable outcome of 'underclass problems' such as homelessness (RMO 2006). One way of preventing personal responsibility from degenerating into a form of individualism in which citizens act entirely in their own interests would be to involve social commitment when making adjustments to the welfare state (via the concept of citizenship; RMO 2006). The life situation index already includes characteristics of social commitment.

However, the greater emphasis on citizens' personal responsibility does mean that they need different skills in order to be able to find their way in society. Increased individualisation means that people have to equip themselves in other ways in order to keep their heads above water; during the pillarisation period, the baggage required was different because everything was much more definite at that time. This refers to social skills and self-reliance, for example. The fact that the necessary social skills may differ according to the situation or the relationship makes this additionally complicated for people (Vuijsje and Wouters 1999). According to the WRR, ensuring that people have the (minimum) skills required is the task of not only the government, but also of other parties, although the WRR does not state which parties this refers to (WRR 2006).

Having the necessary skills and competences has still not been sufficiently included in the conceptual framework. We already indicated earlier on in this chapter that it would

be advisable to include self-reliance under the resources in the conceptual framework, which would fill this gap.

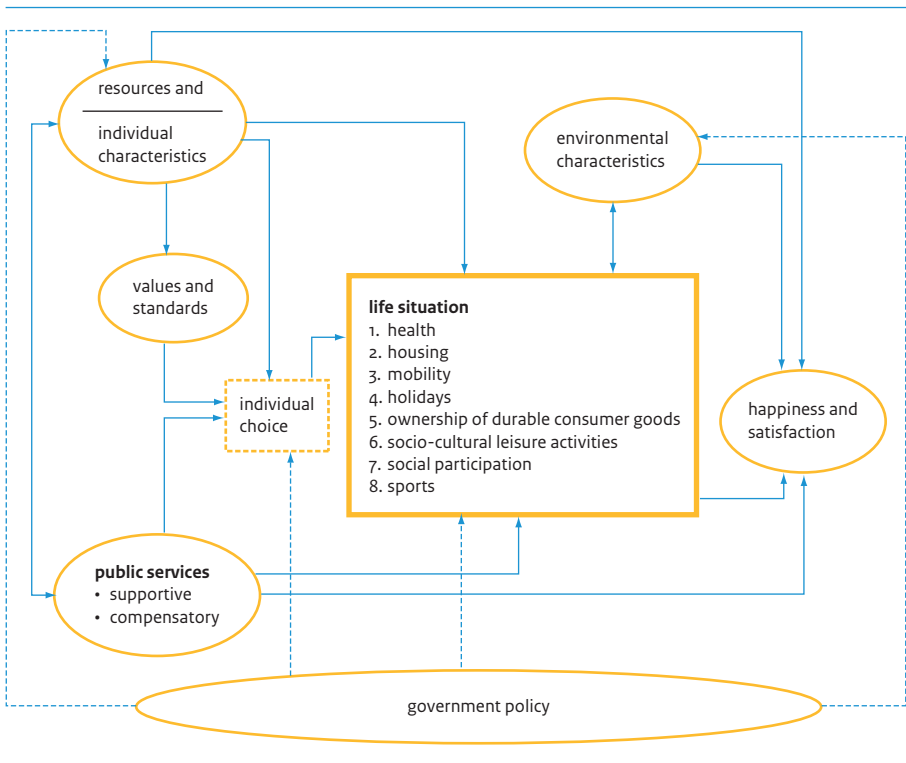
5.7 General remarks on the conceptual framework

In the preceding paragraphs, we defined the relationships contained in the conceptual framework. However, there are also a number of general remarks that we can make with respect to the framework. The first of these concerns the use of the terms *input* and *output*. We have already stated that the life situation index consists of output indicators, and that resources are regarded as input. There are some other possible divisions besides those concerning input and output. For example, the life situation index can also be regarded as a measurement of outcome, in which government expenditure on education constitutes the input, while the level of education constitutes the output. The index can also be interpreted as a throughput indicator; in that case, the evaluative indicators constitute the output (see Hagerty et al. 2001). Moreover, the distinction cannot always be strictly maintained: health is a resource as well as part of the index (see paragraph 5.1). This lack of clarity could lead to the abandoning of the distinction between resources and life situation index. However, this would mean that causation would cease to be effective, and we would no longer be able to investigate whether a high income increases people's opportunities for improving their life situation. Insight into the determinants of the life situation contributes towards a comprehensive description of this, and is also policy-relevant (after all, the government plays a major role with respect to resources). Secondly, the model gives us a fairly *static outline* of the life situation. This is not an accurate representation of the actual situation because the development of the life situation is more like a process. This is apparent from, for instance, the relationship between the life situation and the stage of life that people have reached: single people's life situation (which is usually the first stage after leaving home) are less favourable than those of couples (the following stage of life), while those of couples with children (the subsequent stage of life) are more favourable than those of couples without children (SCP 2005). The available data do not enable us to examine whether intergenerational factors play a role: for example, do children whose parents' life situation is unfavourable likewise end up in unfavourable circumstances? Nor can we examine the consequences of changes in people's lives: for example, what effect would cohabitation have on the life situation index? Although this is implicitly clear with respect to a number of changes (buying a house is positive, while discontinuing a sport would have negative results), a panel study would enable us to carry out a more precise investigation into the results of these changes. Moreover, a panel study would give us a better idea of the role of the government: if changes occur in people's personal circumstances, do they themselves have the capacity to adapt, or does the government assist them, and what are the results of such assistance (Lane 1996)?

A third remark concerns a missing link in the conceptual framework: the indicators included in the life situation index relate to the *choices* that people make. These choices may differ from those assumed in the framework. For example, people might use their resources for purposes other than those that we measure using the life situation indica-

tors, and as a result, people with a great many resources could still obtain a low score on the life situation index. An analysis carried out in 1996 has shown that 5% of the people with a great many resources had a low score on the life situation index. The reverse is also the case: 13% of the people with few resources achieved a high score on the life situation index (SCP 1996). It is inevitable that people will make different choices, since they do not all have the same preferences, and it is not feasible to include all possible individual choices in one general index. The life situation indicators were chosen on the basis of a general idea of the factors in a welfare state that form part of a good life, and on the basis of policy relevance.

Figure 5.2
Modified conceptual framework for the life situation



Our last general remark on the conceptual framework, which relates to our previous remark, concerns people's *values and standards pattern*. They use these values and standards to weigh up matters, which, in combination with their personal preferences, results in a certain type of behaviour. We could position standards and values somewhere between the resources and the life situation in the conceptual framework: the resources would then influence the values and standards, which in turn would influence behaviour, in the sense that they can explain the motives behind such behaviour. However, a separate

study would be necessary in order to work out the exact relationships between standards and values and life situation indicators.

If we explicitly indicate the choices people make in the conceptual framework and connect them with people's preferences, and with the values and standards that play a role when making these choices, we get a modified framework which we can use in the future when defining the life situation (figure 5.2).

5.8 In summary

When defining the life situation index, we make use of a conceptual framework that centres on the life situation. The quality of the life situation is not only influenced by individual characteristics, such as age and composition of the household, but also by social opportunities. We refer to these opportunities as resources, and we distinguish between education, work, income and health; self-reliance should also be added to these resources.

Besides individual characteristics and resources, people's environments also constitute a factor in their life situation. Environments comprise a physical component (what city and what neighbourhood do people live in; what is this neighbourhood like, is it safe?) as well as a social component (what is the population composition in the neighbourhood?)

The actual life situation is not the same as our evaluation of it: they can even be contradictory. Although it is naturally important that people are happy and satisfied, this aspect is separate from the life situation itself. However, we do assume that the quality of people's life situation influences their happiness and satisfaction.

Finally, we have included the use of public services in the conceptual framework. The reason for this is that the government takes supportive action to help prevent social deprivation, and endeavours to compensate such deprivation as far as possible if it does arise.

The life situation index and the conceptual framework assign a major role to the government and government policy. However, the role of the government in the Dutch welfare state has changed over the past 30 years, and so has the welfare state itself. This has resulted in less government interference and more 'personal responsibility' and freedom of choice for citizens. It does not affect the content of the life situation index: the government will always be (in any event ultimately) responsible for citizens' prosperity and wellbeing. However, since the increased emphasis on people's personal responsibility does mean that they need different skills in order to be able to find their way in society, it is advisable to include self-reliance under the resources in the conceptual framework. Some general points for discussion in the conceptual framework include the static outline it provides (while the life situation tend to develop in stages), and the lack of data on standards and values resulting in certain types of behaviour.

The explicit inclusion of people's preferences, values and choices in the model gives us a slightly modified framework which we can use in the future when defining the life situation.

6 An index for the life situation

In chapter 4 we explained that we can divide the broad-based life situation concept into eight domains, which we measure on the basis of 19 indicators. Once we have chosen the domains and indicators, the next question is whether it would be useful to combine the indicators to form one index. Would this result in added value compared to the use of separate indicators? This question becomes all the more relevant if we do not select a limited number of core indicators. After all, the greater the number of indicators used, the greater the added value of some kind of summary or comprehensive view. The idea of using one comprehensive index for a complex phenomenon is not new. For example, statistician and criminologist Alfredo Niceforo was already devising a composite index for the current level of prosperity in 1921, although this was still known as the ‘level of civilisation’ at that time (Noll 2002c). A discussion was also going on in the social indicators movement in the 1960s with respect to the usefulness and necessity of a composite measuring instrument. Initially, this idea mainly focused on finding a counterpart for composite *economic* gradators such as the GNP. However, most researchers soon abandoned the idea of one single standard and concentrated on developing satisfactory indices for components of the social domain such as health or housing (Offner 1996). One of the major reasons for this was a lack of international consensus on a composite standard for social issues. So the fact that the SCP continued to adhere to a comprehensive standard seemed like swimming against the tide for quite some time. However, attention for comprehensive indices has gradually been increasing since the 1990s. One of the main incentives in this respect came from the United Nations, which has been issuing publications on the Human Development Index every year since 1990. This index, which is based on work carried out by economist and Nobel Prize winner Amartya Sen, was the result of a discussion between Sen and Mahbubul Haq (the founding father of the Human Development Reports) in 1989: ‘We need a measure of the same level of vulgarity as GNP – just one number- but a measure that is not as blind to social aspects of human lives as GNP is.’ (Sen, in UNDP 1999: p. 23). There are other multi-dimensional non-economic indices besides this one that are fairly universally accepted, such as measuring IQ and socio-economic status, or the SF-12, which relates to health. Meanwhile, a whole variety of indices has come into existence; an overview is given in e.g. Hagerty et al. (2001), Noll (2002c) and Sharpe and Smith (2005). All attempts to arrive at a composite index can be divided along two axes. One axis distinguishes between indices that can be expressed in terms of money (such as the Index of Genuine Progress) and indices where this is impossible (such as the life situation index and the HDI). The second axis divides up the indices according to the data used: individual data versus aggregated data. Most indices use aggregated data, as opposed to the life situation index, which uses individual data (Noll 2002c).

One of the biggest problems we encounter when using social indicators to compile a composite index is the absence of a ‘natural’ counting unit, in the same sense that money is used as a unit in economic indicators. If we decide to combine the indicators, we will have to find a solution to this difficulty. For example, how can we include doing

voluntary work and living in a flat in the same index? In this chapter, we will first examine the advantages and disadvantages of combining different indicators in one index, following which we will discuss various ways in which this can be done.

6.1 Added value of one single index

Added value of a composite index

The economist Jan Drewnowski was one of the first to compile a composite index of social indicators, known as the level of living index, in 1974. He substantiated the need for this kind of index by arguing that the importance of combined standards for social indicators should be contrasted with the importance of combined standards for economic indicators. In his view, social indicators could only attain the same importance as economic indices if they were combined (Drewnowski 1974).

However, there are a number of other points that give an index comprising social indicators added value over the use of separate indicators. First of all, an index can be helpful when understanding and analysing complex multidimensional concepts such as liveability, social exclusion or the life situation. A major advantage of one single life situation index over separate indicators is that it gives us a clear and comprehensive insight into the life situation as a whole; we can see at a glance what direction society or a given population group is moving in. This means that we can quickly see if the situation is improving or deteriorating. If separate indicators are used, it is far less easy to see in which direction the entire situation is moving, particularly if these indicators are developing in conflict with one another (Hagerty and Land 2004, Fahey et al. 2003, Nardo et al. 2005, Drewnowski 1974, Booyesen 2002).

In addition, combining separate indicators has a communicative function: using one single figure is more likely to attract attention than if different figures are used, not only with respect to those for whom the index is intended (policy-makers in this case), but also to the media and the public (Fahey et al. 2003, Nardo et al. 2005). This communicative function enables a composite index to more easily play a role in the social debate. Furthermore, a general index can give an overall impression of (social) developments in a society, and therefore of *all* policy efforts (cf. Nardo et al. 2005: p. 8).²⁹ We can use a thermometer as a metaphor in this instance: a thermometer tells us the temperature of the patient (i.e. society) and whether this temperature is going up or down, and we can then conclude whether the patient has a fever. If we establish that the patient has a fever, we then have to find the cause: this cannot be established beforehand (is it a virus or a bacterium?), as we first have to carry out further analysis.³⁰ Another comparison, which is very appealing, was made during the presentation of the Human Development Index: we can regard an index as the door of a house. This door invites people to enter, but the house as a whole, not the door, is ultimately important. If we apply this metaphor, the important factor here is not the life situation index itself, but the fact that we intend to use it to measure social developments in society.

Another type of added value with respect to a composite index is that it can reveal cumulative effects. We may assume that individuals who are lagging behind in a number of domains are worse off than individuals lagging behind in only one domain. Since a

composite index enables us to examine the various domains in conjunction with one another, this gives us an idea of which groups are lagging behind in a number of areas, and indeed which groups are better off. We refer here to concentrations: not only with respect to lags, but also to leads. References to concentration and accumulation relate to distribution factors as well, in which the question is how the life situation factors are distributed (among groups) in society.

Finally, composite indices give us a methodological advantage: they increase the reliability of the measurements because errors in separate indicators are balanced out on average (Batista-Foguet et al. 2004). Moreover, it is simpler to compare and analyse the data, since this data has been reduced (Booyesen 2002). This data reduction also makes it easier to use complex concepts to classify groups or countries (Noll 2002b).

Problems involved in a composite index

Besides the added value of a composite index vis-à-vis separate indicators, there are also arguments against the use of one index. Although we described summarising of complex concepts into one index as an advantage in the foregoing, others believe this to be an argument *against* the use of composite indices. The three most commonly-used arguments against a composite index can be summed up by saying that it lacks a generally-accepted approach (see Finn 1998, Ekos 1998, Noll 2002c, Drewnowski 1974, Booyesen 2002, Hagerty and Land 2001, Diener 1995). The main point here is the absence of consensus regarding the following:

- Selecting the indicators: it is not clear on what basis the indicators should be selected.
- Taking the selected indicators together: can one compare apples and oranges?
- Weighting the indicators or domains: how should the weighting factor be determined?

Another argument against a composite index is the lack of a conceptual framework within which cause and effect are indicated. After all, it is not clear whether developments in the index are a direct result of policy efforts or, for example, of autonomous economic processes, which means that an index can only serve as a contextual fact at the very most (Finn 1998, Ekos 1998). Furthermore, a general index is not suitable as a means of answering specific policy questions, or of assessing specific policy either. In a more general sense, a composite index cannot always provide the desired insight when analysing and explaining developments in the index. At the very least, we would have to break down the index into the individual domains in order to pronounce upon this. Moreover, developments in indicators often have to be examined as well, and since even this is sometimes inadequate, other data sources would then have to be consulted (Boelhouwer 2002a, cf. Land 2004).

Another problem relating to indices is that the interpretation is unclear. Since different indicators are taken together, it is not clear what effect a rise or drop of a general index would have on individual policy areas such as health or housing (Ekos 1998, Drewnowski 1974).³¹ And the meaning of differences in index values is not always clear either. For example, what is the significance of the fact that the Dutch score on the Human Development Index is 0.015 lower than the score attained by Finland (which leads the field), resulting in the Netherlands occupying ninth place (UNDP 2007)?³² Another factor is that

sometimes the procedure leading up to an index is unclear. Those opposed to indices therefore advocate the use of separate indicators; proponents of indicators based on income even suggest that the use of income alone is sufficient (Booyesen 2002).³³

The added value of one index is greater than the problems

The life situation index has added value over the use of separate indicators with respect to a number of points. First of all, the index has added value (compared to separate indicators) in communications with the public as well as with policy-makers. The index also has added value with respect to analysis, since an index reveals cumulative effects. These effects provide policy-relevant information because they show the gravity and the degree of deprivation; this is much more difficult when using separate indicators. Moreover, providing insight into complex concepts gives important added value to one single index over the use of separate indicators. Although the life situation concept is complex and multidimensional, it is used in the debate as one sole concept, which means that we also need a definition of this concept as one entity. In addition, it is easier to compare groups with one another using an index than a number of different indicators.

This does not alter the fact that in order to conduct a thorough analysis of developments, we need to discuss the domains of the life situation and its indicators, or even to consult other sources. If the analysis is carried out in this matter, there will be no question of any simplification of reality. Furthermore, the analysis of the life situation index is carried out within a conceptual framework, which we discussed in chapter 5.

The fact that no consensus exists on a number of aspects of index construction does not in itself justify the dismissal of a composite index, since there are several ways in which indicators can be combined in one index. Nor is the complexity of index construction a problem with respect to a composite index (the Human Development Index is fairly simple to compile); it depends on the method chosen. In paragraph 6.3 we will be taking a closer look at ways of constructing the index, but first we will discuss a few points to be observed in order to arrive at a composite index.

6.2 Points for attention when constructing an index

An overview study, compiled in 2001 on the basis of composite indices and social indicator systems for use in government policy, gives a number of recommendations for improving methods of consolidating indicators into one index (Hagerty et al. 2001). This study (and other studies) can be taken as a basis for drawing up a number of general points to be observed when constructing a composite index (Drewnowski 1974, Noll 2002c).

Three of these points concern the index as a whole, and we indicate below how these relate to the objectives we formulated with respect to the life situation index (see chapter 3):

- 1 Firstly, the index must have a *clear purpose* directed towards policy: it must help policy-makers to assess policy as well as making it. This can best be achieved if the index is easy to understand; however, it is usually simpler to understand developments highlighted by the index than to comprehend the exact construction of the index all

at once. In general, the construction is less easy to explain, especially if statistical methods are applied and the index is not merely a ‘simple’ sum total.

- The major aim of the life situation index is to identify social developments for (social) policy purposes. One of the points for attention was that the indicators must focus on output and achieved wellbeing.
- 2 Secondly, the index must be based on *time series* to enable regular monitoring to be carried out. A major point for attention here is that it is better not to make any changes in the data compilation.
 - The third objective with respect to the life situation index was to create a time series in order to note any changes.
 - 3 Thirdly, the index must not only be presented as one figure; we must also be able to break it down into *separate components* or domains. These domains must be sensitive to change as well as being valid and reliable. Moreover, it is advisable that policy be able to bring about these changes.
 - The first objective with respect to the life situation index was to describe the life situation as a whole. Another objective was to follow developments in constituent indicators over time.

In addition, the overview studies contain four points which relate more to the domains that comprise the index than to the index itself. For this reason, we will compare these points with the basic principles that we formulated for the indicators as well as with the objectives for the life situation index:

- 4 Each domain must constitute a substantial yet separate part of the whole, while the total number of domains remains limited.
 - Although this has not been specifically formulated as an objective with respect to the life situation index, we contended that the domains must be directly connected with the life situation when they are selected.
- 5 In addition, the indicators (and therefore the domains and the index as a whole) must be measurable with *descriptive as well as evaluative* indicators.
 - One of the requirements we set for indicators was that they must be descriptive. At the same time, we included a block of evaluative indicators in the conceptual framework, which actually relate to the various domains and the resources as well.
- 6 The sixth point is that the indicators included should in principle apply to everyone (i.e. not just to specific groups).
 - One of the points of attention for the indicators was that they must apply to everyone. For example, characteristics relating to employment are not included in the index, since although they are extremely relevant for people with jobs, they are completely irrelevant for unemployed persons.
- 7 Finally, the indicators must be able to make a *neutral, positive or negative contribution* to the index (i.e. not exclusively negative, such as feeling pain).
 - The second objective with respect to the life situation index was to assess the situation in terms of positive and negative.

The overview shows that the basic principles that the SCP applies to the life situation index more or less correspond to the points for attention given in the literature. One point has not been included in the SCP's basic principles, i.e. that the number of domains included must be limited. However, the number of domains actually included is limited in practice. As we observed earlier on, most indices contain about ten domains at the most. For the sake of clarity, it is advisable to limit the number of indicators too: these should be core indicators. Although this was not specifically included in the basic principles for the life situation index either, it is nevertheless customary to include core indicators in the index. Pragmatically speaking, we have very little choice in this respect because the life situation index is based on data obtained from surveys, in which it is impossible to question respondents interminably.

The fact that the life situation index is based on microdata (one of the SCP's basic principles), does not emerge as a recommendation in the literature. It has no general validity, given that there are many (useful) indices that utilise aggregated data or even national averages (such as e.g. the Human Development Index). Another basic principle that does not appear in the recommendations made in the literature is the broader framework of background information in which the life situation is placed. This is not really a basic principle for the index *itself*, or for the domains and indicators, but rather for the setting in which analyses and explanations are made.

With respect to the fourth point (restricting the number of domains), it is difficult to determine the best possible number of domains: one is too few, but how much would be best? Moreover, including all the available indicators would result in far too many figures. This calls for a certain degree of *flexibility*: the index must be able to produce different variations for different purposes. What this actually means is that an index can still be constructed using fewer data (containing only the bare essentials), and that the index can be enlarged with more data. This is especially useful when using the same measuring instrument in a number of surveys or questionnaires: the available space is sometimes limited. However, making the best possible selection of indicators and domains still remains difficult.

When combining descriptive and evaluative indicators (the fifth point), the question is whether we should include both types in one measuring instrument. In view of the low correlation that is generally found between these two types of indicators, this does not seem a sensible idea. Moreover, descriptive and evaluative indicators have completely different meanings, principles and intentions (see chapter 3). Nevertheless, they do have to be used supplementary to one another in order to arrive at a comprehensive definition of the quality of life. For that matter, there are hardly any examples of indices that combine descriptive and evaluative indicators in one single measuring instrument.³⁴

One last point with respect to constructing an index is the measurement unit for the indicators. The question here is whether one can combine indicators for different quantities (e.g. money, years, and percentages). Nowadays indicators in most indices are measured *in actual terms*, not in terms of money.³⁵ For example, this means that the type of dwelling is important instead of its value, without expressing this in terms of money.

We could use a statistical solution for adding up the various units, like z-transformations, orders of priority, etc., in which case it is a question of which method is best and what the effects of the different solutions are. Determining the best way to consolidate indicators and domains is one of the most problematic dilemmas in index construction; it is also one of the most difficult matters to resolve in this respect.

6.3 Options for index construction

Perhaps the actual indicators chosen are more important than the way in which they are subsequently consolidated. After all, a composite index comprises nothing more than the separate indicators, which are presented in a certain way (Drewnowski 1974). There are numerous methods for constructing an index on the basis of the indicators once these have been selected (see e.g. Noll 2002c and Booyesen 2002). Before we discuss the options for combining indicators, we will first look at the choice between microdata or aggregated data. We will then examine other options: should we choose a threshold value or not, should we use weights or not, and finally, how can we use weights?

Microdata instead of aggregated data

The first choice we have to make is between using microdata or aggregated data. There are a number of advantages attached to the use of microdata (information on individuals obtained through e.g. surveys or registrations of persons), and the most important of these is that all connections and relationships can be analysed at microlevel. Each individual can be examined to determine whether there is any accumulation of social disadvantages, and whether the actual situation deviates from their evaluation of it. Moreover, microdata can be used to analyse all higher levels in principle: the data can be aggregated into figures on social groups or on cities, for example.

However, an index does not have to be based on microdata. Another possibility would be to take aggregated data (such as *percentages*) as a starting point. This would run as follows: let us imagine that in year X 25% of the population have a car and 30% practise a sport once a week. The next time this is measured (year Y), 50% have a car and 35% practise a sport once a week. In that case, a combined index would increase from 100 in base year X to 115 in year Y [$100 + ((50 - 25) + (35 - 30) / 2)$]. This type of method is used by Johnston in his quality of life index, as well as in the Child Wellbeing Index (Land 2004). The United States Index of Social Health uses aggregated data in a different way. This index does not examine annual increases or decreases; the indicators are scaled according to the 'best year' in the time series, and the relevant indicator is allocated a score of 10 for that year. All other measurements are allocated scores between 0 and 10 relating to that year. The ultimate index score is an average of the 16 indicators, expressed as a percentage (described in e.g. Finn 1998: p. 11 and Noll 2002c: p. 328)

The life situation index consists of individual data based on surveys. This is because we want to determine the relationship between the indicators at individual level.

No threshold values instead of threshold values

There are also many ways in which the indicators can be consolidated when using microdata. The way chosen depends among other things on whether threshold values are selected or not. We have already said that the choice of indicators and domains is of a normative nature, but this normative aspect is limited if we simply add up the indicators to make one index.³⁶ However, index construction may also take on a normative element, for example if deviations from a *threshold value* to be determined constitute the starting point. Let us imagine that a policy objective states that 80% of Dutch people should practise a sport, and that this percentage is still only 65% in year X, which means that sports is 0.81 in that year (65/80). We can make the same calculation for all indicators, following which we could work out the average. Threshold values are used by the United Nations, for instance, when calculating the Human Development Index, and by Drewnowski in his Level of Living Index (he uses 'critical points' to make 'incommensurable' measurement units commensurable).

The choice of a threshold value is a normative choice, which emerges for instance from the fact that we have to choose between an 'upper limit' and a 'lower limit': whether people have to obtain maximum results (e.g. studying at a university) or minimum results (primary education at the very least). There are far fewer people who comply with the norm in the first option than in the second option. The crucial question here is who determines the threshold value, and on what basis the choice is made. If the researcher is the one to do this, the choice is normative. Social consensus on the welfare objectives and levels of care can also be assumed; if this consensus actually exists, we can no longer refer to a normative substantiation on the part of the researcher. In that case, a sort of 'democratic' normative choice has been made (Drewnowski 1974).

The advantage to applying threshold values is that we can clearly delineate whether people are in an unfavourable position or not. Incidentally, this appears to be simpler than it actually is, because it is difficult to determine the number of indicators in which an individual must remain under the threshold value in order to be classed as being in an unfavourable position. Threshold values are often used if the concept to which the index relates can be clearly interpreted in terms of 'favourable' and 'less favourable', as is the case with respect to social exclusion or safety. These concepts therefore have a natural counterpart (social inclusion and lack of safety), which is not the case with respect to neutral concepts (e.g. the life situation concept, which does not have a natural counterpart; although this concept is a neutral one, the interpretation of the outcomes is not, since the life situation can be interpreted in terms of favourable and unfavourable). Since the life situation is a neutral concept, we have not decided in favour of using threshold values. The normative aspect therefore remains limited to the choice of indicators and their concrete details (being healthy is better than being unhealthy, taking exercise is better than not doing so). Nevertheless, no limits are imposed to the effect, for example, that exercise is only beneficial if taken at least four hours a week.

Weighting instead of not weighting

In actual fact, weighting is *invariably* used in index construction. Even if no explicit weighting is used, it is still implicit, since all indicators are of equal weight in that event.

The simplest method for constructing an index would then be to add up all the indicators. If an individual scores 4 on one indicator (e.g. practising sport once a week) and 2 on another indicator (ownership of a car, for example), the score on the index will be 6.³⁷ Although we can make this method slightly more complicated by calculating an average (this would be 3 in the example given above), the method is simple to use and to explain in principle.

When applying this method, it does not make any difference in principle whether the indicators have equal range. However, if there are considerable differences between the indicators, it may be necessary to reduce the spread. In order to prevent scale effects from arising, the number of hours that people practise a sport should not be added on to the number of cars they own. In such cases, the number of hours of sports will play a bigger role in the index than the number of cars owned, because as far as most people are concerned, sports has a greater scope than the number of cars owned (e.g. 5 hours' sports and 1 car). If we use z-transformations (a z-score is the actual score minus the mean, divided by the standard deviation) for example, this will standardise all the indicators, and we can subsequently add them up (Noll 2002c, Booyesen 2002, Nardo et al. 2005). Some examples of this approach include the Environmental Sustainability Index (Esty et al. 2005) and Estes's Index on Social Progress (Estes 1988). Incidentally, the z-transformation method can also be used if the measurement units for the indicators differ (e.g. if the index consists of percentages and figures), as z-scores are standardised deviations from the mean. However, one drawback with respect to z-scores is that they are based on relative transformations. This means that changes may occur for each measurement year, i.e. if changes occur in the spread of the indicator. Moreover, it no longer gives us insight into an overall improvement: after all, if everyone's situation improves to the same extent, this will not change anything with respect to the relative differences or to the differences with the average (cf. also Esty et al. 2005).

Although the scope and the spread of the indicators are now taken into consideration, there is still no question of weighting (as opposed to equal weighting). Is this a bad thing? Research has shown that using equal or differing weights has hardly any effect on the outcomes in many cases: there is an extremely close relationship between an index based on equal weights and an index based on differing weights (Breda et al. 1997, Russell et al. 2006, Esty et al. 2005, Booyesen 2002). This is understandable in a way, because people who are lagging behind in a number of areas will always have a lower score than people who are not lagging behind (SCP 1984).

Some studies have nevertheless revealed that it does make a difference whether equal or differing weights are used. An example of this is the conclusion reached (which is disturbing in this respect) in a study conducted by Becker et al. in 1987 on the quality of life in cities in the United States, which compares 329 cities using a multiplicity of indicators such as climate, health care, safety, etc.: 'depending on the weights given to the variables, there were 134 different cities that could be rated first and 150 different cities that could be rated last. Indeed, there were 59 cities that could be rated *either* first or last, depending on the differential weighting of the very same variables!' (in Diener and Suh 1997: p. 197).

When calculating the life situation index, we use a weighting in which different weights may be allocated to the indicators. Indeed, the weighting methodology used by the SCP even makes it possible to allocate different weights to categories as well. This method of weighting not only clarifies the importance of the different indicators compared to one another (the importance of the type of dwelling vis-à-vis the importance of sport, for example), but also the importance of various categories, such as a flat compared to a single-family dwelling, or even compared to the number of sports practised. Moreover, the difference between practising one type of sport or two does not have to equal the difference between practising three or four types of sports (it is quite conceivable that the biggest difference lies in whether or not people practise any sport at all, instead of in the number of sports practised).³⁸

The methodology chosen resolves yet another problem which occurs when simply adding up the indicators, i.e. in the case of nominal indicators, it is not always clear which categories are better and which are worse. Two types of sport is more than one, and three is more than two, but what about the type of dwelling? We are not sure about the order in which flats, homes for the elderly and single-family dwellings should be included, ranging from favourable to less favourable (see also Batusta-Foguet 2004).

Determining the weights

Although determining the weights is difficult, it is not impossible: 'policy-makers do this every day when weighing up one social measure against another' (Drewnowski 1974: p. 26). If we do decide to use weights, there are a number of ways in which we can determine them. We will examine the most important methods below.

The first option for determining the weights is to take preferences as a starting point in the same way as Drewnowski did in his level of living index. In this index, the idea is that the weights for the indicators reflect their relative contribution to prosperity, and that this contribution must be deduced from relevant preferences (Drewnowski 1974). Drewnowski proposes three ways of deducing weights from these preferences. The first way in which this can be achieved is by ensuring consensus among policy-makers: they set (quantified) social objectives in their plans, which can be used as a basis for a weighting schedule. We have meanwhile discovered that this is easier said than done, since there are very few quantified social objectives. Drewnowski gives a second option for these situations, i.e. personally deducing the social objectives from the government's plans and campaigns. If this is not possible either, the compiler of the index must then personally determine the weights, in consultation with experts and with due regard for policy-makers' attitudes. Consulting 'experts' who determine which indicators are more important and which are less so is frequently cited as a suitable option for determining weights. However, from experiences undergone by the compilers of the Environmental Sustainability Index, it has emerged that the consulting of experts results in the allocation of practically equal importance to the indicators (Esty et al. 2005).

Besides consulting experts, preferences can also be obtained by consulting the public, i.e. by finding out what indicators and domains people consider to be important. Another possibility, which is sometimes used as a supplement, would be to examine how satisfied people are. We then determine the weights on the basis of the importance assigned

to each of the domains or indicators and/or the degree of satisfaction with these. A number of studies have revealed that there is not a very close relationship between the importance people attach to a given aspect of their life situation and how satisfied they are with this (see e.g. Russell et al. 2006).³⁹ These studies also show that what people feel is important is of far less significance than what they are satisfied with, and that it makes very little difference whether equal or differing weights are used.⁴⁰ Besides, the more details there are, the more difficult it is for the public as well as for experts to determine what is more important. With respect to domains, it is probably possible to state whether housing is more important than health, but this is more difficult with respect to indicators: is the type of dwelling more important than the absence of disorders? This becomes even more difficult if we have to weight categories in an indicator as well: is a detached house better than practising a sport twice a week? Moreover, another question is how we can determine *how much* better one (category in an) indicator is than another. We can make a similar comment on people's satisfaction with component parts of their life situation. This may well be possible with respect to domains, since the question 'how satisfied are you with your home situation, your leisure activities, etc.' is relatively easy to answer. But this becomes more complex with respect to indicators: it is difficult to answer questions like 'how satisfied are you with your membership of societies' or 'how satisfied are you with your non-membership of societies'. Another problem is that preferences and the degree of satisfaction probably differ according to each social group. As a result of these problems, we have decided against consulting experts in order to determine the weights for the life situation index.

Another option that is sometimes used to determine various weights for indicators assumes a relationship with an external indicator relating to the index. The indicator most frequently used for this purpose is happiness, and the question is to what extent the indicators contribute to people's happiness. In that event, the relative importance of each indicator with respect to happiness constitutes the weight with which the relevant indicator is a factor in (in our case) the life situation index. The reason for choosing happiness is that it is regarded as the most important goal in life, or as an aim that policy must endeavour to achieve. One drawback to using happiness as a guideline is that only a very limited part of this is elucidated by the indicators that constitute the life situation index (see paragraph 5.3 and chapter 7 for a substantiation of this in figures). Apart from happiness, no other indicator is available for the life situation index because it has to cover a broad and comprehensive concept. This is different with respect to indices concerning more specific areas: if we take an index for housing alone, we might consider linking the indicators to satisfaction with one's home, satisfaction with one's living environment, attachment to one's neighbourhood, safety, etc. The SCP has therefore abandoned the notion of using an external indicator to determine the weights.

Finally, we can use *multivariate techniques* to arrive at differing weights for the indicators. These techniques are based on empiricism and are regarded as a more objective way of determining weights (Booyens 2002). Multivariate techniques assume that the indicators are interrelated and that they have a common basis, which we have to look for (the latent

dimension). The extent to which the indicators relate to this common basis serves to determine their weights. One example of this approach can be found in Belgium, where a statistical method for determining the weights for the standard of wellbeing (factor analysis) was selected. The reason for this was that no information is lost if the factor technique is used, and moreover, the index remains compact because indicators that are not closely interrelated are not included (Breda et al. 1997).

When constructing the life situation index, the SCP uses a multivariate technique, and the basic principle here is that the indicators are interrelated. However, in a previous report on the life situation index, this choice was accompanied by the information that this is not a *fundamental* solution to the weighting problem (Mootz and Konings-Van der Snoek 1990). This pragmatic line of approach has always remained in use: if no better method for weighting the indicators is available, and also in view of the disadvantages attached to the methods described above, we use a multivariate technique for the life situation index. We will be discussing which technique we have selected in the following paragraph. And we will examine the relationship between a weighted and an unweighted life situation index in chapter 8, and discuss the question of whether weighting or not weighting would affect the life situation index in any way.

6.4 Construction of the life situation index

In the case of the life situation index, we have opted for an index on the basis of micro data where the indicators are not subject to any threshold value. The indicators are weighted, not on the basis of external experts or criteria, but via internal weighting (on the basis of the interrelationships between the indicators). The fact that the indicators are interlinked is the starting point when selecting the domains and indicators for the life situation index: obviously they should be relevant to the central theme, the life situation. This implies that it may be assumed that the selected indicators are interrelated *via that theme*. This basic assumption can also function as a starting point for the construction of the index: the indicators all relate to the same dimension – they must contribute either positively or negatively to the life situation. In addition, an accumulation of negative aspects would lead to a worse life situation than would a negative score on just one aspect – and the reverse applies in the case of positive aspects (SCP 1988, compare also Atkinson et al. 2002). The fact that indicators can have both a positive and negative influence makes not only for accumulation, but also for compensation: positive aspects can compensate for the effects of negative ones. The positive effect of doing sports can diminish or even cancel out entirely the negative effect of living in a poor-quality home. This also provides the opportunity to compare the life situation of a sports practitioner in a poor-quality home with that of someone who does not practise any sport and who lives in a good-quality home.

These considerations mean that the weighting of indicators is determined by their mutual relationships, and also their relationship with the life situation as a whole. Given that the life situation as a whole is not measured, as opposed to the individual indicators, we have to locate the common basis of these indicators via a non-measured – latent – dimension. Additionally, any indicator that has a strong relationship with

other indicators should weigh more heavily than one with a weaker relationship. For these reasons, we are using a multivariate, statistical method to construct the index and to determine the weightings. The nonlinear canonical correlation analysis method (the Overals procedure in SPSS) was selected as the most appropriate.⁴¹ What it comes down to is that this method, which is a variant of principal component analysis, calculates the weights in such a way that the item total correlation is maximised.⁴² Appendix B carries a detailed description of how this procedure works and the results it produces for the life situation index.

The benefit of this technique is that it can deal with different levels of measurement. Indicators do not have to be measured at ordinal or interval level (such as the number of sports and the surface area of the living room): nominal indicators (such as type of home) can also be included in the analysis.⁴³

Another advantage of the statistical method selected is that the theoretically distinctive domains can also be used empirically in the analysis (Van der Burg, De Leeuw & Dijksterhuis 1994). It can be indicated that the number of sports that someone practises and the frequency thereof together form one domain, and that the type of home, whether or not it is owner-occupied, the number of rooms and the size of the living room form another. In addition, each domain has an equal weight, so that a domain with a larger number of indicators does not weigh more heavily than one with a lower number.⁴⁴

We are using Overals to determine the common basis of the individual indicators and therefore also their weights.⁴⁵ The common basis is formed by a dimension from the Overals analysis. In practice, it seems that the first dimension is suitable for describing the life situation (that is, that the indicators comply with expectations: positive categories, such as 'does practise sports', are given a positive rating and negative categories, such as 'does not practise sports', a negative one). The scores in this dimension have an average of 0, and a standard deviation of 1. Because the differences between groups are small, a (linear) transformation occurs before the presentation of the figures. From 1997, the life situation is presented as a 'real' index figure. This means that the average life situation score in the Netherlands is set at 100 for the base year, with a standard deviation of 15.⁴⁶

The index is calculated on a dataset that includes, in principle, all available years. A new Overals analysis is carried out every time a year is added.

Of course, there are not just advantages to the method chosen for merging indicators and determining weights. The fact that the researcher no longer has any influence on the weights that are used could be regarded as a disadvantage.

It may also be a disadvantage that the life situation index should be interpreted in a relative sense: whether a person's life situation is good can only be decided by comparing it with the life situation of others. This makes it awkward to determine the exact boundary beyond which a person's life situation can be said to be good, or bad. The task is made easier when threshold values or target figures are used: after all, they represent clear boundaries. However, the relative level is more important for the life situation than is the absolute value, and it is how the situation evolves over time that is of particular interest. Nevertheless, 'hard' boundaries have been set since 2001, and this makes it possible

to make pronouncements about a good and bad life situation (the figures are presented in the next chapter).

Outcome of the Overals analysis

We use the first dimension from the Overals analysis as the basis for the life situation index. This first dimension lends itself to easy interpretation in terms of the life situation: the indicators point in the expected direction. This means that positive categories like 'does practise sports' are given a positive rating, while negative categories like 'does not practise sports', a negative one. However, in theory it is possible to distinguish more dimensions to which a meaningful and substantial significance could be given. Analyses show, though, that only the first latent dimension can be meaningfully interpreted with the nineteen indicators that we are using: in the case of the other dimensions, either the expectations are not met or not all the indicators are relevant (see appendix B). Whether indicators are relevant can be inferred from the weights and the component loadings (table 6.1). Weights are comparable to regression coefficients and give an indication of the contribution made by each variable to the dimension, while the component loadings are comparable to the Pearson's correlation coefficients (between the quantified variables and the scores on the dimension). Indicators are somewhat more important or less important depending on which of the two is being examined: in general it appears that the diversity of socio-cultural leisure time activities and holiday behaviour are the most important and that possession of a public transport ticket season ticket and the diversity of hobby activities are less important.

The index has an eigenvalue of 0.39.⁴⁷ This eigenvalue indicates the extent to which the relationship between the eight domains is shown by the index. Of the eight domains, leisure activities appears to make the largest contribution to the index, and health the least (see the 'fit' in table 6.1). This means that the indicators for the leisure activities correlate most closely with the other indicators and that the health indicators correlate the least.

The raw scores for the life situation index (that is, before the transformation into index figures, as described above) have a mean of 0, with a standard deviation of 1. These index scores can be represented as a scale on which the extremes are defined as 'the least good life situation' and 'the best life situation'; this is shown as a graph in figure 6.1, which shows that a relatively small group reaches high scores. It can also be seen that the left-hand side of the graph extends further than does the right-hand side. The lower somebody scores, the worse their life situation is.

Table 6.1

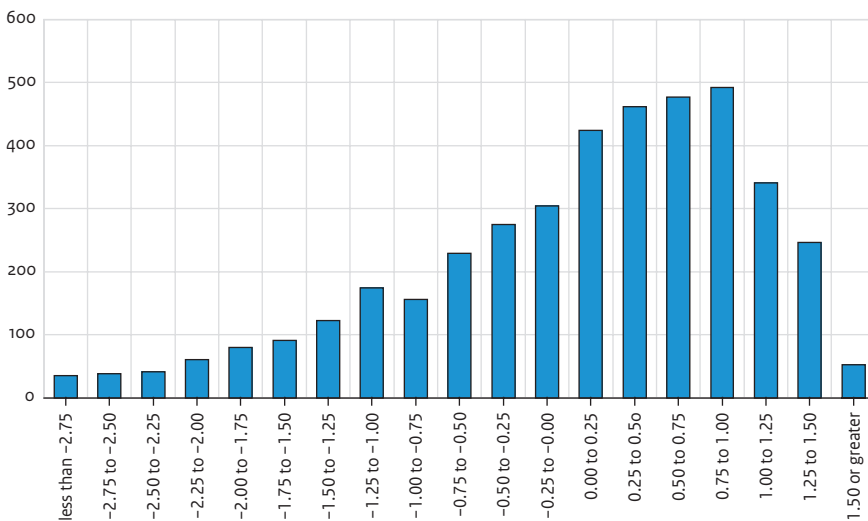
Some results of the Overals analysis (2006)

domains	fit per set	relationship with the latent life situation (Pearson's correlation)
housing	0.48	0.67
socio-cultural leisure activities	0.52	0.73
social participation	0.34	0.52
sports	0.33	0.59
holidays	0.44	0.68
ownership of durable consumer goods	0.43	0.68
mobility	0.32	0.58
health	0.24	0.49
<i>mean loss</i>	0.61	
<i>eigenvalue</i>	0.39	
indicators	weights	component loadings
type of home	0.25	0.26
surface area of living room	0.23	0.40
number of rooms	0.20	0.42
owner-occupied or not	0.34	0.51
hobby activities	0.12	0.30
socio-cultural leisure activities	0.54	0.66
membership of societies	0.31	0.51
voluntary work	0.31	0.35
social isolation	0.36	0.39
number of times doing sports per week	0.34	0.58
number of different sports	0.26	0.57
holiday	0.52	0.67
foreign holidays	0.23	0.58
household articles	0.33	0.52
hobby equipment	0.51	0.63
possession of a public transport season ticket	0.22	0.11
possession of a car	0.58	0.54
hindered in carrying out daily activities at home	0.36	0.47
hindered in carrying out leisure-time activities	0.18	0.41

Source: SCP (CV '04, '06)

Figure 6.1

Distribution of the raw scores on the life situation index (the higher the score, the better the life situation, 2004-2006)



Source: SCP (CV'04, '06)

One of the starting points in determining the selection of domains and indicators is their correlation – with each other, but more especially, with the (latent) life situation. Between the domains themselves there is a reasonable, though not very strong, degree of interrelationship: the correlation varies from a maximum of 0.47 between housing and the ownership of durable consumer goods to a minimum of 0.18 between health and mobility (appendix B). A very high correlation cannot be expected anyway, because we are examining different aspects of the life situation and a high correlation between two aspects would suggest that they are effectively measuring the same thing. We can look at the correlation of the indicators with the (latent) life situation on the basis of the component loadings (table 6.1). Although no hard boundaries can be given, a minimum component loading of 0.30 is usual. In the case of the indicators that are used for the life situation, there are two component loadings that do not meet this requirement: that of type of home and public transport season ticket. We will continue to use these indicators for the time being because they are important for a theoretical definition of the life situation, but it may be necessary at a later stage to see whether alternative operationalisations would lead to an empirical improvement.

6.5 In summary

For the construction of the life situation index we are using various weights for the indicators. The weights are determined statistically, through the use of nonlinear canonical correlation analysis, which has the advantage over other statistical methods in that:

- indicators of every level of measurement can be included (including nominal indicators);
- the domains can be included in the analysis too;
- a domain with more indicators than another does not automatically carry greater weight;
- the categories are rescaled (so that it is clear, for example, that the difference between doing sports and not doing sports is greater than the difference between doing one sport and two);
- indirectly people's choices (and therefore their appreciation) also play a role (because the correlation between the indicators is the starting point of the analysis).

The additional value in merging social indicators into a composite index lies primarily in providing an insight into complex concepts, the communicative function (not just with policy makers but also with the general public) and in the analysis (with an index, cumulative effects are made visible and insights are created into the compensatory effect between domains). Because the index is calculated at the individual level, it can be seen for which groups the life situation deteriorated, what the causes are, and whether the decline in one domain can be compensated by an improvement in another.

7 The life situation in the Netherlands over a thirty-year period: the results

In this chapter, we look at the development of the life situation in the Netherlands between 1974 and 2006.⁴⁸ We will also be examining the developments of the life situation of various social groups. This will be followed by an appraisal of the relationships that we distinguish in the conceptual framework and a test of the sustainability of those relationships. This chapter contains only a brief description of the most significant results, given that they are dealt with in detail in the biennial publication *The Social State of the Netherlands* (which covers a period of 10 years). A number of observations regarding the analyses and interpretations of the results are given in box 7.1.

Box 7.1 Data collection and interpretation of the results of the life situation

With regard to the developments in the life situation between 1974 and 2006, it is not so much the changes from one year to the next that matter, but rather the trends over several years.

Extra care needs to be taken when making interpretations based on two measuring moments because of changes that have been made to the way in which data are collected. The first time was in 1997, when the separate life situation survey was replaced by a more omnibus-type of survey, and the second was in 2004, at which time the survey switched from face-to-face to pen and paper. At these two times, there is no clear indication of whether any change to the index score is attributable to alterations in the way the data was acquired or to actual changes in the life situation. For that reason, the life situation for the Netherlands as a whole between 1993 and 1997, and between 2002 and 2004, has been kept constant.⁴⁹ However, it is possible to show how groups have developed, as the life situation of groups can be derived from the national mean. In addition to changes in the way data are acquired, the construction of the index has also been modified down the years (with regard to both the indicators used and the method of combining them). A detailed description of these and several other minor changes that have been implemented over the years can be found in Boelhouwer and Stoop (1999) and *The Social State of the Netherlands 2005* (SCP 2005).

Finally, it is important when interpreting the results to realise that the data for the life situation index are acquired from people in residential households, aged 18 or over. People residing in institutions, temporarily or otherwise, or who have no fixed address, were not included in the random sample that formed the basis of the results (about 220,000 people in 2007/8 – about 1.5% of the population: CBS 2010a, Leger des Heils 2007). Moreover, the level of participation in surveys of people in ethnic minorities is low. As a result, the picture of the life situation in the Netherlands may be distorted to a slight extent, that is, in somewhat too positive a way.⁵⁰

It should be pointed out that improvements or deteriorations in the life situation are, as a rule, a slow process. This is because the changes in the individual domains are generally limited, especially when viewed over a short period. For example, the vast majority of people continue to live in the same home and do not undergo drastic

changes in their state of health. As a result of this, shifts of, say, two points in the average index value can be significant, even though they may only seem slight.⁵¹ It should also be borne in mind that the index is a relative measuring instrument: it is not about the absolute life situation level at any given moment, but about how it evolves over time, or how groups evolve in comparison with each other. If the national trend is positive, but a particular group is showing a negative trend, that could indicate that greater attention (in relation to policies or otherwise) is needed for the group in question.

7.1 Developments since 1974

This paragraph deals with developments in the life situation since 1974, both for the Netherlands as a whole and for several social groups. For this purpose, we have divided the population of the Netherlands according to age, level of education, income and household composition, among other things. If any noteworthy developments have occurred in any particular group or groups (for example, if the life situation among one group has improved much more markedly than for other groups), then the details of the individual clusters will be presented, thereby giving an initial impression as to the reasons behind the relevant noteworthy development.

Looking at how the life situation in the Netherlands has evolved, we see that since 1974 there has been an almost continuous improvement: the life situation in 2006 was better than in 1974 (figure 7.1. For the exact life situation scores of the social groups, see internetappendix C – in Dutch. This appendix also carries the standard deviations and the number of respondents).

Only the economic crisis in the early 1980s led to a worsening, but by 1986 it had recovered to the level seen in 1980. This general positive development applies to each of the separate groups: between 1974 and 2006, the life situation of every group in the Netherlands improved.

Nevertheless, there have been a few notable developments in the past 30 years. For example, in the age-based groups, the progress of those in the 45-54 category stands out: in 1974 their life situation was slightly below average, but in 2006 it was above (figure 7.2). The improvement among 65-74 year olds is also notable: they advanced more than average, as did the group of those aged 55-64, although to a lesser degree in the latter case. Consistently, the life situation of people aged over 55 years has been less than average, while that of people under that age has been above it (see figure 7.2). However, the relationship between the life situation and age is not denoted by a straight line, but rather a curve: as people get older their life situation improves, except that once they reach the age of 45, the life situation deteriorates.

Figure 7.3 shows that the life situation of couples (with or without children) was better than average in 2006, while that of people who lived alone and one-parent families was worse than average. If we look at how things have developed since 1974, it is striking that the life situation of one-parent families remained stagnant for a long time, but that there has been a positive trend in recent years. Additionally, the life situation of couples without children has improved in the last thirty years from less good to better than aver-

age. In general, the differences between the various types of households have become smaller.

That also applies to the difference in life situation between men and women – it was smaller in 2006 than in 1974 (figure 7.1). In general, the life situation of men appears to be slightly better than that of women.

With regard to the resources work, income and education it applies that the life situation of people who work, who have higher educational qualifications, or a higher level of income is better than average (figures 7.4 to 7.6). Those in the opposite position have a life situation that is below average. Looking at how things have developed, it is noteworthy that the difference between the outermost groups has increased. In 2006, the difference in the life situation between those in employment and those not, between those with good educational qualifications and those without, and between those on good incomes and those on poor ones, was greater than was the case in 1974.⁵² This led to the conclusion that there was evidence of greater inequality in Dutch society (SCP 2005). Health has only been included as a resource since 2002, so no long-term pattern is available.

Figure 7.1
Development of the life situation based on gender, 1974-2006

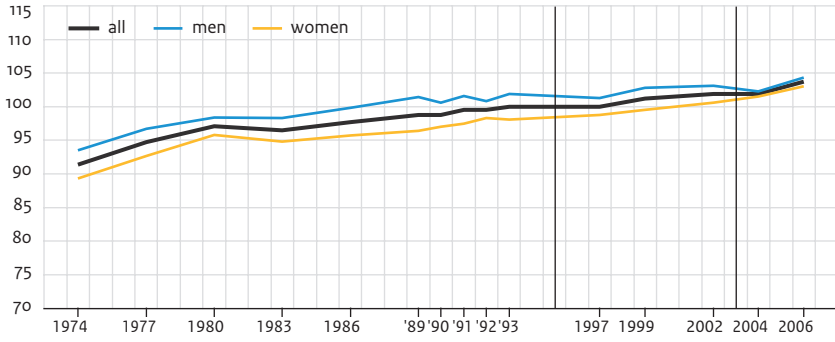


Figure 7.2
Development of the life situation based on age groups, 1974-2006

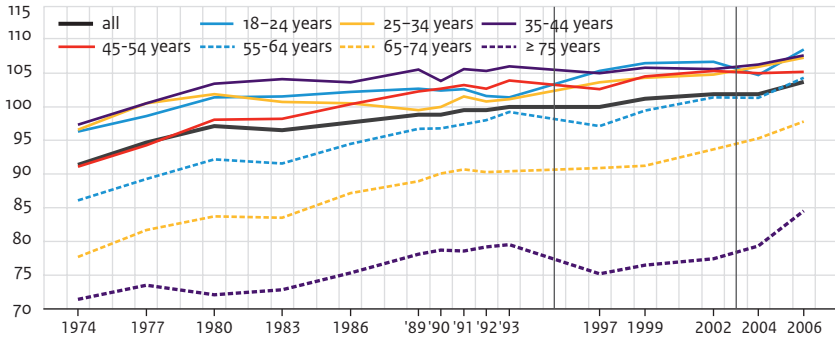


Figure 7.3
Development of the life situation based on household composition, 1974-2006

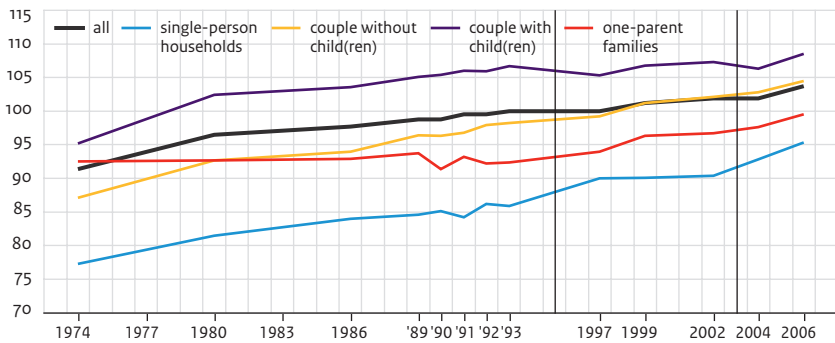


Figure 7.4
Development of the life situation based on labourforce position, 1974-2006

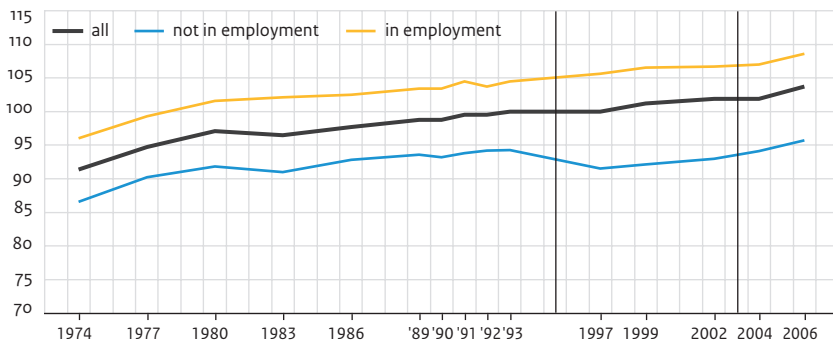


Figure 7.5
Development of the life situation based on level of education, 1974-2006

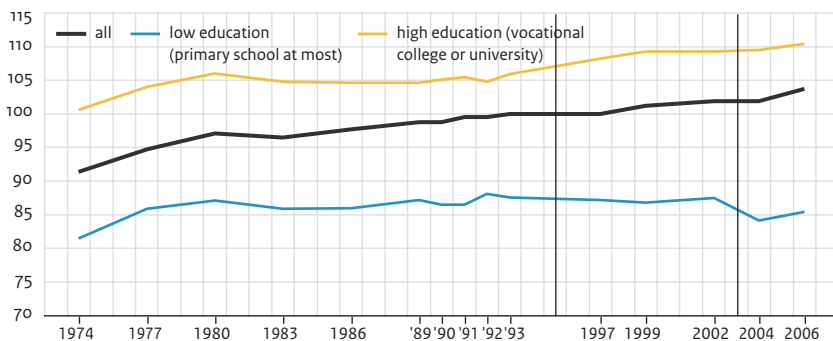
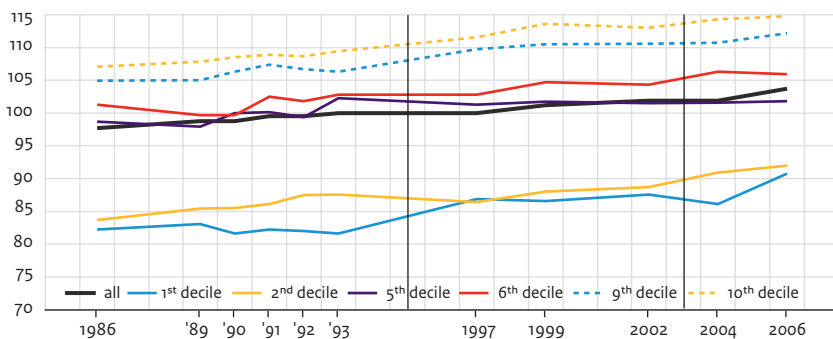


Figure 7.6
Development of the life situation based on income groups 1986-2006: deciles



Source: Statistics Netherlands (LSS'74-'86, DLO'89-'93; POLS-SLI'97-'02) SCP edition; SCP (CV'04,'06)

In the case of a number of other aspects, the data do not go back to 1974, but 1997: it is only since then that data can be broken down for these aspects. This applies to the difference between the inhabitants of the four largest cities in the Netherlands and the rest of the country, between those with an income under the poverty line and those with an income above it, and ethnicity. The life situation for these categories is shown in table 7.1. It appears that the life situation for people on low incomes and of those from non-Western ethnic minorities is below average. The life situation of people living in the four largest cities also lags behind.

Table 7.1

The life situation for a number of social groups, 1997-2006

	1997	1999	2002	2004	2006
all	100	101*	102**	102	104*
inhabitants of the four largest cities (Amsterdam, Rotterdam, The Hague and Utrecht)	97*	95*	98*	99*	100*
inhabitants of 21 larger municipalities	98**	100	100**	102	103
inhabitants of other municipalities	101**	103*	103*	102	105
people on low incomes	89*	90*	89*	92*	95*
people not on low incomes	103*	104*	105*	104*	105*
indigenous		102**	103**	102	105**
Western migrants		100	100	102	102**
non-Western migrants		91*	93*	94*	96*

Significance: * $p < .01$ ** $p < .05$ ('all' compared to the previous year in the table; groups compared to 'all' for each year).

A low income is defined as a household income below the poverty line.

Source: Statistics Netherlands (POL5-SLI'97-'02) SCP edition, SCP (CV'04,'06)

People aged 75 or over have always had the most unfavourable life situation of all the various groups. This of course has to do with the indicators that are selected. Looking at the scores for the eight individual domains tells us something about the causes of their deprived status. Taking the scores for the year 2006, we see an overview in table 7.2 of the domains in which the deprived status of the groups with the worst life situation is most clearly manifested. The table shows that, in particular, senior citizens possess fewer consumer goods and have smaller homes (the complete scores of all the various groups for the individual domains can be seen in the form of a graph in internetappendix D – in Dutch).

It appears that the income-related domains (ownership of consumer goods, mobility, and housing) play a role for most groups in a less-than-good life situation. This is not surprising given that the groups concerned generally have low incomes. Nevertheless, there are other aspects that play a role for some groups – people from non-Western

ethnic minorities, for example, who have less varied leisure-time activities and whose social participation is more limited.

Table 7.2

Domain scores for groups with the worst life situation, 2006 (the mean per domain is 100, standard deviation 15, in 2004).

	ownership of consumer goods	mobility	housing	holidays	health	leisure time activities	sports	social participation
all	104	101	101	100	101	101	101	101
65-75 years	96*	101	98*	99	96*	96*	96*	101
75 years or older	84*	100*	88*	89*	90*	89*	90*	93*
single-person households	94*	90*	92*	95*	98*	98*	100	98*
one-parent families	103	95*	98**	93*	100	96*	99	99
low incomes (lowest decile)	94*	82*	89*	93*	95*	96*	99	96*
poorly educated	90*	91*	90*	88*	92*	85*	91*	94*
unemployed	97*	97*	97*	96*	94*	95*	96*	98*
non-Western migrants	98*	95*	93*	92*	102	91*	95*	93*
inhabitants of four largest cities	101*	94*	95*	99	102	99	100	98*

Significance: * $p < .01$ ** $p < .05$ (difference with 'all').

The score of 104 for the ownership of consumer goods under 'all' indicates that this rose between 2004 and 2006. In the case of senior citizens, however, it fell (the score is less than 100). The lowest score in each social group is shown in bold.

Source: SCP (CV'04, '06)

In the light of the indicators that have been selected, it is no surprise to learn that the life situation for senior citizens is less good at any given time than that of younger people. Looking at how things have developed over time is of greater interest. An examination of the individual domains allows us to say something about the causes of progress, stagnation or deterioration. Because we did not make any distinction between the current eight domains until 1997, it is not possible to describe how the domains evolved before that time. Extensive analyses of longer periods and specific developments in the years between 1997 and 2006 are described in various editions of The Social State of the Netherlands. Because of changes to data collection methods (see the description in box 7.1), we will look at deviations from the mean for both 1997 and 2006.

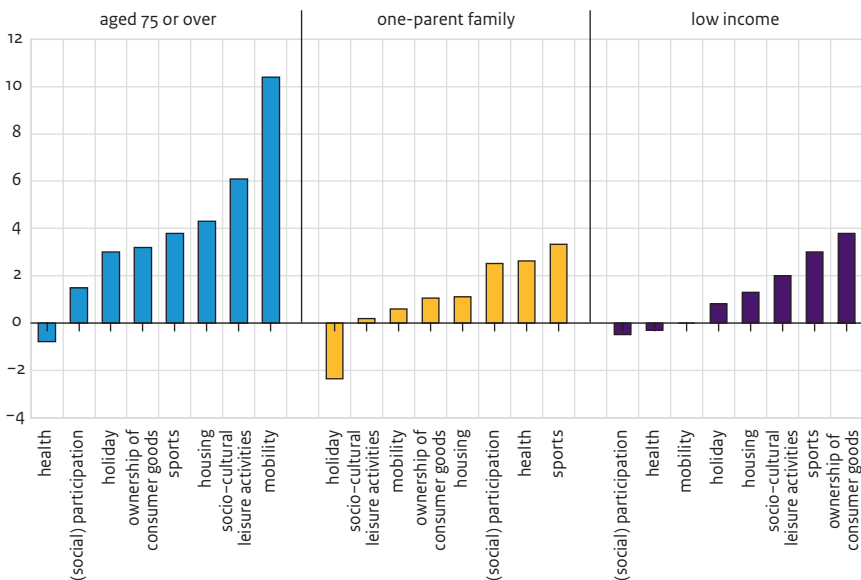
Figure 7.1 showed that between 1997 and 2006, the life situation in the Netherlands improved (for the exact figures, see internetappendix C). Below, we show how the domains developed for a number of these groups between 1997 and 2006. To make things clear, we have selected three of the groups that progressed well in relative terms

– people aged 75 or older, one-parent families and people on low incomes – and three groups for whom the life situation deteriorated relatively markedly. These are people who had not gone beyond primary education, those in the 45-54 age group, and people on middle incomes (we use the fifth decile as middle incomes – the remaining groups, together with the categories not mentioned here, are in internetappendix D).

In the case of the three groups whose life situation improved much relatively speaking, the improvements occurred in virtually every domain (figure 7.7). A striking aspect is the much greater degree of mobility among those aged 75 or over; today more elderly people have a car and use it (Jorritsma and Olde Kalter 2008: Ch. 3). At the same time their health lagged behind somewhat; this also applies to the number of holidays taken by one-parent families and the social participation and health of people on low incomes.

Figure 7.7

Relative development of the life situation of population groups that have made relatively good progress, according to domains, difference between 1997 and 2006 (in index scores)



This figure deals with deviations from the mean, for each domain. For example: in terms of mobility, the life situation of people aged 75 or over improved by ten points compared with the average of the population as a whole: in 1997, they scored 17 points fewer than the average for mobility, and in 2006 seven points fewer – a ten-point improvement. Note, however, that this is relative progress, because the group was still achieving worse scores than average for mobility. The data for the remaining domains and the other groups are included in appendix 10 of Boelhouwer 2007b.

Source: Statistics Netherlands (POLS'97) SCP edition; SCP (CV'06)

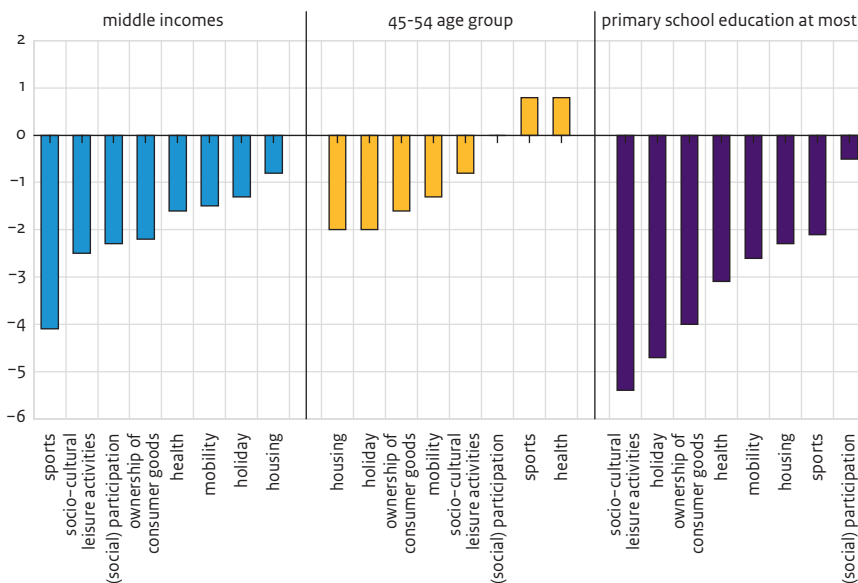
Although people on middle incomes and those aged 45-54 lagged behind in relative terms, their life situation did improve between 1997 and 2006. In the case of the former,

the less favourable developments were seen in all areas, but most markedly in the area of sports (in relative terms, they practised sports to a lesser degree – see figure 7.8). However, those in the 45-54 age group actually made progress in this area, as did their health, although these gains were not enough to negate the relative deficits in the remaining domains.

The life situation of people with no more than a primary school education got worse between 1997 and 2006, in spite of a brief recovery between 2004 and 2006. The deterioration occurred in all areas, but is especially visible in the reduction in leisure time activities and holidays.

Figure 7.8

Relative development of the life situation of population groups whose life situation improved the least, according to domains, difference between 1997 and 2006 (in index scores)



This figure deals with deviations from the mean, for each domain.

For example: people with a middle income have fallen by four points for sports when compared to the average of the total population: in 1997 they scored one point better than average in this area, and in 2006 three points worse than average – a drop of four points, in other words. The data for the remaining domains and the other groups are included in appendix 10 of Boelhouwer 2007b.

Source: Statistics Netherlands (POLS'97) SCP edition; SCP (CV'06)

Finally, we can make some general remarks about how the life situation has developed by looking at whether the proportion of people with a good or less good life situation is increasing or decreasing, and whether the composition of these groups is changing. To do this, we have set 'hard limits', based on the standard deviation in 1997 (the base year).

A person's life situation is considered to be 'good' if their score is at least 115, while a score of 85 or less means a poor life situation. By adhering to these limits in subsequent years as well (regardless of any improvement or deterioration that has taken place at a general level), it is possible to look at how the group of people with a good life situation has developed, and whether the composition of the group has changed. The analyses indicate that the percentage of people with a good life situation rose from 5% in 1974 to 24% in 2006 (Boelhouwer 2007b: p. 299).

In summary

From the time that the SCP has been monitoring the life situation in the Netherlands, the picture has been one of progress: the life situation overall improved between 1974 and 2006. Every group in Dutch society discussed here saw an improvement in that period. Nevertheless, the life situation for some groups has advanced at a faster rate than others. It also appears that not every group has experienced the same development in each domain. The fact that social participation among one group has increased does not mean that this applies to other groups. Additionally, a positive development in one area and a negative development in another can cancel each other out. Consequently, the life situation may have improved as a whole, even though that may not be the case for every domain.

7.2 Backgrounds to the life situation

The descriptions of the development of the life situation since 1974 in the previous paragraph made reference to differences between social groups in the Netherlands. As these social groups are based on the background features of the conceptual framework, this represents a start to the process of analysing the life situation according to the conceptual framework.

In the last paragraph, it was shown that the most important resources play a role in the quality of the life situation: people without work, on a low income, or who have a low level of education have a less good life situation than do those with a job, a high income or who have good educational qualifications. In the last thirty years, the difference in the life situation between people in these two categories has grown, apart from the difference in income, which was not as great in 2006 as it was in other years (table 7.3). In particular, the difference between those people with paid work and those without has increased, although in recent years the difference has remained steady (a detailed description of these differences can be found in SCP 2005: p. 304-305).

With regard the fourth important resource, health, it is unfortunate that no comparative data is available for the entire period between 1974 and 2006. Data are available for subjective health (used here as a proxy of objective health) for 1980 and later. Here, too, there is a greater difference in the life situation between people in good health and those in poor health, although the increase has been slight and only emerged after the turn of the century.

Table 7.3

Resources and the life situation, 1974-2006 (in index scores)

	1974	1980	1986	1993	1999	2004	2006
mean life situation in the Netherlands	91	97	98	100	101	102	104
lowest income decile ^a	77	82	82	82	87	86	91
highest income decile ^a	103	108	107	109	114	114	115
<i>difference</i>	26	26	25	27	27	28	24
lowest level of education (primary school at most)	81	87	86	88	87	84	85
highest level of education (vocational college or university)	101	106	105	106	109	109	110
<i>difference</i>	20	19	19	18	23	25	25
not in employment	87	92	93	94	92	94	96
in employment ^b	95	102	103	104	106	107	109
<i>difference</i>	8	10	10	10	14	13	13
self-assessment of health: (very) poor		79	81	84	88	83	83
self-assessment of health: very good ^c		103	103	105	107	108	110
<i>difference</i>		24	22	21	19	25	27

All differences are significant ($p < .01$; the mean life situation compared to the previous year in the table (two exceptions: 1986 differs not significant from 1980 and 2004 not from 1999); groups compared to the mean for each year; difference compares the two groups).

a For 1974 and 1980, income *octiles* are used; in later years, income *deciles*.

b 'In employment' is defined as follows: people who work at least one hour a week. It should also be noted that there is little difference in the life situation between people who work more and those who work fewer than twelve hours a week (see appendix 12.2 in SCP 2005).

c As the indicators for health have changed considerably over the years, and therefore cannot serve to make comparisons, it is impossible to make any comments about differences in objective health, which is why differences in subjectively measured health aspects have been included. This, incidentally, is a good pointer for a person's general state of health.

Source: Netherlands Statistics (LSS'74; DLO'93; POLS-SLI'99) SCP edition; SCP (CV'04, '06)

Index for social disadvantage

To a certain extent, the above deals with groups that overlap. Someone with a poor level of education has less chance of being in paid employment (and more chance of having a poverty-line income), and even if they are in work, their income will be below that of someone with better educational qualifications. By combining these three factors, or resources, it is possible to create an index for social disadvantage (first presented in SCP 1999). This involves the following demarcation points: an income below the poverty line, education no greater than secondary level, and not being in paid employment

(employment is defined as any job where the employee works at least one hour a week). It is not possible to calculate the index for social disadvantage for the period leading up to 1983, because at that time income was only recorded in categories. This means it cannot be determined whether or not incomes fell below the poverty line. The index is a simple sum of the three indicators: the scores therefore range from 0 (no social disadvantage on any of the indicators) to 3 (disadvantaged on all three counts). For people aged over 65 the maximum score is 2, as very few of them are in employment (at least, as yet). In the past twenty years, the proportion of socially disadvantaged people has declined, especially among senior citizens (see table 7.4). However, this fall is in contrast to the increase in the difference in the life situation between those who are not disadvantaged and those with a maximum level of social disadvantage. The most vulnerable groups are not benefiting from the improvement to the life situation in the Netherlands (their life situation in 2006 is not significant better than it was in 1983). Taken in context with the sharp decline in the percentage of senior citizens who are in a socially disadvantaged position, this indicates that especially the most vulnerable group of the elderly have not been able to improve their position.

Table 7.4

Accumulative scores of social disadvantage in relation to the resources: income, education, and employment, 1983-2004 (in percentages and index scores)

	percentage						mean life situation					
	1983	1986	1993	1999	2004	2006	1983	1986	1993	1999	2004	2006
people below the age of 65												
no disadvantage	41	49	58	58	57	61	103	103	105	108	109	110
maximum disadvantage	7	5	3	4	2	2	87	82	86	81	81	86*
<i>difference in life situation</i>							16	21	19	27	27	25
people aged 65 or over												
no disadvantage	28	30	41	42	56	65	86	90	93	95	96	97
maximum disadvantage	36	34	25	22	8	5	76	75	78	74	72	79*
<i>difference in life situation</i>							10	15	15	21	24	19

* The life situation of disadvantaged people is not significant better in 2006 than it was in 1983. For people below the age of 65 $p = 0.887$, for people aged 65 or older $p = 0.347$.

Source: Statistics Netherlands (DLO'93; POLS-SLI'99 and '02) SCP edition; SCP (CV'04, '06)

Influence of background features on the life situation

The model assumes a causal relationship between the various resources and the life situation: the more resources someone has, the better their life situation will be. This relationship has already been dealt with above, but without determining how great the influence of each resource is on the life situation. In this paragraph, the effect of the resources on the life situation will be established with the help of multivariate analysis. In addition to the three resources, we will also be including other background aspects:

age and household composition. These will enable us to explain more than half of life situation differences.

Of all the features included, that of income is the most important with regard to the quality of a person's life situation, followed by education and age (see table 7.5).

Table 7.5

The influence of the resources and several other background features on the life situation, 1974-2004 (analysis of variance (Anova; multiple classification analysis), beta coefficients)

	1974	1980	1986	1993	1999	2004 excluding health	2004 including health	2004 including health and ethnicity	2006
age ^a	0.25*	0.27*	0.25*	0.20*	0.26*	0.25*	0.22*	0.24*	0.21*
income ^b	0.27*	0.23*	0.23*	0.24*	0.32*	0.34*	0.33*	0.31*	0.37*
employment									
market position ^c	0.03**	0.02	0.01	0.05*	0.10*	0.08*	0.07*	0.07*	0.06**
education ^d	0.21*	0.22*	0.26*	0.21*	0.27*	0.29*	0.27*	0.27*	0.24*
household composition ^e	0.14*	0.24*	0.21*	0.25*	0.09*	0.08*	0.07*	0.08*	0.08*
source of income ^f	0.11*	0.07*	0.12*	0.10*	0.06*	0.13*	0.13*	0.12*	0.12*
health ^g							0.14*	0.15*	0.19*
ethnicity ^h								0.10*	
R ²	45%	48%	48%	47%	57%	58%	59%	60%	54%

Significance: * $p < .01$ ** $p < .05$

a 18-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years, 75 years and older.

b In octiles until 1980, thereafter in deciles.

c Until 1993: does work; does not work. From 1997, people in employment have been divided into two categories: those working fewer than 12 hours a week, and those working more than 12 hours a week.

d Until 1993: LO/VGL0 (forms of primary education); MULO, LBO, MAVO, VWO-3 (forms of secondary education); MBO, HAVO, VWO (forms of upper secondary education); HBO (university-level education), university. LBO has been included as a separate category since 1997.

e Single-person household; couple without children; couple with children; one-parent family; other.

f Until 1993: salary; pension/assets; old-age pension/widow's or orphan's pension; other type of social security; other. In 1999 and 2002: salary; profit; pre-retirement pension; pension/old-age pension; social security / grant; other. In 2004: salary; profit; pre-retirement pension; old-age pension; surviving dependants' pension, unemployment benefit, invalidity benefit, social security; student grant; other.

g Does or does not have chronic condition, illness, or handicap.

h Indigenous; non-Western migrants; Western migrants.

Source: Statistics Netherlands (LSS '74, LSS '80, LSS '86, DLO '93; POLS-SLI '99 and '02) SCP edition; SCP (CV '04, '06)

Since 1993, the importance of income and level of education have increased, while that of household composition has decreased. This is due to a large degree to the differences in the life situation between various household types becoming smaller: it now matters less than it did in the past what kind of household a person lives in. The life situation of people living alone and of one-parent families has improved especially (see also inter-

netappendix C). This is related to the greater proportion of young people and people in work (both of whom enjoy a life situation that is better than average) in these groups (see also SCP 2005: p. 307). The result is that income and education have become more important at the expense of the composition of households.

Since 2004, health has been regarded not only as a part of the life situation, but also as one of the resources (not having a handicap or chronic condition is a resource: any impediment that may result from having a handicap or chronic condition is part of the life situation). Adding health to the analysis shows that it makes its own unique contribution to the quality of the life situation (see table 7.5).

For a number of years now, we have also had information about people's ethnic backgrounds. It previously appeared that the life situation of those from non-Western ethnic minorities was not as good as that of the indigenous population and western immigrants. Adding ethnicity too as a background feature to the multivariate analysis produces a result that is comparable to when health is added. Ethnicity contributes to the quality of the life situation, but adding it to the analysis does not increase the total determination (only available for 2004, see table 7.5).

Box 7.2 The life situation of ethnic minorities in Amsterdam

Every two years, the Department for Research and Statistics of the Amsterdam city council publishes a report entitled '*De staat van de stad*' that describes how the life situation in the city has developed. In 2008, a total of 4,351 people were surveyed. As a result, it is possible to make detailed statements about relative small groups: a distinction can be made between different ethnic minorities, for example (Gemeente Amsterdam 2009, Ch. 1). It appears that residents of Amsterdam of Moroccan origin have the worst life situation (their score is 95, while the city's average in 2008 was 102). People with Surinamese and Turkish roots also score below average (96 and 98 respectively). The life situation of indigenous inhabitants is better than average (105), but Western migrants achieved the best life situation score – 106. Since 2000, the differences in life situation between the various groups have decreased slightly.

For some members of ethnic minorities, the fact that they were born in the Netherlands does make a difference. The life situation of those who were born in the country (second generation) is much better than that of members of the first generation (105 and 97 respectively). However, this applies only to non-Western migrants; for Western migrants, there is little difference in the life situation score between the two generations in question (first generation 105, second 106). The difference between generations cannot be explained by age: there is also a difference among young people. People in this category who were born in the Netherlands scored 106, those born outside the country, 97.

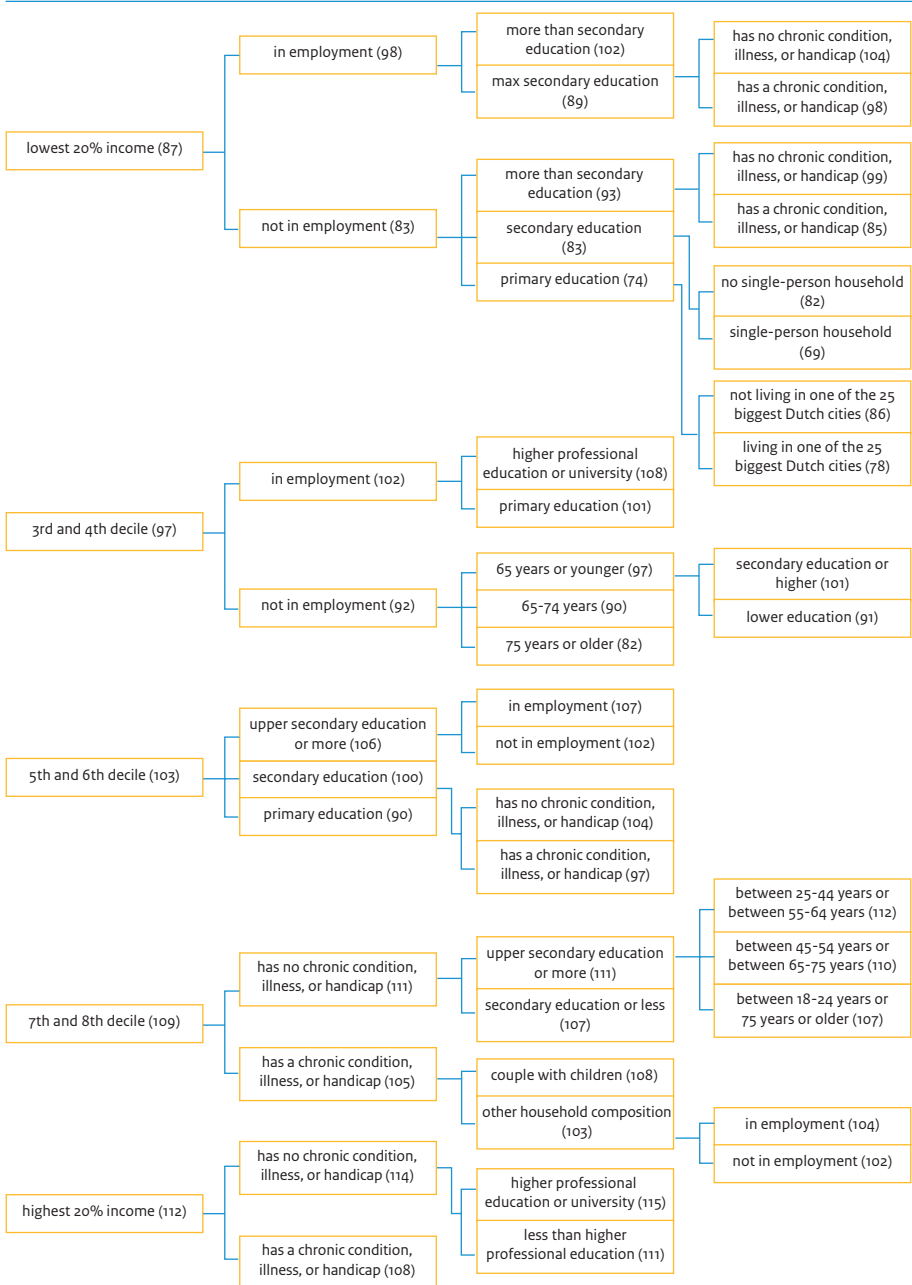
Furthermore, it also appears to matter not just where a person was born, but with which country a person has the closest affinity: ethnic identity. Amsterdam citizens of non-Dutch origin who identify more closely with their country of origin have, on average, a worse life situation (97) than those who feel Dutch or who identify with both countries to an equal degree (103 and 99 respectively).

The importance of the resources and other background features in determining the quality of the life situation has been examined above. The underlying assumption is

that each feature included affects each group in the same way. However, that is not necessarily the case: for example, it may well be that the significance of income level is much greater for senior citizens than it is for young people. A segmentation technique can be used for determining the degree of importance of the background features for the various groups. The result is the creation of a tree structure that shows the order in importance of the features for each group (see figure 7.9). Using the previous analyses from table 7.5, we have listed income as the most important feature in the analysis.⁵³ It is immediately clear that the items that rank among the most important differ from one income group to another: for the lower-income groups it is whether or not they have paid employment, for the middle-income groups (fifth and sixth decile) it is education, and for the higher-income groups it is whether they have a handicap, medical condition or illness. The figure shows that the important features for one group are not the same for another.

In addition, it also appears that large differences exist within the groups that in previous analyses were seemingly homogenous. For example, people with a handicap or medical condition and a high income have a life situation score of 108, while this score is just 85 if they have had a high level of education but a low income and no work.

Figure 7.9
Tree structure of the life situation and background features (2004)



Source: SCP (CV'04)

7.3 Use of public services and differences in life situation

In the model that we are using to analyse the life situation, the government plays an important role in creating the conditions for realising a good life situation. It does so not just by devising policies in relation to the important resources (income, education, employment and health), but also in terms of the choices that people make. This is expressed partly in the subsidies given for public services, such as housing benefit or assistance in paying health insurance premiums. A distinction can be made between compensatory and supportive public services: in the case of the latter, the government acts to prevent social disadvantage (through back-to-work projects, for example) and, where social disadvantage is present, it takes measures of a compensatory nature, such as income support. The public services provided are aimed not just at people's resources, but sometimes also directly at their life situation. This is the case, for example, with social and cultural participation, where the government attempts to encourage participation by subsidising theatres and museums, among other things.

By identifying those who use public services, it is possible to see whether people with a worse than average life situation use them more than do those with a better one. It is to be expected that they would, given the role of such public services in preventing and alleviating social disadvantage, as described above. Of greater interest is the question of the effect, if any, of the use of such public services on people's life situation. As we do not have any panel details at our disposal, it is unfortunately impossible to answer this question.

There are a number of public services that cannot be included in the analysis, as their use is seen as a good indicator of people's life situation in the relevant domain and therefore forms part of the life situation index. These are visiting cultural amenities, such as museums, the theatre, the cinema, etc., and using public transport.

The life situation of those who use public services is not as good as that of people who do not – this applies to all amenity categories (see the second and third columns of table 7.6). The greatest differences can be found between users and non-users of home-based care services and the social services.

Because most public services are primarily important for people with a relatively poor life situation, the question arises as to whether or not they actually make greater use of them. This does appear to be the case: around 31% of people with a poor life situation have had some kind of contact with a social security organisation, compared with 9% of those with a good life situation (see the last two columns in table 7.6). Home-based care services are used by 31% of people with a poor life situation, whereas only 2% of those with a good life situation use them. As has already been mentioned, the data available are not sufficient for us to be able to say whether the use of public services leads to a better life situation.

Table 7.6

Use of public services and life situation, 2006 (in percentages and index scores)

	life situation (index score)		use of an amenity (%)	
	does not use	does use	poor life situation ^a	good life situation ^a
support and compensatory public services				
been in contact with employment agency or back-to-work agency in last 2 years	104	100	23	10
been in contact with social security body in last 2 years	105	98	31	9
has received housing benefit	106	87	47	1
care facilities				
has used GP in last 3 months	106	102	75	52
has used physiotherapist in last 12 months	104	103**	27	25
has used medical specialist in last 3 months	105	100	42	24
has been admitted to hospital in last 12 months	104	100	16	9
has received help from social services in last 12 months	105	92	18	2
has received help from home-base care services in last 12 months	105	86	31	2
has received health insurance premium relief (<i>zorgtoeslag</i>)	107	98	65	15

All differences in life situation are significant ($p < .01$) except for the difference between people who have used and people who haven't used physiotherapist (n.s.).

a A poor life situation is defined as a score of 85 or less, a good life situation as one of 115 or more; the average score for the population as a whole was 104 in 2006.

Source: SCP (CV'06)

The figures in table 7.6 date from 2006. Although it is not possible to make exact comparisons over time, the conclusions based on the figures in the table are largely in line with previous findings regarding relationships between the use of public services and life situation (Mootz and Konings-Van der Snoek 1990, SCP 1996).

7.4 The life situation and the social and physical environment

It is not only individual features and resources that people have which are important for the quality of their life situation, but also the environment of which they form a part. This entails both their social environment (social networks) and physical environment (the area where people live).

The physical environment

As already mentioned in this chapter, the size of a town where someone lives plays a role in their life situation. The life situation of inhabitants of the four largest cities in the

Netherlands is not as good as that of the people who live in 21 smaller towns, who themselves have a worse life situation than those who live elsewhere (see table 7.7).⁵⁴ The life situation of the inhabitants of the four major cities improved on all fronts between 1999 and 2002 (Boelhouwer 2003: p. 274). Not only did they gain from the economic growth (and reduced the deficit in terms of ownership of durable consumer goods), but they also made progress in the social field (with a greater percentage of volunteers and people doing sports).

The fact that there is a relationship between a person's life situation and their physical environment is also highlighted when we look at other geographical classifications. Using an approximate geographical classification, we can illustrate the difference in life situation between urban and country areas: that of people who live in the countryside appears to be better than that of town dwellers (scoring 104 and 101 in the 2004 life situation index respectively; Steenbekkers et al. 2006). The definition of town and country is derived from an urban classification used by Statistics Netherlands. If we look at the overall urban classification, we see that the life situation improves as urbanisation decreases, although the difference did shrink between 1993 and 2006, especially as a result of the improved life situation in the larger cities.

Table 7.7

Differences in life situation between levels of urbanisation of municipalities, 1993-2006 (in index scores)

	1993	1999	2002	2004	2006
Inhabitants of other municipalities		103	103	102	105
Inhabitants of 21 larger municipalities		100*	100*	102	103
Inhabitants of the four largest cities (Amsterdam, Rotterdam, The Hague and Utrecht)		95*	98**	99*	100*
degree of urbanisation of the local authority area					
very highly urbanised	93	96	99	99	101
highly urbanised	98*	102*	101*	101**	103**
moderately urbanised	101*	102	104*	103**	104
slightly urbanised	103*	103	103	104	106
non-urbanised	103	103	103	103	104

* Significance: * $p < .01$ ** $p < .05$ (difference with the group above).

Source: Statistics Netherlands (DLO'93; POLS-SLI'99 and '02) SCP edition; SCP (CV'04)

If we use a more refined classification, we see differences between the individual provinces: in 2006, there are hardly any (significant) differences between provinces, but the worst life situation is found in Zeeland (table 7.8). Since 1974, Zuid-Holland has progressed better than any other province, and no longer had the worst life situation in 2006. On the whole, the differences in life situation between the provinces were no greater in 2006 than they were in 1974 (see table 7.8). We can further refine and examine

the geographic units using what are known as the 'COROP' (or NUTS3) regions, created by merging municipalities, but which are smaller than provinces. There are forty such regions in all. The scores on the life situation index vary from 93 in Delfzijl and the surrounding area to 111 in IJmond (see appendix 13.10, Steenbekkers et al. 2006).

Table 7.8

Differences in life situation between provinces, 1974-2004

	1974	1980	1986	2004	2006
Netherlands as a whole	91	97	98	102	104
Groningen	90	94**	96	98**	102
Friesland	91	98	98	100	105
Drenthe	96*	98	101**	103	102
Overijssel	93*	99	99	105**	102
Flevoland			98	102	104
Gelderland	93	99**	100*	103	105
Utrecht	92	98	98	105**	104
Noord-Holland	91	96	96*	103	103
Zuid-Holland	88*	93*	95*	100	103
Zeeland	91	94	97	98**	99*
Noord-Brabant	93*	100*	100*	103	105
Limburg	93	100*	98	99	103

Significance: * $p < .0$; ** $p < .05$ (provinces compared to the Netherlands as a whole).

Source: Statistics Netherlands (LSS'74, LSS'80, LSS'86) SCP edition; SCP (CV'04, '06)

The most refined geographical level is that of the immediate surrounding area. Districts in which people live with a life situation below average have a greater proportion of rented housing than do those areas in which people live whose life situation is better than average.⁵⁵ In addition, the rents themselves are often low and the proportion of older residents is high, while there are relatively low numbers of people on high incomes and families with children (see SCP 2005, appendix 12.9). By combining a number of district features it is possible to establish an idea of the degree to which a district is disadvantaged. If physical features are taken together, an impression of the quality of the residential environment can be formed, while an examination of the collective social features reveals something of the social status of a district.

The quality of the residential environment relates to the extent to which a district is physically run down and suffers noise, the amenities that are present, and the number of people in a household in relation to the size of the accommodation (see Knol 2005 for a detailed description). There is a link between the quality of the residential environment and people's life situation, albeit not a very strong one (the correlation coefficient is 0.14). Nevertheless, 21% of people who live in a district where the quality of the residential environment is low have a poor life situation and 11% a good one, compared to

12% and 16% respectively for those who live in a high-quality residential environment.⁵⁶ These differences in concentration lead to differences in the average life situation: the life situation in high-quality districts is better (with a score of 103) than that of districts with a poor residential environment (with a score of 99).

The social status of a district consists of a combination of three indicators that relate to the make-up of its population: the proportion of people who are unemployed, poorly educated and on low incomes. Some 17% of the population of the Netherlands live in a low-status district, although the figure is double that – 35% – for those with a poor life situation. Also, the average life situation in low-status districts is worse than in high-status areas (see table 7.9). From the time of the earliest year for which readings are available (1997), there have hardly been any changes in the difference in life situation between high and low-status districts.

Table 7.9

Differences in life situation according to the socio-economic deficit of a district, 1997-2006 (in index scores)

	1997	1999	2002	2004	2006
low-status district	94	93	96*	95	98*
average-status district	100	101*	103*	103	105*
high-status district	106	107	107	108	108

Significance: * $p < .01$ (yearly changes). All differences between groups are significant in each year ($p < .01$).

Source: Statistics Netherlands (POL5-SLI'97-'02) SCP edition; SCP (CV'04, '06)

Looking closer at the decreasing difference between districts between 1997 and 2002, it appeared that the life situation in the most deprived districts improved in particular (Boelhouwer 2003). The question here is whether district-specific features play a role in addition to the individual characteristics. Multi-level analyses have shown that the latter are more important for the quality of a person's life situation than are the former. The analyses examined the degree to which social and physical district-level features affected people's life situation in their own right – in other words, over and above the effects a person's individual characteristics. This could relate, for example, to differences in district cultures: from that perspective, there are areas where it is usual for people not to do sports, to go out at night, or take part in society in other ways (comparable to a poverty culture). Achieving the opposite – positive – effect is often the aim of housing different groups in the same area: to improve social cohesion and social participation.

The analyses indicate that district-level features account for only a very limited proportion of the differences in life situation. Individual aspects like income, education and age play a much greater role. The only district-level feature that in itself has any kind of effect is the socio-economic backwardness of a district, mentioned above. In areas of this type, the life situation is worse than what might be expected solely on the basis of individual characteristics, although the effect of this is very slight.

Inhabitants of socio-economically deprived districts

Based on districts' social status, as described above, an extra survey of inhabitants of socio-economically deprived areas was held in 2004. They differed in a number of respects from people involved in regular surveys (see SCP 2005, appendix 12.9). The respondents were selected because they lived in districts that were designated as socially and economically deprived, although this did not necessarily mean that they themselves were socio-economically disadvantaged. The extra survey allowed a deeper analysis of the life situation of people who lived in districts with a low socio-economic status. The average life situation score in these areas was 95: a negative difference of seven points from the national average.⁵⁷ Additionally, the proportion of people with a poor life situation in socio-economically deprived areas is, at 26%, markedly greater than that of the Netherlands as a whole (14%).

The below average life situation in socially deprived areas is not surprising given that a significant proportion of the population there have fewer resources. Splitting the life situation index into eight domains reveals something of the nature of the deprivation. The analysis shows that the less than average life situation is primarily related to a less favourable housing situation and more limited mobility.⁵⁸

The social environment

The environment in which people live refers not just to their physical environment: the social environment (social networks) also plays an important role in their life situation. The index includes indicators for the presence of social networks (the quality), but this says nothing about the use of networks (the quantity). In order to find out more about this, we need to look at how often someone is in contact with their family, friends or neighbours. The family plays an important role in people's social networks. Most people are in contact with a family member at least once a week, and a much larger proportion are in touch at least once a month (SCP 2005: p. 183). Contact with friends or neighbours is much less frequent. The relationship between the frequency of social contacts and the life situation is a positive one: the more frequent the contacts, the better the life situation (see table 7.10).

For the first time in 2006, people were also asked about their contacts with other people in their neighbourhood. Those in paid employment were additionally asked about the contacts they had with their colleagues outside working hours. The differences in the life situation between people who regularly enjoy this kind of contact and those who do not are smaller than those in table 7.10. People who are in contact with others in their neighbourhoods at least once a week score 102, while those who hardly ever, if at all, have such contact score 100. In the case of contact with work colleagues, the life situation scores are 105 and 103 respectively.

Table 7.10

Average life situation, according to frequency of social contacts, 1986-2006 (in index scores)^a

	1986	1993	1999	2004	2006
contact with family members					
once a week or more	97	100	102	103	105
seldom or never	88	88	87	89	86
contact with neighbours					
once a week or more	98	101	101	101	104
never	93	95	97	97	98
contact with friends and acquaintances					
once a week or more	100	101	103	103	105
seldom or never	81	83	79	83	81
no contact with any of the groups at least once a week	95	97	92	97	98
contact with all three of the groups at least once a week	99	101	103	103	105

For each year, all differences between groups are significant ($p < .01$).

a The table shows just a selection of the data; the SCP 2005 appendix also shows other groups in the overall range.

Source: Statistics Netherlands (DLO'86; DLO'93; POLS-SLI'99) SCP edition; SCP (CV'04, '06)

Most people in the Netherlands are positive about the degree of social cohesion in their neighbourhood (table 7.11). This also reflects on their life situation, which is better for those who experience the social cohesion of their district to be positive than it is for those with a negative perception.

Table 7.11

Social cohesion and life situation, 2006 (in percentages and index scores, national average = 104)

	percentage		life situation index	
	agree	disagree	agree	disagree
I have a great deal of contact with my immediate neighbours.	58	19	104	101
People get on well with each other in this neighbourhood.	78	6	105	98
I live in a close-knit neighbourhood in which there is a sense of togetherness.	51	17	105	102
People hardly know each other in this neighbourhood.	20	57	101	105
I am satisfied with the composition of the population in this neighbourhood.	78	9	104	101
every question positive		37		105
every question negative		10		100

All life situation differences between people who agree and who disagree are significant ($p < .01$).

Source: SCP (CV'06)

Public nuisance and safety

It is not just the socio-demographic and physical aspects already mentioned that play a role in the quality of the living environment, but also safety. Around a quarter of the population has been a victim of crime (Wittebrood 2006). There appears to be hardly any relationship between the average life situation in a district and the level of safety in that same district. The rate of burglaries (or attempted burglaries) is almost as high in districts where people with a poor life situation live as it is for those districts inhabited by people with a good life situation (table 7.12, see also SCP 2003). The same applies to the percentage of people who have been victims of violence (threatening behaviour or assault): this is barely greater in areas with a poor life situation than in other districts. As well as direct forms of victimisation of this kind, noise and other types of public nuisance that people experience can also be regarded as an indication of safety levels in a neighbourhood. In order to examine the relationship of this with people's life situation, a criminality and nuisance index has been devised, consisting of crimes against property, road-safety problems, deprivation and threatening situations.⁵⁹ Although the index is related to the life situation, the connection is only slight. Criminality and public nuisance is somewhat greater in districts in which people with a poor life situation live than it is in areas inhabited by people with a good life situation.

Table 7.12

Victimisation and levels of criminality in district in relation to life situation, 2002

	burglary or attempted burglary ^a	threatening behaviour and assault ^a	criminality and public nuisance ^b
poor life situation	4.7	5.3	2.7*
average life situation	5.0	5.2	2.6
good life situation	4.6	5.2	2.5*
all	4.9	5.2	2.6

Significance: * $p < .01$ (compared with 'all').

a Average percentage of people who have been a victim in each district.

b Score on a scale of 1 to 10.

Source: Statistics Netherlands (POLS-SLI'02); Ministry of the Interior and Kingdom Relations (Police Monitor 2001) SCP edition

The picture is the same when making a direct link between various types of public nuisance and people's individual life situation, rather than looking at district averages. There is no clear relationship between people's life situation and nuisance caused by neighbours, noise, smell, or litter. For example, the life situation of people who are frequently affected by anti-social behaviour by their neighbours may be worse than that of people who are only sometimes affected by it, but it is at a similar level to those who are never affected in this way (the life situation scores being 100, 102 and 100 respectively; see SCP 2003, appendix 12.7).

When looking at the chances of someone being a victim of crime as an indicator for safety, the relationship with their life situation is also not easy to interpret. If we examine the question of whether someone has been the victim of crime in the past five years, it appears that the life situation of those who have been victims is better than that of those who have not (see table 7.13). As far as the ‘theft from a car’ item is concerned, this might be understandable given that car ownership makes a positive contribution to a person’s life situation. No such relationship can be discerned from the other items, however, even though the life situation index includes indicators for going out at night (socialising) which, according to research, increases the likelihood of being a victim of crime (Wittebrood 2006).

Table 7.13

Average life situation of people who have been victims of different types of crime in the last five years (2004 and 2006)

		2004	2006
burglary	yes	103	104
	no	102	104
threatening behaviour	yes	103	103
	no	102	104
bicycle theft*	yes	104	105
	no	101	103
theft from a car*	yes	106	108
	no	101	103

* Significant differences between ‘no’ and ‘yes’ for both years ($p < .01$).

Source: SCP (CV’04, ’06)

One final category of indicators regarding safety relates to how safe people *feel*. This forms part of another group of indicators in the life situation model.

7.5 Relationship between descriptive and evaluative features

There is only a slight connection between the life situation index, based on indicators that reflect particular circumstances, and people’s views of such circumstances. Nevertheless, subjective judgements of this kind are playing an ever-greater role in societal and political discussions, perhaps in the area of safety more than anywhere else. How people perceive safety has acquired an important role in policy making, in which objective and subjective safety are considered side-by-side. Looking empirically at the relationship between a person’s life situation and how safe they feel, things seem to be very unclear. This puts it in line with the relationship that exists between a person’s life situation and other safety indicators, as described in the previous paragraph. In 2004, the life situation of people who at one time or another felt unsafe was better than that of those who did not feel that way, while in 2002 and 2006 the reverse was true (see table 7.14).

Table 7.14

Average life situation according to feelings of safety, 2002 and 2004 (in index scores)

	2002	2004	2006
Do you ever feel unsafe?*			
yes	101	104	103
no	102	101	104
Do you often, sometimes, or rarely feel unsafe?			
often	90	93	94
sometimes	102	102	101
rarely	106	108	109

* The difference between 'yes' and 'no' is only significant in 2004 ($p < .01$).

Source: Statistics Netherlands (POL5-SLI'02) SCP edition; SCP (CV'04)

In recent years, people have felt slightly safer; at the same time, the levels of satisfaction with a number of other aspects related to people's life situation have also risen (see table 7.15). For example, people are more satisfied with their circle of acquaintances and level of education. The level of household financial resources and Dutch society as a whole were rated less positively. The fact that people had a more negative view of their finances can be related to the economic decline between 2002 and 2004, while the greater negativity towards society can be seen in the context of the troubled political and social climate at the time (during which the murders of Pim Fortuyn and Theo van Gogh took place).

However, most aspects are given a comfortable 'pass' mark. As in previous years, people value their homes more than anything else: 8.0 (out of ten) in 2006. Dutch society was given a lower score (6.5), with the government gaining the worst rating, 5.8.

It seems that people continue to rate the personal aspects of their lives highly (apart from their financial position), but that general and political items are not appreciated as much, and that the level of appreciation is on the decline. 'Things are going well for me, but bad for us' was the conclusion of the Social and Cultural Report in 2004 (SCP 2004: p. 49).

The fact that personal aspects were rated so highly begs the question of how this relates to people's life situation (which is also largely personal). There appears to be a positive link between the objective life situation and subjective judgements: people with a good life situation are more satisfied than those with not such a good one (see table 7.16).

The connection with a person's life situation is stronger as far as personal aspects are concerned, such as satisfaction with one's circle of friends and acquaintances and level of education, than with political aspects like satisfaction with Dutch society. However, it is always the case that the better a person's life situation is, the more satisfied they are. Nevertheless, levels of satisfaction differ from one social group to the next: the elderly are more satisfied with their homes than are younger people, for example. People with

a poor life situation are the least satisfied with every aspect (see table 7.16). What is more surprising is that their satisfaction did not grow since 1997, and that they are even less satisfied with some aspects than they were in 1997, while people with a good life situation became more satisfied during the same period (except in relation to Dutch society: every group is less satisfied with regard to this aspect).

Table 7.15

Satisfaction with aspects of people's life situation, society, and the government, 1997-2006 (in marks out of ten)^a

	1997	1999	2002	2004	2006
home	7.9	7.9	7.9	8.0**	8.0
friends and acquaintances	7.7	7.7	7.9*	7.9	8.0
residential environment	7.7	7.7	7.7	7.6	7.7
social position	7.4	7.4	7.5	7.3*	7.4
household finances	7.4	7.4**	7.4	6.9*	7.1*
education	7.0	7.0	7.2*	7.3*	7.4*
Dutch society	6.6	6.6	6.4*	6.2*	6.5*
Dutch government ^b				5.2	5.8*

Significance: * $p < .01$ ** $p < .05$ (changes between years). The difference between 1997 and 2006 is not significant for the social position and the residential environment and significant for the other aspects ($p < .01$ except satisfaction with the home: $p < .05$).

a 1: lowest score; 10: best score.

b In previous years, people were not asked to give a mark out of ten: instead they were asked to express their satisfaction in terms ranging from 'very satisfied' to 'very dissatisfied'. In 1999, 33% were satisfied or very satisfied, and 18% dissatisfied or very dissatisfied. In 2002, the figures were 22% and 35% respectively.

Source: Statistics Netherlands (POLLS-SLI '97, '99, '02) SCP edition; SCP (CV '04, '06)

However, the relationship between satisfaction levels and the life situation is not entirely linear, as can be seen if we look at the data from a different angle. In that case, the life situation of those people who give the highest rating to a particular aspect is the same, or even not as good as that of people who give a slightly lower score to that aspect (see table 7.17). The primary cause of this is that the life situation of people aged 75 or over is generally not so good, but the people in question are very satisfied (see SCP 2003, appendix 12.11). For example, some 16% of the oldest age group give their home a score of 10, compared with 9% of the population as a whole. The most striking thing is the relationship between people's life situation and levels of satisfaction with Dutch society. Initially, the life situation improves as the score rises, but when the score reaches 7 out of 10, it deteriorates. This is caused by the fact that senior citizens and those from ethnic minorities (both of whom have a relatively poor life situation) are satisfied with Dutch society (for more details see Boelhouwer 2004).

Table 7.16

Opinions on several aspects of people's life situation and Dutch society, according to the quality of the life situation^a, 1997 and 2006 (in marks out of ten)

	poor life situation		average life situation		good life situation	
	1997	2006	1997	2006	1997	2006
home	7.6	7.5	7.9	8.0	8.2	8.3*
friends and acquaintances	7.3	7.2	7.8	8.0*	7.9	8.3*
residential environment	7.5	7.3	7.7	7.6*	7.9	7.9
social position	6.8	6.4**	7.4	7.4*	7.8	7.9*
household finances	6.6	5.9*	7.4	7.0*	7.9	7.9
education	6.2	6.3	7.0	7.4*	7.5	7.8*
life at present		6.7		7.7		8.1
Dutch society	6.3	6.1	6.7	6.5*	6.9	6.6*

Significance: * $p < .01$ ** $p < .05$ (difference between 1997 and 2006, for each group on each aspect). All differences between people with a poor life situation and people with a good life situation are significant ($p < .01$).

a Poor life situation: score < 85; average life situation: score 85-115; good life situation: score > 115.

Source: Statistics Netherlands (POLS-SLI'97) SCP edition; SCP (CV'06)

Table 7.17

Average life situation according to marks out of ten for aspects of people's life situation, 2006 (in index scores)

	< 5	6	7	8	9	10
home	95	97	102*	105*	108*	104*
friends and acquaintances	88	96*	102*	105*	109*	105*
residential environment	98	101	103***	105**	108*	103*
social position	90	96*	104*	108*	109	107
household finances	94	99*	104*	107*	112*	111
education	90	99*	104*	108*	109	107
Dutch society ^a	100	103*	106*	105	100***	
life at present	87	97*	102*	107*	109*	105*

Significance: * $p < .01$ ** $p < .05$ *** $p < .10$ (difference between successive marks).

a Too few people rate Dutch society with a mark of 9 or 10 to present the figures separately.

Source: SCP (CV'06)

The high level of satisfaction that people generally feel for the personal aspects of their lives can be summarised in the mark out of ten that they give for 'the life they are currently leading'. In 2006, this was an average of 7.7; people with a poor life situation rated

their lives less highly, however, while those with a good life situation gave themselves a better score (table 7.16).

People's satisfaction can also be translated into a feeling of happiness: in 2006, some 82% of the population of the Netherlands was happy or very happy. This is also positively related to people's life situation: a good one goes together with a feeling of happiness (see table 7.18). In other words, 93% of the people with a good life situation are happy or very happy, while the proportion among those with a poor life situation is 60%. Of the latter group, 13% are not very happy or indeed unhappy.

There is also a positive relationship between a person's life situation and how they perceive their health: a good life situation goes hand-in-hand with good health. The link is slightly stronger than that between the life situation and happiness (correlation coefficient of 0.31, against 0.36 for health). This is hardly surprising, given that the life situation index includes health indicators (see paragraph 4.2).

Table 7.18

Average life situation according to general feeling of happiness, 1974-2006 (in index scores)

	1977	1980	1986	1993	1999	2004	2006
happiness							
very happy	98	100*	101	104*	106*	108**	109
happy	95	98*	98***	100*	102*	103*	105*
not happy / not unhappy	89	92**	93	92	92	95**	96***
not so happy / unhappy	81	81	82	86**	84	88	90
subjective health							
	1974						
very good	95	103*	103	105*	107*	108	110**
good	95	99*	99	102*	104*	105**	106**
not bad	91	89**	90	92*	92	92	94***
sometimes good and sometimes poor ^a / poor ^b	84	79*	81	84**	88*	83*	84

Significance: * $p < .01$ ** $p < .05$ *** $p < .10$ (change per group from year to year).

In every year the difference between one group with any other group is significant ($p < .05$).

a In 2002: poor.

b In 2002: very poor.

NB: as a result of these changes to the response categories, more people answered 'Not bad' in 2002 than in previous years. Less than 0.5% believed their health was 'very poor' in 2002, while in previous years around 3% stated that it was poor (this category scored 4% in 2002).

Source: Statistics Netherlands (DLO'93; POLS-SLI'99, '02) SCP edition; SCP (CV'04, '06)

The health indicators that feature in the life situation model and the life situation index refer to *physical* health. However, this reveals little about a different aspect: *mental* health. We can examine the relationship between people's life situation and their mental health with the help of a widely used measuring instrument for health-related quality of life

(known as the SF-12). It consists of two components: perceived physical health and perceived mental health.⁶⁰

There is a clear relationship between people's life situation and how they perceive their physical and mental health: the better the life situation, the better their health, both mental and physical. However, the correlation between the life situation and the physical component is much stronger than that between the life situation and the mental component (correlation coefficients are 0.46 and 0.18 respectively; see also SCP 2005).

One question that was raised earlier was whether a person's life situation contributes to their level of happiness. In other words, is it possible to demonstrate empirically the causal relationship that the life situation model assumes? On the one hand, the evidence from literature does not appear to be very encouraging: there is hardly any relationship between objective and subjective indicators. On the other hand, a previous analysis into the relationship between a person's life situation and happiness showed that merging the separate indicators of the life situation results in an improvement: the correlation between the life situation index as a whole and happiness is greater than that between the individual life situation indicators and happiness (see Boelhouwer and Stoop 1999). However, there is no causality in any such correlation. Attempts at explaining happiness through examination of the eight individual domains of the life situation help clarify 10% of the variance in happiness levels (Boelhouwer 2007b, appendix 10). Social participation in particular plays an important role: this corresponds with other research that shows that happiness is primarily related to personal characteristics (such as a positive self-image) and having a permanent partner and friends (Veenhoven 2002b). The ownership of consumer goods, use of leisure time and sports are not significant. Moreover, it appears that using the life situation index as a whole as a means of explaining happiness is less successful than using the individual domains: if we attempt to explain happiness using the index, the explained variance is just 4% (table 7.19).

Following on from this, it is better to try to explain happiness by including background features and evaluation judgements about aspects of people's life situation (satisfaction with their homes, friends and acquaintances, health, etc.). This sees the explained variance percentage rise to 24% (only a slight improvement, though, compared with explaining happiness using purely evaluative indicators, in which case the explained variance is 22%). The perceived level of health is the most important explaining variable, followed by satisfaction with one's social position.

Table 7.19

Happiness explained by background features and people's life situation (beta's from ANOVA analysis)

	model 1: life situation only	model 2: life situa- tion and background features	model 3: life situa- tion and satisfaction	model 4: life situation, background features and satisfaction
life situation (poor, average, good)	.19	.17	.04	.01
sex (male, female)		n.s.		–
education (5 categories)		n.s.		–
position in labour market (unemployed, <12 hours; >12 hours)		.18		.11
age (seven categories)		.14		.09
city (four largest cities (G4), twenty-one smaller towns/cities (G21), other)		n.s.		–
composition of households (five categories)		.16		.14
ethnicity (indigenous, non-Western migrants, Western migrants)		n.s.		–
income (deciles)		n.s.		–
subjective health (five categories)			.21	.20
satisfaction with home *			.06	.04
satisfaction with residential environment*			.04	–
satisfaction with circle of friends and acquaintances *			.15	.16
satisfaction with social position *			.18	.18
satisfaction with education *			.04	–
satisfaction with financial resources *			.06	.05
satisfaction with Dutch society *			.07	.07
satisfaction with the government *			n.s.	–
explained variance	4%	11%	22%	24%

* Satisfaction levels are divided into three categories (marks are out of ten): 1-5; 6-7 and 8-10.
n.s. = not significant ; all other reported beta's are significant ($p < .01$, except for satisfaction with
education: $p < .05$).

– = not included

blank = not included

Source: SCP (CV'06)

7.6 In summary

In the past thirty years, the life situation of the Dutch population has improved. This applies to every distinctive social group, but not to every group in the same measure. For example, people aged between 55 and 74, those with better educational qualifications, people living on their own, and couples without children saw their life situation improve better than average, while 25 to 34 year olds, the most poorly educated and single-parent families advanced less than average.

With regard to the resources work, income and education, it applies that the life situation of people with work, a high income or higher education is better than average. Conversely, those without have a life situation that is worse than average. It is striking to note that the gap between the two outermost groups has widened: in 2006, the difference between those in and out of work, those with good and poor educational qualifications, and those on high and low incomes was greater than it was in 1974. These three resources have also become more important in explaining the differences between groups of the population. Together with individual characteristics such as age and household composition, the resources accounted for 54% of the differences in life situation in 2006 – the same figure for 1974 was 45%.

It is not just between social groups that the life situation differs, but also between geographical entities. Generally speaking, the more urbanised an area or the larger a city is, the less good is the life situation. However, the differences have been diminishing down the years, primarily as a result of improvements to people's life situation in large cities. There is also a positive relationship between making use of social networks and people's life situation: that of people with regular social contacts is better than those without.

Finally, there is a positive link between people's actual life situation and how they evaluate it: those with a good life situation are happier and more satisfied than are people with a less good one. The correlation with a person's life situation is stronger with regard to personal aspects like satisfaction with friends and acquaintances and attained level of education, than with political aspects like satisfaction with Dutch society. However, personal happiness depends on a person's life situation to only a limited degree. Of much greater importance are satisfaction with components of their life situation and having a partner and friends.

8 Stability and sensitivity

In this chapter, we look at the quality of the life situation index. It is concerned initially with the question of whether the outcomes would be different if the index did not apply to everyone in the Netherlands, but only to young people for example, or those living in single-person households. Then is examined how weights are determined: does it matter how this is done, and are weights necessary anyway? The last paragraph is about what happens when changes are made to the content of the index. These questions are relevant when it comes to calculating the life situation index – after all, if it turns out that there is no point in using weights, it would be enough to simply add up the indicators.

8.1 The index based on social groups

One of the principles for the life situation indicators is that they should be of a general nature (see paragraph 3.3). After all, the purpose of the index is to describe the picture of the life situation of everybody in the Netherlands, not of specific groups. And even supposing that we would wish to, then determining the composition of the groups would be problematical. What criteria would be used to distinguish such groups? What degree of detail would we use? Do we set the boundary for an index for senior citizens at 65 years of age? Should we not then devise a separate index for senior citizens on low incomes and another for those on high incomes? The end-result of this discussion is an unworkable situation in which the life situation of each individual would have to be determined in order to take account of every conceivable preference.

But is it in fact the case that the indicators have a different significance for different groups? It should be noted that ‘significance’ here is in the sense of (statistical) significance for the life situation index rather than in the sense of what people find important. In order to be able to make pronouncements on the question of whether the indicators have a different significance, the life situation has been calculated separately for the following social groups:

- age groups (18-24 years; 25-34 years; 35-44 years; 45-54 years; 55-64 years; 65-74 years; 75 years or older);
- male versus female;
- income below or above the poverty line;
- education (low, medium, high);
- those who live alone versus those who do not;
- inhabitants of the four largest cities versus inhabitants of the rest of the Netherlands.

The result is therefore eighteen ‘group indices’. In order to see whether the indicators have a different significance for the various groups, a separate index has been devised for each group, with the same domains and indicators as the general life situation index (in other words, a separate Overalls analysis has been carried out on each group using the 2004 data). We then use this as the basis for looking at three aspects that indicate whether or not there are any differences between groups. First, we compare the group indices with the general index, before going to a deeper level and looking at the weights that the

individual indicators are given. We then deal with the most detailed level and examine whether the same response categories make a positive – and negative – contribution to people's life situation. What it in fact amounts to is whether the structure of the index is the same for every group.

Correlation

In general, there is a very strong correlation between the general index and the group indices (see table 8.1). This means it barely matters if the index is calculated for everyone at the same time, or for men only or just for inhabitants of the larger cities.

The weakest correlation is to be found in the age groups, especially the lowest age group (the only correlation coefficient that is lower than 0.90). This may be evidence that the significance of the indicators is less relevant for younger people: it could be that the indicators are less important to them than to other groups. Nevertheless, the eigenvalue (which gives an impression of the explained variance percentage) of the index for young people is not especially low (see table 8.1).

Table 8.1

Interrelationship between the index for everyone and the indices for different social groups (2004)

	correlation coefficient with general index	eigenvalue
everyone	1.00	0.39
18-24 years	0.83	0.35
25-34 years	0.92	0.33
35-44 years	0.97	0.34
45-54 years	0.97	0.36
55-64 years	0.97	0.36
65-74 years	0.97	0.42
75 years or older	0.93	0.45
males	1.00	0.37
females	1.00	0.42
income below the poverty line	1.00	0.37
income above the poverty line	0.97	0.40
poor educational qualifications	0.99	0.40
average educational qualifications	0.95	0.33
good educational qualifications	0.96	0.30
people living alone	0.99	0.47
people not living alone	0.99	0.34
lives in the G4	0.98	0.43
does not live in the G4	1.00	0.39

Source: SCP (CV'04)

The less strong correlation between the general index and that for age groups is therefore not due to the fact that the index for young people, for example, has a different significance, but because the size of the sample is only small: there are seven age groups, after all. With respect to the different indices for ten income groups (deciles), for example, some of the correlation coefficients lie around the 0.40 mark. Increasing the sizes of the samples of the age groups by combining data from 1997, 1999 and 2002 causes the correlation coefficient of the index for the youngest age group and the general index to rise to 0.93.

There is therefore no reason to assume that an index for young people has a different statistical significance to one for older people.

Differences in weights

The significance of indicators for different groups can also be examined via the weights assigned to the individual indicators (in Overals, the weights are comparable with the beta's from a regression analysis; both are found in internetappendix E – in Dutch). For the groups under investigation the weights for each indicator are different. Of particular note is that a lower weight for one indicator appears to be compensated by a higher weight for another indicator *in the same domain*. For example, the number of times that someone practises sport is given a greater weight while the weight for the number of different sports is smaller.

Again, the greatest deviations are to be found in the age groups.⁶¹ In order to determine the extent of these deviations, we have focused more closely on the differences in the case of people aged 75 and older and of younger people aged 18 to 24. It seems that the following indicators are given a greater weight in the 'senior citizens' index' than in the general index: membership of societies, voluntary work, going on holiday, public transport season ticket, and being restricted in one's leisure time. In the index for younger people, the number of hobby activities and being restricted in one's leisure time are given a greater weight.

From this summary, the conclusion is that it is not a problem that certain indicators are given a greater weight for some group indices than for others. Indeed, it is logical that going on holiday, for example, plays a greater role in the index for older people than it does in other groups, because people in that category go on holiday relatively infrequently (39% of senior citizens have been on holiday in the past twelve months, compared with an overall average of 76%). This means primarily that the distinctive character of this variable is greater for older people than it is for others.

Difference in category quantifications

There is another way of looking at the significance of indicators for different groups, namely to examine whether the *structure* of the index is the same in every case. Do the same categories make positive and negative contributions to the index in the case of every indicator? For this purpose, we use so-called category quantifications (the optimal quantifications of the categories, calculated by Overals; for more information, see appendix B).⁶² These quantifications enable us to see whether a small home makes a negative contribution to a person's life situation and a large home a positive one,

or whether practising sports contributes positively and not doing so, negatively. The category quantifications are therefore an important check with regard to assumptions that could be made of the indicators.

The category quantifications are also important for another reason. In most cases, the indicators are measured ordinally, which means the categories have a natural sequence: two sports are more than one, three are more than two. However, in the analysis, the indicators are listed as nominal variables, so that this 'natural' sequence is no longer the starting point. This is needed, for example, for being able to determine the sequence of variables for which no obvious sequence exists, such as with type of home.

In the case of the general index, the check with the category quantifications gives a positive result for every indicator (with one exception, see box 8.1). For example, the smaller a home, the more negative the value; owning the home is positive, not owning the home is negative; the greater the level of social isolation, the more negative the contribution to the index; and finally, non-participation (in voluntary work, membership of societies, socialising or doing sports) produces a negative score (the data are in internetappendix E).

The latter indicators reveal an interesting result: it is not just lack of participation that yields a negative score, but also *intensive participation* (having many hobbies actually has a negative effect on a person's life situation). This therefore means that it is not always the case that greater participation is better for a person's life situation: the positive contribution made by participation is subject to a maximum level. This can be largely explained by the fact that the activities concerned take up a person's time. Given that the amount of time that people have is limited, it is impossible for them to be involved in an infinite number of different activities: time that is used for voluntary work cannot be used for other purposes, for example.

The picture is the same for the group indices, rather than the general index. Here too, the category quantifications are as they might be expected.⁶³ There are a few exceptions, which are related to the improbability (or indeed impossibility) of certain combinations. It is highly unlikely, for example, that a senior citizen would live in student accommodation, or that a student would live in a home designated for a senior citizen. Young people are also less frequently afflicted by handicaps than are older people. In these cases, the category quantification fluctuates around 0 (see internetappendix E).

The results described above are based on data from 2004, but are also valid if other measuring moments are examined (see internetappendix E for the results).

Box 8.1 Category quantifications in the housing domain

In the main text it has been stated that we can verify the validity of the indicators used by checking whether the category quantifications meet expectations (for example, doing sports and owning a car have a positive influence and their opposites a negative one). With most of the indicators, this is indeed the case (see table B.7 in appendix B), but in the housing domain there is an exception. Looking at the category quantifications (multiplied by the weights), the categories under type of home are not as they might be expected. The quantifications suggest that a detached house has a negative impact on the life situation and a flat a positive one. It should be pointed out, however, that the effect is only a slight one. It is the difference between accommodation for the elderly and student accommodation that plays the biggest role in this indicator.

If the total life situation index is calculated, the life situation of people who live in a detached house is better than that of people who live in a flat (with life situation scores of 106 and 96, respectively). The final result is therefore in line with expectations. But why would this confusing deviation occur? It is likely that the Overals technology plays a role, and has to do with 'capitalising on extreme groups'. One of the starting points of Overals is the relationship between the individual indicators. In the case of the housing indicators, the mutual relationships are fairly close: living rooms in flats are generally smaller than those in detached houses, they have fewer rooms and flat dwellers are more often tenants paying rent than homeowners (see table B.8 in appendix B). Additionally, the two most different groups with respect to other characteristics – people in accommodation for the elderly versus people in student accommodation – are placed as far apart from each other as possible. The result is that the other groups are placed somewhere between the two. In this case, this approach produces what first appears to be an awkward outcome. However, as far as the final life situation scores are concerned, this does not lead to results that cannot be interpreted (the life situation of people living in detached homes is better than that of people living in student accommodations). For future research, this is reason to look at the interplay of indicators within the housing domain. This problem is described in more detail in appendix B.

The use of group weights for everyone

From the above analyses, there appear to be few differences in the importance of the indicators for different group indices, while those that do exist are only slight. Most of the differences can also easily be explained: senior citizens simply do not live in student accommodation. But perhaps a number of small differences taken together would lead to a greater change in the eventual life situation. In that case working out different indices for different groups might be considered. It has already been stated that we have not selected this option on theoretical grounds as it is important to have one single index for everyone, even though it is possible to use a better set of weights for some social groups. Only by using the same index for everyone can we make proper comparisons of the groups.

Also an empirical examination of the consequences of using a different set of weights, such as that of one of the groups, can be made. However, it seems that the results hardly

change. Two groups were selected that were originally located at the extremes: 18-24 year olds, and females. They were chosen because they had the furthest and closest links to the general index respectively (see table 8.1).

Table 8.2 lists the results that emerge after using the weights from an analysis that focused solely on these two groups. In other words, an analysis was first carried out on the 18-24 year olds only, the weights from which were then used to determine the life situation for the entire sample. This life situation score is shown in the table. The same thing was then done for women. In both cases the results are similar to the general index, although using the set of weights of the 18-24 year olds produced a slightly greater difference (see table 8.2).

Table 8.2

Life situation (raw) scores based on different sets of weights

	index scores based on weights obtained after analysis of		
	everyone	females	18-24 years old
one-person households	-0.60	-0.56	-0.59
single-parent families	-0.28	-0.28	-0.25
couples without children	0.06	0.06	0.03
couples with children	0.29	0.28	0.31
other	-0.28	-0.27	-0.24
no education, or only very basic	-1.17	-1.11	-0.98
lbo (form of lower secondary education)	-0.35	-0.33	-0.29
mavo (form of lower secondary education)	-0.13	-0.12	-0.04
mbo, havo, vwo (forms of upper secondary education)	0.16	0.15	0.12
hbo (university-level education), university	0.51	0.48	0.41
males	0.03	0.03	0.02
females	-0.03	-0.03	-0.01
18-24 years	0.18	0.16	0.14
25-34 years	0.26	0.25	0.19
35-44 years	0.29	0.28	0.28
45-54 years	0.21	0.20	0.20
55-64 years	-0.02	-0.02	0.00
65-74 years	-0.42	-0.40	-0.40
75 years or older	-1.51	-1.42	-1.28

The general average for all three sets of weights is 0. Shown here are the 'raw' life situation scores without rescaling, as is the case elsewhere in this study. Rescaling to index-figures could lead to confusion because different sets of weights are used here.

Source: SCP (CV'04)

Conclusion

In conclusion, it can be said that whether calculations are made on the basis of all respondents or just specific social groups makes little difference to the results. However, certain indicators are of greater significance to some groups than they are to others, but the effect on the results is only very slight. Based on the analyses carried out, we can conclude that the index is stable.

8.2 The use of weights does matter

The life situation index aims at comparing social groups using the same measuring instrument. It is therefore not so important if there are different sets of weights for different groups. Of greater concern is whether the weights change *over time* and if it matters which year is chosen to determine the weights. In paragraph 6.4 it was stated that the index can be compared over time because the data from a new sample year are always linked to the pre-existing data. The index is then recalculated using this combined database. There are in any event four alternative ways for determining the weights:

- 1 by using the weights from a previous sample year for the new sample years;⁶⁴
- 2 by using the weights from the new sample year for previous sample years;
- 3 by using the weights from the combined sets of data (the current method);
- 4 by not using any weights at all (which is the same as assigning equal weights).

In this paragraph, we look at what the consequences are on the results using the various alternatives. We are using the period from 1997 to 2002: no changes occurred in the data collection process during this time so the years provide a useful basis for comparison. For the analysis the entire set of data from this period is used (the database is therefore a combination of three sample years: 1997, 1999 and 2002). This makes it possible to calculate the weights and component loadings for every possible combination of years (options 1, 2 and 3, referred to above). Weights are comparable to regression coefficients and give an indication of the contribution made by each variable to the dimension, while the component loadings are comparable to the Pearson's correlation coefficients (between the quantified variables and the scores on the dimension). The results show that there are only very small differences: it matters little whether we use weights from the first or last sample year, or weights based on several years together (see table 8.3).

Table 8.3

Different sets of weights and component loadings according to year and combination of years

	1997		1999		1997+1999		2002		1997+1999+2002	
	weight	loading	weight	loading	weight	loading	weight	loading	weight	loading
eigenvalue	0.391		0.401		0.394		0.403		0.394	
type of home	0.27	.27	0.25	.28	0.25	.27	0.24	.30	0.25	.28
surface area of living room	0.20	.40	0.21	.42	0.20	.41	0.18	.40	0.19	.41
number of rooms	0.20	.37	0.17	.37	0.18	.37	0.22	.41	0.19	.38
owner occupier or not	0.28	.44	0.30	.47	0.29	.46	0.28	.48	0.29	.47
year of construction of the home	0.16	.21	0.18	.22	0.16	.20	0.16	.22	0.15	.20
hobby activities	0.16	.34	0.12	.32	0.14	.33	0.11	.28	0.11	.29
socio-cultural leisure activities	0.57	.68	0.55	.68	0.56	.68	0.58	.67	0.57	.68
membership of societies	0.29	.44	0.34	.51	0.32	.48	0.31	.47	0.32	.48
active contribution to society activities	0.34	.44	0.33	.47	0.33	.46	0.32	.43	0.33	.45
voluntary work	0.08	.21	0.19	.38	0.15	.31	0.11	.26	0.13	.30
social isolation	0.41	.49	0.36	.46	0.38	.47	0.46	.53	0.41	.49
number of times doing sport per week	0.24	.51	0.27	.53	0.25	.52	0.19	.50	0.25	.52
number of different sports	0.54	.65	0.50	.64	0.51	.65	0.52	.63	0.50	.63
been on holiday	0.38	.59	0.36	.58	0.37	.58	0.43	.60	0.39	.59
foreign holidays	0.25	.52	0.26	.52	0.25	.53	0.18	.50	0.23	.52
ownership of holiday items	0.20	.34	0.19	.31	0.19	.32	0.19	.33	0.19	.33
number of household articles	0.23	.44	0.22	.43	0.22	.44	0.26	.48	0.22	.44
amount of hobby equipment	0.55	.64	0.59	.67	0.57	.65	0.56	.66	0.56	.65
possession of a public transport season ticket	0.18	.07	0.20	.08	0.19	.08	0.20	.10	0.20	.09
possession of a car	0.58	.54	0.57	.53	0.57	.54	0.60	.56	0.58	.54

Table 8.3 (continued)

	1997		1999		1997+1999		2002		1997+1999+2002	
	weight	loading	weight	loading	weight	loading	weight	loading	weight	loading
module on perceived health	0.22	.33	0.18	.32	0.20	.32	0.21	.34	0.20	.33
number of nine serious conditions	0.10	.19	0.18	.26	0.14	.23	0.13	.20	0.13	.22
number of 23 other conditions	0.21	.33	0.20	.34	0.20	.33	0.22	.34	0.20	.33

Source: Statistics Netherlands (POLS'97, '99, '02) SCP edition

Because there are only slight differences in weights, it matters little for the final life situation scores which set of weights are used (see table 8.4). The only differences are found in the figures to the right of the decimal point, and as these are omitted in the standard reports, there are no differences in the results from the various sets. Similarly, looking at the differences between social groups, it is of virtually no consequence which set of weights is selected (see internetappendix F – in Dutch).⁶⁵

Table 8.4

Life situation scores when using different sets of weights (1997 set at 100)

	1997	1999	weights used from		
			1997+1999	2002	1997+1999+2002
1997	100	100	100	100	100
1999	101.06	101.23	101.17	101.16	101.16
2002	101.54	101.89	101.73	102.01	101.85

Source: Statistics Netherlands (POLS'97, '99, '02) SCP edition

The above analyses cover a relatively short period. It is fair to say that no major shifts in the indicators used are to be expected in five years. However, on the basis of previous analyses from 1974 to 1993, the conclusions are the same. It does not matter much as far as the results are concerned whether weights from one particular year are used, or from a combination of years: the weights remain stable as years pass (see also internetappendix F).

An index without weights

It emerged from the discussion in chapter 6 that the use of weights is needed because it is impossible to determine in advance:

- whether the difference between practising sports twice or three times a week is as great as the difference between four and five times a week; and
- in what sequence the response options of nominal indicators should be placed (is sheltered accommodation for the elderly better or worse than student accommodation?).

Below, we will examine the consequences for the life situation score if no weights are used – in other words, if we assign an equal weight to every indicator (in this case, a weight of one). Again the data from 2004 will be used for this analysis.

First, the indicators are simply added up. The only adjustment is a recoding that is implemented in such a way that the highest score will be given to the response option that is assumed to make a positive contribution towards the life situation index (the larger the room, the greater the category quantification; the same applies to the number of sports, for example, a slight degree of loneliness/social isolation and absence of impediments).⁶⁶ The result is an index of which the minimum attainable score is 19 (where each question is given the least positive answer) and the maximum score 93 (where every question is given the most positive answer). In practice, the scores range from a minimum of 22 to a maximum of 77. This index is closely related to the index that is constructed with the help of Overals: the correlation coefficient is 0.91 (see table 8.5).

Table 8.5

Relationship between a life situation index without weights and based on Overals weights

	life situation index with Overals weights	life situation index without weights
life situation index with Overals weights	1.00	0.91
life situation index without weights	0.91	1.00
domains		
housing	0.67	0.58
socio-cultural leisure activities	0.72	0.72
(social) participation	0.47	0.56
sports	0.57	0.62
holidays	0.66	0.54
ownership of durable consumer goods	0.68	0.52
mobility	0.58	0.42
health	0.48	0.44

NB: the domains have been optimised for correlation with the life situation index (recoded with category quantifications).

Source: SCP (CV'04)

If we look at the relationship of the individual domains with both indices, we see a number of differences.⁶⁷ The domains that relate to societal and socio-cultural participa-

tion play a greater role in the index without weights than in the index with weights. The reverse is true for the holidays and ownership of consumer goods domains. This is attributable in part to the fact that there are large differences in the maximum scores that can be achieved for each indicator and for each domain: 21 for use of socio-economic leisure time activities and 5 for holidays. The greater the maximum score for each domain, the greater the chance of there being a larger variation, thereby enhancing the importance of that domain. Note that the maximum total score is 93, so the score for use of leisure time accounts for a major part of the result. We can adjust the calculation to accommodate this, but this does not lead to different conclusions (see internetappendix G – in Dutch).

There are also hardly any differences in the results if we divide them according to various social groups. The conclusion is that it barely affects the results if weights are used or not. The results here are not new: similar analyses have been carried out in the past, with the same outcome (Mootz and Konings-Van der Snoek 1990).

The main advantage of not using weights, but merely adding up the indicators, is the simplicity of the procedure: Overals is difficult to explain and not very accessible as a technology. On the other hand, it is very much the question whether it is indeed a problem that the technology is not easy to explain. Of greater importance is that the results can be interpreted. Only a few people know how the AEX index or GDP are calculated, but they are well-known and widely used indices. Besides, a number of problems remain if we do *not* use weights. First, it is impossible to determine the sequence of indicators that are measured nominally (does a flat have a more positive impact than a single-family dwelling?) and, even if it were not, it would be awkward to ascertain exactly how great the distances between the categories should be. It would also be a point of discussion as to whether the difference between practising sports twice or three times a week is as great as the difference between doing so four or five times a week. We would also lose any insight into the ‘diminishing returns’, as in the case of diversity of participation, where more activities do not always lead to a better life situation. This latter aspect is an important matter of substance, even though the results are hardly affected if it is not taken into account.

An index with random weights

In the case of the Overals analysis the weights are determined on the basis of the correlation between the indicators. Against the background of the sensitivity analyses in this paragraph, the consequences of selecting random weights are considered briefly below. First, the *indicators* are given random weights. In total, the indicators are assigned random weights one hundred times (each one obviously different from the next).⁶⁸ The correlation with the ‘original’ life situation index varies from 0.83 to 0.93. Although the correlations are surprisingly high, they are lower than what we have so far seen in this chapter. When the various indices are split according to background features, such as age and whether or not people live in a large city, the differences are greater than those encountered previously in this chapter (see internetappendix H – in Dutch). Of still greater importance is that for a number of background features it appears that the group

that achieves the best score is determined by how the weights are allocated. This is especially the case for age groups and for the city where people live. This effect is undesirable and is a reason to reject the use of random weights.

Assigning weights at random clearly makes the results unreliable: this is also the case if the *response categories*, rather than the indicators, are assigned weights (for the procedure that was followed and the results, see internetappendix H). If these weights are given randomly, the relationship with the life situation is much weaker than if the indicators are given weights as a whole. In addition, the variation in correlation coefficients is greater: in the one hundred tests using randomly chosen sets of weights, the correlation ranged from 0.01 to 0.73.

It is obvious that no account is taken of what has a positive and negative impact on people's life situation when the weights are randomly allocated. If we add this aspect to the procedure (thereby making the random allocation slightly less random), the correlation is at least 0.89 (and 0.96 at the most; again, one hundred tests were carried out). It can be concluded from this that, when weighting the response categories, assigning the positive or negative effect that a response category has on the life situation is important. How great the relevant weights exactly are is much less important.

Sensitivity analysis: conclusion

Overals is currently used to calculate the life situation index: this statistical procedure determines the weights that are given to the indicators and the response categories. Based on the analyses in this paragraph, it can be concluded that weights for the indicators are not strictly necessary. Adding up the indicators is sufficient: this produces more or less the same results (and even if background features are used as the basis for splitting the groups the results still remain pretty much the same). However, it is important that the categories of the indicators run from positive to negative (or vice versa). There are several reasons not to simply add up the indicators when constructing the life situation index. First, because it is difficult to decide how exactly the index is affected by every possible answer. It may be clear that practising sports has a positive effect and that not doing so does not. But is the difference between doing sports six and five times a week the same as the difference between twice and once a week? Second, there seems to be an optimal point in the case of a number of indicators, after which the positive effect on the life situation diminishes: more does not always mean better. Finally, simply adding up is awkward for determining how, for nominal indicators such as type of home, a response category affects the life situation. In what order should flat, single-family dwelling and old people's home be included? Even then it is unclear whether and, if so, how, these indicators should be recoded (and it is also not certain that the order selected will be valid in the future).

The use of Overals resolves this problem. It is also possible to determine the weights with other statistical procedures, but Overals has a number of benefits, which have already been referred to, such as the simultaneous allocation of weights to indicators and response options, and the ability to distinguish the domains empirically (see also paragraph 6.4). A possible drawback of Overals is the risk of 'capitalising on extreme

groups' we noticed within the housing domain. However, as far as the final life situation scores are concerned, this does not lead to strange results. For future research, we should look at the interplay of indicators within the housing domain.

Furthermore, using a statistical procedure has the advantage of making it possible to test whether the selected indicators can actually be used together in one index. If the indicators are simply added up, there is no check mechanism on the interrelationship of the indicators, apart from the considerations that lie at the basis of the selection of the indicators. In the case of the Overals procedure, a number of checks are possible. First, the weights and component loadings give an impression of the degree to which the indicators are related to the life situation (latent, not measured) and of their role in determining the final index. Second, the category quantifications show whether the desired positive and negative effect on the index are actually present: if practising sports has a negative impact and not doing sports does not, then something is wrong; perhaps the selection of the indicator is not correct or has not been properly operationalised. In the next paragraph, we will be testing this by examining the *content* of the index, and whether or not it matters which indicators are used.

8.3 The content of the index does matter

Since 1974 the index has undergone a considerable number of changes (see Boelhouwer and Stoop 1999 for a detailed review). Alterations in the way data have been gathered and adjustments to the questionnaire in particular have affected the results and have therefore caused disruption to the continuousness of the overall trend. In order to nevertheless show the long-term trend, a pragmatic solution has been chosen. By assuming that the life situation for the Netherlands as a whole remained unchanged in the years when the interruptions occurred, it is possible to map out the trend in the life situation for social groups (see box 7.1).

However, some changes were more far-reaching than others: in some cases, they were relatively minor, such as the substitution of outdated indicators in the index (for example the removal of possession of a slide projector, and the later inclusion of possession of a PC). Sometimes, indicators were removed from the index because they had become commonplace (such as telephone and television, items that almost all Dutch people own). Also, the resources have been removed from the index and instead put in the conceptual framework as a separate block. Unlike the changes in how data are collected, adjustments of this kind have a substantial significance. In this paragraph we will look at a number of decisions in terms of their empirical consequences: what consequences do changes to the content have on the results?

Replacing outdated indicators

If hardly anybody possesses a slide projector any more, should this continue to feature in the index? And if nearly everyone has a television, should that also stay? Probably not, as in both cases it can be argued that the indicators no longer have any kind of distinctive merit and therefore make no contribution to differences in people's life situation. It is possible to test whether or not this assertion is correct.

For this test, car ownership is used as an indicator, and the life situation index that applied in 2004. Car ownership is an important indicator in the index (with a weight of 0.62): 81% of respondents have a car. The analyses show that where more and more people have a car, or where fewer and fewer people have one, there is a decline in the significance of ownership of a car on the life situation.⁶⁹ In both cases, the distinctive merit decreases. It is striking to note that otherwise hardly any changes occur in the index: the weights of the other indicators remain more or less the same. Even if we split the life situation along a number of background features, there are still very few differences (see internetappendix I – in Dutch).

From a statistical point of view, it therefore matters little if outdated indicators, or indicators that apply to just about everybody, are removed from the index or not. If they are retained, they simply become less relevant in terms of their impact on the outcome: their importance becomes negligible and no longer have any effect on the life situation. The only reason to continue the inclusion of indicators of this kind is if they are required for theoretical reasons or for allowing international comparisons.

Inclusion of resources?

In 1990 it was decided to remove the socio-economic variables – income and education – from the index. The underlying, theoretical idea was that income and education should be seen as resources: not features of a person's life situation itself, but rather as preconditions for improving it (see chapters 4 and 5). Removing income and education from the index had hardly any effect on the results: the relationship between the remaining indicators did not change (Mootz and Konings-Van der Snoek 1990).

The question is whether this was still the case in 2004: what would happen if we were to decide to reintroduce the resources to the index? Would the results be significantly different? To examine this, the inclusion of income and education in the index was tested, as well as that of the third resource, employment (indicators for the fourth resource, health, already form part of the index). The results show that the differences in weights are very small and that the relationships between the other indicators hardly change at all (see table 8.6; the component loadings are in internetappendix I). The newly added indicators are given a fairly heavy weight if they are included separately, but less so if they are taken together (and in the same domain). Also, as previously, if the life situation score is split along social groups, any deviations are only very small. Moreover, the relationship between the original life situation index and test indices is strong (correlation coefficients of 0.98 or higher; see also internetappendix I, which also includes analyses for 1997, with similar results).

Table 8.6

Changes in weights of the indicators in the life situation index after inclusion of the resources in the index

	origi- nal	with education	with income	including income and education ^a	including employ- ment	including income, education and employment ^a
	weights	weights	weights	weights	weights	weights
eigenvalue	0.391	0.39	0.397	0.409	0.378	0.411
correlation with original		0.98	0.98	0.99	0.98	0.99
type of home	-0.29	-0.30	-0.25	-0.27	-0.30	-0.27
surface area of living room	0.24	0.25	0.25	0.26	0.22	0.25
number of rooms	0.15	0.15	0.18	0.17	0.15	0.17
owner occupier or not	0.36	0.36	0.38	0.37	0.36	0.37
number of hobby activities	0.12	0.12	0.12	0.12	0.11	0.12
number of socio-cultural activities	0.52	0.56	0.50	0.53	0.55	0.54
membership of societies	0.31	0.27	0.30	0.29	0.26	0.28
does voluntary work	0.31	0.29	0.30	0.29	0.26	0.28
scale of social isolation	0.32	0.32	0.30	0.31	0.32	0.31
number of times doing sports per week	0.37	0.30	0.32	0.31	0.33	0.32
number of different sports	0.23	0.28	0.24	0.26	0.25	0.26
been on holiday in the past twelve months	0.51	0.47	0.50	0.49	0.48	0.49
been on holiday abroad	0.22	0.24	0.23	0.24	0.23	0.24
number of household articles	0.32	0.27	0.36	0.33	0.29	0.32
amount of hobby equipment	0.54	0.55	0.52	0.54	0.57	0.55
possession of a public transport season ticket	0.24	0.27	0.20	0.23	0.20	0.22
possession of a car	0.62	0.58	0.65	0.63	0.59	0.62
hindered in carrying out daily activities at home	0.38	0.35	0.35	0.36	0.39	0.37
hindered in carrying out leisure time activities	0.19	0.20	0.18	0.19	0.18	0.18

Table 8.6 (continued)

	origi- nal weights	with education weights	with income weights	including income and education ^a weights	including employ- ment weights	including income, education and employment ^a weights
education ^b		0.71		0.42		0.36
income ^c			0.70	0.50		0.44
employment ^d					0.62	0.21

a The resources have been included in the same domain.

b Maximum basic education; lbo; mavo; mbo, havo, vwo; hbo, university.

c In deciles.

d No work; works under twelve hours; works more than twelve hours.

Source: SCP (CV'04)

Additional sensitivity tests showed that the index is robust even when entire domains are excluded.

This does not cause any major change to the results. For example, the omission of the housing situation or participation domain from the index leads only to minor differences in eigenvalue and in the weights (see internetappendix J – in Dutch). The relationship with the original index is hardly affected either, with correlation coefficients of at least 0.98.

It should be noted, however, that this is only relevant as a statistical exercise. After all, why should we leave domains out of the index that we believe should be included on theoretical grounds?

But the content of the index does matter

It could be concluded from the above that the content of the index is unimportant and that each of the indicators can be exchanged for others. However, this is not the case: not every indicator can be included unconditionally. It is important to remember that we select domains and indicators on the basis of their supposed relationship with the life situation concept, so it is only to be expected that indicators with no relationship to the concept (and therefore no relevance to the other indicators) cannot be included. The method selected for constructing the index provides for a check on the supposed relationship: if indicators show no relevance, the weights and component loadings in the Overals analysis will be negligible.

An empirical test would be the inclusion of non-relevant indicators, the only limitation being that we use existing data as a starting point. The life situation survey was linked in 2004 to the Cultural Changes in the Netherlands survey, allowing us to tap into a fairly wide range of questions.

A first step is to add a domain to the index that relates to payment arrears on things like personal loans, the rent or mortgage, gas, water and electricity. The correlation between

an index with these items added in a separate domain and the original index is 1. This is not because payment arrears score well, but because they actually have very little impact on the index. The weights are no more than 0.05 (except the 0.16 for arrears for gas, water and electricity: see internetappendix J).

The same applies if we include confidence in institutions or opinions on ethnic minorities in the index: the indicators are given low weights. In addition, these items appear to have a mixed impact on the index: with some indicators the category quantifications are exactly as they should be, while with others they are completely wrong, while with still others there is no discernible pattern (for example, positive, negative and then positive again).

In the above tests, a single domain was added each time to the life situation index. It is also possible to make somewhat more substantial changes and leave out a few domains from the life situation index, replacing them with all the domains used in the tests. The domains concerned deal with opinions on immigrants, confidence in institutions and payment arrears, while those omitted that were in the original index are housing, going out (socialising) and durable consumer goods.

In this case, the correlation with the original life situation index falls to 0.86 – still a reasonable correlation. However, the heart of the new index is still formed by the five domains that make up the ‘real’ life situation index (see internetappendix J). It therefore seems that it makes hardly any difference if other domains are added to some of the original domains, even when the added domains have no direct substantial relationship with the life situation. That does not mean, incidentally, that these domains also actually affect the index: in most cases, the weights and component loadings are low. Adding domains with virtually no relevance to the life situation (in this case, the domains included in the index) is therefore pointless from *both a substantial and empirical* point of view. That is no bad thing, because it would be a great cause for concern if it really did not matter which domains and indicators were taken together: ‘these analyses always come up with one thing or another’.

Using a last empirical test, it is examined whether it really is important that the domains and indicators are interrelated. This can be tested by looking at a combination of three domains that, on the face of it, have little in common: mobility, opinions on immigrants and contacts with official bodies. The image of the category quantifications that emerges is variable and not always easy to interpret, which means the substance of the index as a whole cannot be interpreted either (the correlation with the life situation index is 0.24; see internetappendix J).

It therefore does matter which domains are included in an index (see also Boelhouwer 2008). In more general terms, the domains that together form an index have to be interrelated. This also applies to the life situation index.

Safety not included

Our final test concerns safety. The fact that this aspect does not form part of the life situation index frequently causes people to wonder why: after all, the role of safety in social and political debate has become much more prominent in recent years. This is shown for

example from the replies to the question of ‘what people find important in politics’ in the Cultural Changes survey – fighting crime and maintaining law and order feature at the top of a list of sixteen items (SCP 2003). It may be true that safety does not form part of the life situation *index*, but it does have a place in the *conceptual framework*, as an aspect of the environmental features in which we examine criminality and public nuisance in local districts and where people’s perception of safety is part of the evaluative indicators. Attempts have been made several times in the past to include figures relating to victimisation in the index (as an indicator for safety). This appears to lead to results that are difficult to accept: victims have a better life situation than people who have not been a victim. Adding these figures to the life situation index would therefore have a perverse effect. It was therefore concluded that victimisation figures should not be included in the life situation index (SCP 1998a). An analysis of data for 2004 leads to the same conclusion: being a victim goes together with having a positive score on the life situation index (see internetappendix K – in Dutch). It does not matter whether the inclusion of victimisation is done on the basis of combined crimes (e.g. being the victim of theft, threatening behaviour or burglary) or individual crimes. This does not mean that safety is not an important part of someone’s life. Obviously people can be seriously affected if they have been the victim of crime and this can, among other things, have consequences for their feeling of safety.

The inclusion of descriptive indicators for the safety domain does not therefore appear to be meaningful. Another option is to include evaluative indicators in the index. However, the general feeling of safety (or lack of safety) is also related to people’s life situation in an unexpected way: the life situation of people who feel unsafe is better than that of people who feel safe. Another evaluative indicator (the presence of places in the neighbourhood that people find ‘scary’) does correspond to the life situation in a way that might be expected. The absence of scary locations has a positive connection with the life situation. This indicator formed part of the index for a brief period (in 1997), but was subsequently removed for a number of reasons. First, it appeared that the weight of the indicator was low, so it had only slight added value. Second, the theoretical value of the indicator was questionable as it is not a feature of an individual, but rather a feature of the environment. It should therefore be part of a different block in the conceptual framework.

There is another reason why evaluative safety indicators are not included in the life situation index, and that is the separation of descriptive and evaluative indicators that we use with the life situation index. The situation in which people find themselves is different to how they assess that situation. This can clearly be seen in the case of safety, for example: actual levels of crime and how people perceive levels of crime regularly show a conflicting picture (Wittebrood 2006).

The final remaining possibility for including figures relating to victims of crime in the life situation index is the abandonment of the current statistical method for determining weights. The weights to the indicators would then be assigned by the researcher, which would make it easy to decide that victimisation has a negative (not positive) im-

pact on the life situation. Quite apart from the question of how we would then assign the weights, any such step would have to be taken with great care. This approach operates on the assumption of a kind of wishful thinking: the relationship between safety and the life situation index is absent (statistically), but it *ought* to exist. Some comments can be made about why this assumption could be wrong: the safety domain has a number of features that differ from other domains. First, there is an element of chance regarding ending up in unsafe situations, for example because lifestyle plays a role – the more often someone goes out (socialising), the more likely they are to be affected by certain types of crime (see also Wittebrood 2006).⁷⁰ Additionally, the chance of becoming a crime victim is greater if the person in question has himself been a perpetrator of crime. And, by definition, another person is (undesirable as they may be) involved with every crime – the offender. This is not the case with the other indicators in the life situation. Finally, we have already seen that the chance of being a victim of crime is related to the area where people live. Safety is therefore more a feature of the environment than it is of the individual.

For these reasons, safety should be included in the environmental features, not the index itself. In addition, people's feelings of safety form part of the block with evaluative indicators, as has already been mentioned.

8.4 In summary

In this chapter, the consequences of calculating an index for specific groups have been presented, whether it matters how weights are determined, whether weights are needed, and what would happen if the content of the index were to change.

The analyses show that it matters little if the life situation is calculated with weights based on all respondents or just specific groups. Some indicators have a greater influence on certain groups than on others, but the effect on the results is slight. This means that the index is stable and also that there is no reason to tamper with the aim to have a single index with which we can compare social groups, something that would not be possible with separate indices for different groups.

Using or not using weights hardly has any effect on the results either. The main benefit of not using weights, but simply adding up the indicators, is the simplicity of the procedure. However, this advantage is countered by a number of problems: first, determining the correct sequence in the case of nominal indicators; second, the distances within that sequence (is the distance the same between doing one or two sports and two or three sports?); and finally, loss of insight into the extent of any diminishing 'returns', as we saw in the case of diversity of participation (more activities does not always lead to a better life situation).

A multivariate statistical method has the advantage over simply adding the indicators of an in-built check that shows if the selected indicators are interrelated. Whenever that is not the case, the weights and component loadings will be small. If indicators are chosen purely for theoretical reasons and then added up, no such check exists. It does actually seem to matter which indicators and domains are included: if a few domains are selected at random, this leads to results that cannot be interpreted.

The final conclusion is that, for the time being, Overals is the best method for solving these problems. Although it is possible to determine the weights with the help of other statistical procedures, Overals has a number of benefits, such as the simultaneous allocation of weights to indicators and response options, the ability to include nominal indicators, and the ability to distinguish the domains empirically. A possible drawback of Overals is the risk of 'capitalising on extreme groups' we noticed in the housing domain (which did not lead to strange results). For future research, we should look at the interplay of indicators within the housing domain.

9 Concluding observations

Recently, there has been a lot of interest in achieving a broader perspective on prosperity and the development of countries. The focus is no longer solely on economic figures: more and more initiatives are being set up in which social indicators (also) play a role. There are the transnational initiatives under the leadership of the OECD and the European Commission, for instance, with titles like 'Measuring the progress of societies' and 'Beyond GDP'. But there are also initiatives in individual countries, such as in the UK, where a think tank has been set up (the New Economics Foundation, NEF 2006) that carries out targeted research into the policy relevance of prosperity. Another example is France, where in 2008, President Sarkozy assembled a committee headed by the economists and Nobel Prize laureates Sen and Stiglitz, to arrive at a different measurement of prosperity than the GDP (Stiglitz et al. 2009). The debate is also getting underway in the Netherlands, among other reasons because the Netherlands Bureau for Economic Policy Analysis (CPB) is paying attention to happiness in its *Macro-economische verkenningen* ('Macro Economic Outlook', CPB 2007), the political leader of GroenLinks has published a book about the subject (Halsema 2008), and the newspaper *De Volkskrant* used an economic agenda to draw the public's attention to a different measurement of prosperity (Volkskrant 2009).

The idea that economic indicators alone do not suffice to establish whether a country is faring well is not new. There was already such an understanding in the 1960s and '70s, and then too, initiatives were developed to allow social indicators to play a role beside the economic indicators. It was during this time that the SCP developed the life situation index. This index provides an overall picture of the life situation of the Dutch population on the basis of various domains relating to both prosperity and wellbeing.

This study sets forth what the SCP life situation index involves and how it came about. In addition, the study reflects on the context within which the index came into existence and the changes that have occurred. In the book, the existing life situation index is taken as a point of departure. In part, the book is a history, and in part, it questions the choices made and indicates the 'white spots on the map'. In these concluding observations, we reflect once more on a number of decisions, a number of white spots and make recommendations for the future.

The fact that the existing life situation index has been taken as the point of departure for this study does not automatically entail that that same index should be the outcome of the discussions that are held in this context. The book addresses three important questions that touch the very heart of the debate surrounding the index: can an index serve as an aid in the (policy-relevant) description of the life situation of the Dutch public, does the way in which the index takes shape fulfil the relevant requirements and is the composition of the index appropriate? These questions not only form the central theme of this book, but also of the history of the index. In this book, we have tried to answer these questions by placing the central focus on three objectives:

- 1 The description of (the international context of) the life situation index;
- 2 The description of the choices made in the selection of domains and indicators and in the combining of these domains and indicators into a single index; and finally,
- 3 The testing of the stability and sensitivity of the index.

In these concluding observations, we will once again briefly focus on the main points of discussion. This study indicates the choice options for each point of discussion and also which option has been chosen in the case of the life situation index.

By describing the choices that have been made over the past 30 years, one also gains a picture of the changes that have been carried through: today's index is different from the index of 1974. We round off the concluding observations with ideas for the future.

What is the life situation, and how can it be measured?

In the book, the life situation is understood as a broad and multidimensional concept. The index provides insight into how things are going in a wide range of areas simultaneously, because prosperity and wellbeing are linked: both material and immaterial aspects are included in the index. This allows for a multi-faceted picture of the development. If, for instance, we would only look at economic indicators, and measure economic growth on the basis of the Gross Domestic Product, it would prove to have increased over the course of the last 30 years. The GDP has increased at a far higher rate than the rate at which the life situation has improved. Although the improvement of the life situation does not keep pace with the increase of the GDP, this improvement does go faster than the increase in happiness: between 1974 and 2006, the increase in GDP was more than 210% (2000 price level, CBS 2010b), the life situation improved by 13%, while the increase in happiness was next to nil (although a high proportion – about 80% – reported being happy or very happy, Veenhoven 2010).

At the time of launch of the life situation index, the selection of domains and indicators was based on the prevailing literature at that time, in part as a direct result of discussions within the OECD and the social indicators movement. In addition, the choice of domains and indicators was inspired by the policy relevance that they should have, with the welfare state serving as a guideline. In part, the final selection was however also a practical one and based on the plausibility of an indicator or a domain. These considerations, as they relate to the selection of a domain, still apply today. As today's government policy, but also public debate, to an extent attaches importance to different matters than that of the 1970s, the present-day index differs from the index of that time. A key point of attention in this context is to not always be swayed by the 'issues of the day', but to keep a high level of applicability over a longer period of time.

The life situation index currently consists of a combination of indicators in eight domains: housing, health, sports, (social) participation, socio-cultural leisure activities, the ownership of durable consumer goods, holidays and mobility. These domains are not only important in present-day Dutch society: a comparison with the selection of domains in comparable indices and in monitors from other countries indicates that there is a strong degree of overlap.

It is argued in this study that when selecting domains and indicators, it is important to ensure that they are related to one another in substantive terms and are interrelated to such an extent that they refer to the same underlying concept. These principles particularly lead to discussions in the case of two domains.

In the first place, the domain 'safety'. Since 1974, safety has attracted more and more interest and by now, it plays a prominent role in the public and political debate. This study showed that safety can sooner be viewed as a characteristic of the environment than of an individual. A street can be run-down, a neighbourhood or municipality can be unsafe, but an individual person cannot be unsafe. Someone can become the *victim* of a crime or *feel* unsafe. As a result, safety does play a role in the quality of life and it has been included in the conceptual framework: it is included in the environmental characteristics (the safety of a neighbourhood) and the evaluative indicators (the feeling of safety), but not in the index itself (it turned out that there was no unambiguous and logical relationship between victimisation and the life situation index).

In the second place, the domain 'ownership of consumer goods' can lead to discussions. In the long term the increase in wealth could result in an increase in the ownership of durable consumer goods across all layers of the population. A moment can come when we can only include goods that can hardly be brought in relation with the life situation because they no longer stand for a 'reasonable' standard of living, but for a 'luxury' standard. At that point, it is advisable to reconsider the inclusion of the domain of durable consumer goods in the life situation index. Should we no longer include durable goods, this would have consequences for the comparability with previous years. This is not however a reason not to hold this discussion: when society changes, an instrument that is focused on describing that society will also be required to change. Furthermore, this issue of decreased comparability has also been a topic of discussion in the period 1993-1997. At that time, a pragmatic solution was found in leaving the life situation score unaltered over the course of this period (see chapter 7).

The basic principle that indicators need to be interrelated and that the life situation can be measured with one dimension can in itself also be a direct cause for discussion. Why should we only be allowed to measure the life situation with one dimension, and not with two or even more? The answer to that question can primarily be found in the use of the term itself. The fact that in the debate, 'life situation' is treated as a single concept means that there is also a need to describe the term as a single concept. This does not mean that the separate domains cannot also be described and analysed, just like this happens with other multidimensional terms. Examples include the IQ (which relates among other things to language and arithmetic), social cohesion (which deals with trust and participation) or the GDP (which relates to among other things government spending and export).

Apart from the occasional adaptation of the selected durable consumer goods, there is presently no need to thoroughly revise the domains of the index or the indicators. Combined, the included domains and indicators offer a comprehensive picture of the life situation of the Dutch public.

What are the advantages of the life situation index?

In spite of the long history of the life situation index, its status is much more modest than those of the GDP or the HDI, for example. This is due to a significant extent to the fact that the life situation index can only be calculated for the Netherlands. International comparability generates extra interest, however, the data that is needed for this, is lacking. Another factor is that there are no separate publications about the index, which is instead used as a summarising instrument, in 'The Social State of the Netherlands' and 'The Social State of the Countryside'. It is also true that for a long time, interest in social indicators, and combined social indicators in particular, was minimal, partly because they led to discussions about composition and usability. In recent years however, there has been a turnaround, including in relation to the life situation index. For example, the index now features in local authority reports, and efforts are being made to reproduce the index in the UK and Flanders. If we look at the added value created by the life situation index, the first things is that, generally speaking, it allows one to give a broad picture of the current state of affairs in the Netherlands in social terms and to sketch how this situation has developed. The index is emphatically not intended to be used as an instrument to evaluate specific policy measures, nor is it an instrument that can be used to determine directly which policy measures the government can take to realise social improvements.

The index has a descriptive and indicative function. As the data available to us stretch back to 1974, we can track and describe the life situation of social groups over a period of 30 years. In addition, it is possible to gain an idea of which groups are lagging behind the general average when it comes to development. The focus here is on prosperity and well-being: do all groups benefit to an equal extent from an improved life situation?

Compared to the use of separate indicators, the description of the social situation in the Netherlands on the basis of an index offers added value on a number of points. In the first place, an index is useful because regularly, concepts are bandied about in the public and political debate that say something in general terms about the 'social situation'. Besides the concept of life situation, these concepts include liveability, sustainability, social exclusion, social cohesion and quality of life. The concepts in question are complex terms with a multi-dimensional meaning, which are used in normal speech as a single concept. With each of these concepts, it is clear that they cover a variety of areas: liveability involves more than just the actual residential experience; sustainability transcends the environment; social exclusion doesn't merely relate to social participation; etc. If separate indicators are taken into consideration, it isn't always clear at a glance what the state of affairs is *across the board* or what the trend is: are things going better or worse? This is even more difficult if one indicator shows a positive trend and another indicator shows a negative development. With a summarising indicator – an index – it does become clear at a glance what the state of affairs is and whether the trend is positive or negative. Related to this is the communicative function of an index: a single figure will sooner attract attention than a whole range of different indicators. A major international example is the Human Development Index, which every year is able to generate a great deal of attention in the press. Once the public's attention has been grabbed, one can proceed to look at the underlying data.

The summarising nature of an index was the main reason to start with it in 1974. And it still plays a role today. For example, the life situation index can be used in social reports like 'The Social State of the Netherlands' to gain rapid, summary insight into the general trends and into the development of social groups dealt with in the separate chapters. In the summarising chapter, this input can subsequently be used to describe these developments in more detail and to flesh them out.

Another added value is that with an index, cumulation problems can be made visible: which groups have to deal with a concentration of points on which they trail behind. Linked to this is the fact that an index allows us to provide insight into compensation: arrears in one area can be compensated for by a good situation in other areas. For the above reasons, an index can be of help in the (policy-relevant) description of the life situation of Dutch citizens.

An index can be constructed in a variety of ways. In the case of the life situation index, we do not simply add up the indicators. Although that approach would be easy to explain, it also has a number of drawbacks, such as determining the correct order of categories in the case of nominal indicators. A multivariate statistical method furthermore has the advantage over a simple tally in that an automatic check is built in that shows whether the selected indicators correlate. The question furthermore remains whether it is really that bad that a method cannot be explained in simple terms. Isn't it far more important that the results can be interpreted? Only very few people know exactly how the AEX index or the GDP are calculated, but nevertheless, they are common and often-used indices. The sensitivity and stability analyses carried out in this study do not lead to an adaptation of the method used to construct the index.

Despite these positive points, we should not lose sight of the fact that with an index, we cannot tell the whole story. Ultimately, data about individual domains and separate indicators remain required for the analysis of the life situation (or whichever other concept measured by means of an index). After all, an index consists of indicators that by definition only offer limited insight into the issue that they indicate. Compare it to a thermometer. This can be used to determine whether someone is running a fever, and even whether the fever is growing stronger or abating. But the cause of this fever will need to be determined by means of a more detailed examination. The thermometer will provide little insight in this respect.

We can take the comparison with a thermometer a bit further: a thermometer does not indicate how a person *feels*. With the life situation index, we get a picture of the objectified wellbeing, but not of the subjective wellbeing: we do not know whether someone is happy and satisfied. As insight into the subjective wellbeing is relevant to both the individual himself and to policy (for example in the creation of basic support), the satisfactions have their place in the conceptual framework.

The life situation index relates to the individual and is based as such on population surveys. This is necessary for viewing the interconnection of the various domains at the personal level, so that we can determine for instance whether a person is in a disadvantaged position in a number of domains. This provides us with an insight into how people

are doing and how they are faring compared to others. By combining personal data, we can obtain an insight into the social situation of groups, of cities and even of the Netherlands as a whole. However, there are also areas that can be named within the social domain that do not relate to the individual level, but to the collective level. Examples include social capital and social cohesion, concepts that have a bearing on the (reciprocal) relationships within and between networks. It is definitely useful to develop indicators that refer to such aspects (either composite or separate), but they are of a different order than the life situation (in which the central focus is not groups or networks, but the individual).

The role of the government

This book makes it clear that the government repeatedly plays and has played an important role in how we substantiate the life situation index. This becomes particularly clear from the role that policy relevance is assigned in the objective of the index, in the selection of the domains and in the conceptual framework that we use. The fact that policy relevance plays such an important role is viewed by some as a survival from the 1970s that itself is out-of-date.

Undoubtedly, the role of the government has changed considerably in the last 30 years. The idea that government policies can effect social change has become decidedly less popular over the course of the years. The idea that the government can determine what society should look like has been replaced by the idea that this is the case only to a limited extent. Furthermore, the government is never the only actor within the social domain. Other actors also play a role, such as churches and educational institutions, but also housing corporations, the private sector, private initiatives and the media. However, the conceptual framework that accompanies the life situation only explicitly makes room for public services. The role of other institutions and facilities could be given more emphasis in the description of the (backgrounds to the) life situation. This does not change the fact that an important task is reserved for the government: it is to a large extent responsible for the resources that people have at their disposal and in the current welfare state too, public services are an important contributor to the quality of the society. Even in a society where government plays, or seeks to play, a more modest role, the life situation index is a useful tool to describe the social quality of the society.

Another change involves the relationship between the government and the citizens. More than in the past, today people can be said to have a combination of rights and obligations, for example when receiving an unemployment benefit, which at present is often linked to a job-search requirement (recipients have to prove that they are actively looking for work). In addition, the government appeals more than it did in the past to people's sense of responsibility. The government can't do everything by itself anymore, or no longer wants to be able to do everything by itself. In the fight against crime and terrorism, for instance, citizens are asked to keep a watchful eye and report suspicious matters. The emphasis on people's own responsibility is not always equally strong, however. If we take the mottos of the last few cabinets as a guideline, the central focus of the policy shifts from 'Work, Work, Work' (Kok I) via 'Join In (more work, fewer rules)' (Balkenende I) to 'Work together, Live together' in 2007 (Balkenende IV). There is more

sense of communality in the last slogan than in the preceding ones. The life situation index includes indicators that relate to social and societal participation (for instance doing volunteer work and the intensity of the social network). In the conceptual framework, attention is paid to having a job as a resource for the attainment of a better life situation. One issue that is still given insufficient attention in the treatment of the resources is the ability to fend for oneself, the self-reliance, that is increasingly demanded from people in a society with many and varying networks.

In addition, the often implicit assumption that government policy has a positive effect deserves some comment. This does not necessarily have to be the case, of course: discussions about the so-called *regeldruk* ('pressure of rules') indicate that too many rules are experienced as a burden. In addition, there is increasing debate about the question whether the privatisation trend is going too far. In a number of cases (for instance, the efforts to get people on social security back to work) privatisation is even being reversed. There are not only discussions about the privatisation of government policy, but also about its decentralisation. As of January 2007, there is the Social Support Act (*Wet maatschappelijke ondersteuning*), which is primarily focused on getting people to 'join in'. The municipalities are assigned a key role when it comes to offering support in this context. Whereas before, the national government had rules that applied to the entire country, now municipalities can give shape to their task according to their own insights, so that people can have different rights and obligations from one municipality to the next. This could be an explanation for the fact that the life situation is better in one municipality than it is in the other, but for (the contents of) the index itself, decentralisation or privatisation do not have any consequences.

The future of the life situation index and the conceptual framework

Besides separate indicators, the SCP uses a single index to say something about the life situation of the Dutch public. This book describes what the index consists of exactly and how its formation and development fit within the national and international contexts. This also involves the discussion of a number of points and questions. In some cases, the settlement of these issues falls outside the scope of this book, either because the required data are not available, or because a more detailed study of the possibilities and impossibilities is first desired. In other cases, we can indicate a number of directions in which the life situation index and the conceptual framework can develop; adaptations that lead to a better description and explanation of the life situation.

The life situation index is not self-contained, but is placed within a conceptual framework that serves as a guideline in the description of the life situation. We assume in this context that resources have an influence on the quality of the life situation and that the life situation in turn has an influence on people's contentment and happiness. This line of reasoning bears a strong resemblance to the line from Sen's *capabilities* approach, in which resources are distinguished from capabilities (abilities to do something) that lead to functionings (valued and attained capabilities). An important difference between this approach and the perspective of the life situation index is that the capability approach places emphasis on people's freedom of choice and primarily treats their possibilities

as relevant. In the case of the life situation index, a value judgement is emphatically attached to the decisions that people make: engaging in sports is good; not engaging in sports is bad. In other words: in the case of the capabilities approach, the main issue is the opportunities that people have (possible wellbeing), whereas the life situation index also concerns itself with realised opportunities (realised wellbeing). Recent developments in thought about and the formulation in concrete terms of the capabilities approach seem to move towards combining the capabilities and functionings, which together are important for the quality of life. This is gradually bridging the gap with the approach of the life situation index (see for example Robeyns and van der Veen 2007). The life situation index focuses, in other words, on the choices made by people. Something could be said for explicitly including the backgrounds to these choices in the conceptual framework: the preferences that people have and the underlying values and standards. The idea behind this is more or less as follows. The behaviour exhibited by people is the result of a decision they take: 'I will or will not do something'. This decision has to do with the preferences people have, which in turn can be related to the values and standards that people adhere to. In the capabilities approach, the values and preferences are a given (after all, this approach primarily focuses on the capabilities themselves), but in the conceptual framework that accompanies the life situation index, we can make them the object of study. People occasionally make different decisions on the basis of their preferences and values than those made within the life situation index: someone can choose to not engage in sports or to not own a computer. This is indicated by the fact that there is a group of people (albeit small) that have many resources at their disposal, but do not have a good life situation (SCP 1996: p. 66). It would be a good idea to carry out a separate study into the precise relationships between the values and standards, the preferences and the life situation indicators.

In a continuation of this discussion, it would also be a good idea to study what people think of the domains that make up the life situation index: do citizens find these domains relevant? This study has attempted to say something about this issue on the basis of the available data, but these data have not been collected to answer this question and consequently do not match up perfectly (see paragraph 4.4). An external benchmarking with citizens' preferences offers an insight into their level of recognition in the domains and consequently the relevance that the index has to them. In order to be able to fulfil a communicative function, the index (broadly speaking) needs to be recognised by the public. We must however bear in mind in this context that the primary aim of the index is to be *policy*-relevant.

This policy relevance is also the reason why the life situation index primarily focuses on realised wellbeing: this allows us to establish a relationship with government policy. This policy largely determines the normative choices that form the foundation of the life situation index. After all: the government wants people to engage in sports, do volunteer work, not be lonely and acquire a certain standard of living – *everybody*, if at all possible. Of course, the fact that the government prefers to see people make a certain choice does not necessarily mean that everyone actually makes this choice. Our decision to give individual choices a place in the conceptual framework does not mean that we detract from

the importance and policy relevance of the *result* of these choices. By explicitly including both the preferences, the values and the choices in the model, we can get an improved insight into the backgrounds for somebody's decision to make – or not make – a choice desired by the policy.

A question that subsequently crops up is whether this insight should lead to an adaptation or correction of the indicators. We can take the example of the ownership of durable consumer goods. These have now been included as indicators for a 'reasonable standard of living', but we can also include them as 'poverty' indicators, in which the only issue that is still important is whether people lack such goods on the basis of financial considerations. In that case, other considerations underlying a decision not to have durable consumer goods would be less important to the life situation. However, if we continue to reason along these lines, the question becomes relevant why we do not also apply a correction to the issue that senior citizens engage less in sports, or that disabled citizens have less varied leisure pursuits. However, the objective of the life situation index is to differentiate between a good and a bad life situation on the basis of results that are assigned a normative value. If we find it important that people have a washing machine or engage in sports, their life situation is worse when they do not have this machine or don't engage in sports. In the initial analysis, the underlying cause of this situation is irrelevant. In the case of additional analyses into the *backgrounds* of the life situation (and maybe also in the context of policy recommendations), this underlying cause can be important, for example if we want to know whether financial considerations do indeed play a part. To enable these analyses, we need to include in the model the preferences and values, which co-determine the choices people make.

Resources also play a role in the choices people make. The resources that are distinguished within the conceptual framework can be understood as requirements that allow a person to function (better) in contemporary society (such as an education and income). We should actually add yet another aspect to this list, namely the ability to fend for oneself (self-reliance). Self-reliance relates to individuals having sufficient skills to allow them to participate. An individual's level of education is important for these skills, as is the possible presence of physical or mental limitations. These indicators are part of the resources. We can take a slightly broader view of self-reliance by also looking at, for example, IT skills and the extent to which the individual has mastered the Dutch language. Such skills are necessary to be able to participate (better and more fulfilling) in society. That is why the ability to cope for oneself should also be included as a resource in the context of the life situation. As an extension of self-reliance, social skills also play a role: participation in contemporary society is easier for someone who is self-confident and who does not find it difficult to establish (new) social contacts.

We use the conceptual framework to describe and analyse the life situation of the Dutch population. However, this is nothing more than a static portrait, while the life situation itself probably proceeds far more dynamically. Of course, all charts are simplifications of reality, but what, for instance, does the relationship between the life situation of the parents and the own life situation look like? Is there an intergenerational relationship:

do children of parents with a less positive life situation also have a greater chance of falling into a less positive life situation? However, the right data are lacking to allow us to make a statement on such issues.

Is there a relationship between the life situation and the phase of life that someone is in? Generally speaking, the life phases progress from living in with one's parents, via living independently in a single household or living together and having (or not having) one or more children, to being single at a later age (living either independently or in a rest home or care facility, see the cohabitation profile of individuals in Pommer 2007). Which consequences does this process have for the life situation? For example, the move to an independent household will initially result in a worse life situation, because the first independent home will often be smaller than that of the parents and there will possibly be less consumer goods. Less clear in advance is what the consequences are of partners separating or of having children. With the available data, the consequences of such 'life events' cannot be correctly brought into focus: panel research is a more suitable research method for achieving this.

With panel research, it also becomes possible to determine more effectively the relationship between the use of public services and the life situation. It can be studied at that point whether, and to which extent, the use of public services indeed contributes to the improvement of the life situation (is the life situation of someone who makes use of homecare services better than that of someone who is in the same health, but does not?). Incidentally, we should not have too high an expectation of the efficacy of panel research for answering such questions, because on the one hand, a kind of experimental set-up is required, and on the other, it is unlikely that the life situation will undergo a strong change from one day to the next. Nevertheless, panel data provide greater insight into such processes than cross-section data, if only to determine the length of these processes.

Recommendations for the future: adaptations to the conceptual framework

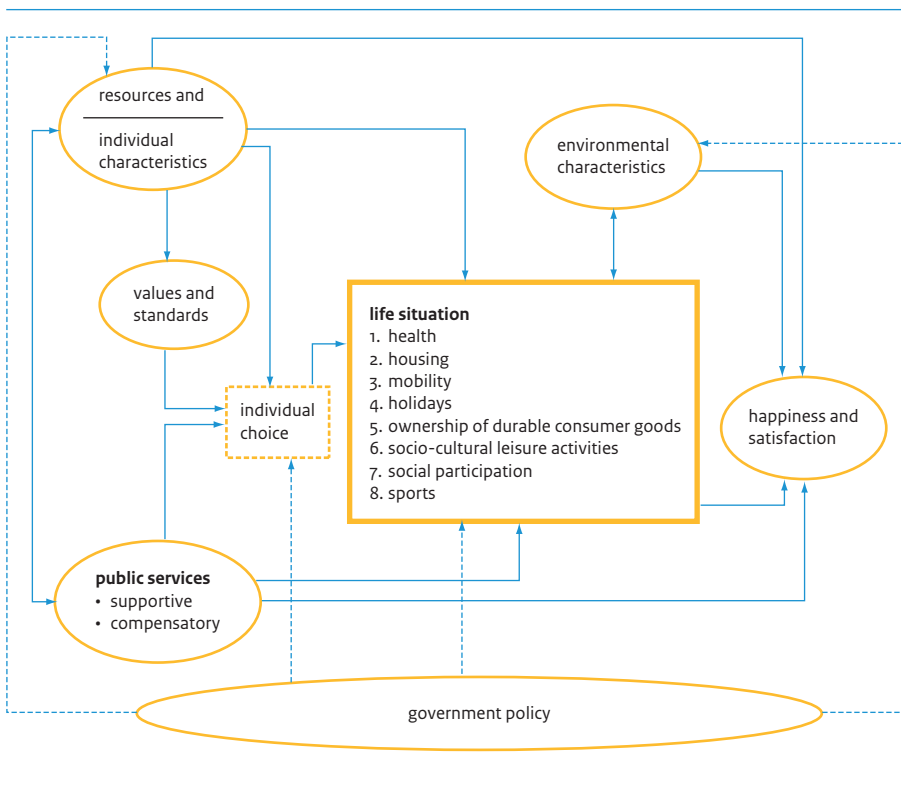
The most important of the previously mentioned directions for further developing the description of the life situation can be summed up in three points, which primarily target the conceptual framework that accompanies the life situation:

- 1 Individuals' choices, preferences and the standards and values complexes are assigned a role in the conceptual framework. The standards and values determine, at least in part, the preferences, considerations and choices that people make and that lead to certain behaviour. Within the conceptual framework, the standards and values can therefore be found between the resources and the life situation. Insight into these matters can result in insight into the comparative assessment underlying people's decision to make – or not make – the choice desired by policy.
- 2 Expand the conceptual framework with self-reliance, a term that plays an increasingly important role in the Dutch political debate. We understand self-reliance to mean having sufficient skills to be able to participate in society. Within the conceptual framework, these skills fall under the resources. This point not only concerns the level of education, but also for example self-reliance in the case of physical or mental limitations, and the question whether an individual has mastered the Dutch language

and has IT skills. Social skills and competences also play a role in this context.

3 Up to now, the conceptual framework has been treated as a structuring model that is helpful when describing the life situation. The assessment of the entire model with the aid of structural comparison models could provide an improved insight into the causal relationships between and within the blocks. In addition, this allows us to gain better insight into the effects of the resources and the background characteristics on the life situation, as not only direct effects, but also indirect effects can be taken on board. Such an assessment of the conceptual framework has not taken place in this book. In a follow-up to this, panel research will allow us to obtain an insight into the dynamism that can be found in the assumed causal chain. Within this chain, we assume that having resources at one's disposal leads to a better life situation and subsequently to increased happiness: is this correct, and which resources are most important in this context? Although we now know something about this process, we could manage to learn more about this by following the events in people's lives. Is there a lifecycle effect? These points result in an adapted conceptual framework, as illustrated in figure 9.1.

Figure 9.1
Adapted conceptual framework relating to the life situation



From the moment that the SCP started with the life situation index, the approach and contents of the index have been debated. In the past 30 years, various changes have indeed been introduced. Some changes are relatively small and not very far-reaching; other changes are more radical. We would prefer to keep a time series uninterrupted for as long as possible, allowing us to make the most effective comparisons possible over time. That is why in each case that an alternative is presented, it needs to be considered which consequences this change will have for the time series.

By further developing the life situation index and the accompanying conceptual framework on the basis of the aforementioned points, we will also be able to view wellbeing and prosperity in connection with one another in the future and to add deeper layers to the analyses. The permanent objective of these undertakings is the identification of social developments for the purpose of policy, specifically social policy, aimed at preventing social disadvantages, and where they exist, to overcome them.

This does not mean there will be no more debate. There will always be discussions about the use and necessity of the life situation index, the selection of the indicators and the combination method used. In this sense, this study is a 'half-time score' that shows that the index is a useful addition to separate indicators in the description of the life situation in the Netherlands. This discussion is revived by the renewed interest in the development of alternatives to the GDP, the interest in sustainability and quality of life and the interest in broad prosperity. The thoughts behind and choices made in connection with the life situation index, as described in this book, can play a role in this discussion.

Nederlands Welzijn – Samenvatting

Er is de laatste tijd veel aandacht voor een bredere kijk op welvaart en de ontwikkeling van landen. Het gaat al lang niet meer over economische cijfers alleen: er ontstaan steeds meer initiatieven waarbij (ook) sociale indicatoren een rol spelen. Dat economische indicatoren alleen niet voldoende zijn om te kunnen zeggen of het goed gaat met een land is niet nieuw. Ook in de jaren 60 en 70 van de vorige eeuw was dat besef er en ook toen ontstonden initiatieven om sociale indicatoren een plek te geven naast de economische indicatoren. Het was in die tijd dat het SCP de leefsituatie-index ontwikkelde. Al meer dan 30 jaar geeft het SCP met behulp van de leefsituatie-index een samenvattend beeld van de leefsituatie van de Nederlandse bevolking. In dit boek wordt uiteengezet wat de leefsituatie-index van het SCP is en hoe deze is ontstaan. Ook wordt stilgestaan bij de context waarin de index tot stand kwam en bij de wijzigingen die er in hebben plaatsgevonden. Toch is het boek meer dan een geschiedschrijving: er zijn vraagtekens gezet bij de gemaakte keuzes en er zijn witte vlekken benoemd. Om een aantal redenen verschilt deze studie van andere SCP-rapporten: de invalshoek is hier niet een specifiek thema of een bepaalde doelgroep van beleid. Ook is het doel niet om een bepaalde situatie te schetsen, beleid te evalueren of om beleidsaanbevelingen te doen. Veel meer vormt het boek een achtergrondstudie bij de leefsituatie-index en bij het daar achterliggende conceptueel kader. In het boek zijn drie belangrijke vragen aan de orde gekomen die de kern raken van discussies over de index: is een index behulpzaam bij het (beleidsrelevant) beschrijven van de leefsituatie van Nederlanders, voldoet de manier waarop de index vorm krijgt en is de samenstelling van de index juist? Deze vragen lopen niet alleen als een rode draad door dit boek, maar ook door de geschiedenis van de index. In dit boek hebben we getracht die vragen te beantwoorden door drie doelstellingen centraal te stellen:

- 1 het schetsen van de (wetenschappelijke) historische en internationale context waarbinnen de leefsituatie-index is ontwikkeld;
- 2 het beschrijven van de gemaakte keuzes voor domeinen en indicatoren en van manieren om die samen te voegen tot een leefsituatie-index;
- 3 het testen van de stabiliteit en sensitiviteit van de index.

Het belangrijkste doel van de leefsituatie-index is het signaleren van sociale ontwikkelingen ten behoeve van beleid en meer in het bijzonder van sociaal beleid dat er op is gericht om achterstanden te voorkomen en, als zij er zijn, te verhelpen. De index bestaat uit een combinatie van indicatoren op acht terreinen: huisvesting, gezondheid, sport, (sociale) participatie, sociaal-culturele vrijetijdsactiviteiten, bezit duurzame consumptiegoederen, vakantie en mobiliteit. Op ieder terrein, hier verder domein genoemd, worden indicatoren gekozen die betrekking hebben op de feitelijke situatie (en niet op de waardering er van). De indicatoren beschrijven een uitkomst, en niet zoals soms gebeurt een input (het gaat om de gezondheid van iemand, niet om het aantal artsen).

De historische en internationale context

Al heel lang is duidelijk dat de vraag hoe het gaat met een samenleving niet alleen kan worden afgemeten aan de economische prestaties. Ook het sociale domein is belangrijk. In de jaren 60 van de vorige eeuw legde de sociale indicatoren beweging de basis voor de ontwikkeling van sociale indicatoren en sociale monitoringssystemen. Het was ook de tijd dat het SCP werd ingesteld. Nadat de aandacht voor sociale indicatoren in de jaren 80 weggezakt was, ontstond er halverwege de jaren 90 hernieuwde interesse. Sindsdien is er een heel scala aan nieuwe initiatieven ontplooid. Deze initiatieven zijn niet alleen gericht op nationale ontwikkelingen, maar ook op inter- en intranationale vergelijking. De initiatieven hebben gemeen dat ze de sociale situatie in landen of gemeenten willen beschrijven op basis van sociale indicatoren. De gebruikte indicatoren verschillen echter: er is geen alomvattende en breedgedragen theorie voorhanden waaruit de keuze van indicatoren op een logische en unieke wijze voortvloeit. Er bestaat ook geen algemene consensus over de definitie van de gebruikte termen. Er is geen overeenstemming over wat precies sociale cohesie is, of sociaal kapitaal of sociale uitsluiting. Evenmin is er een goede definitie van de leefsituatie. Wel is men het erover eens dat het gaat om concepten met een brede inhoud, concepten die uit meerdere domeinen bestaan. De keuze van domeinen en indicatoren lijkt, in ieder geval deels, te worden ingegeven door de keuze voor het begrip. Voor sociale cohesie en sociaal kapitaal worden weliswaar verschillende, maar deels ook overlappende indicatoren gebruikt. In dit boek gebruiken we voor de leefsituatie de volgende definitie: de leefsituatie is het geheel van individuele leefomstandigheden die betrekking hebben op welvaart en welzijn. De leefsituatie heeft betrekking op een toestand en op zowel materiële als immateriële zaken.

De invalshoek van de leefsituatie-index is duidelijk: de index moet beleidsrelevant zijn, de leefsituatie als één geheel beschrijven, een brede inhoud hebben en de leefsituatie zodanig meten dat vooruitgang of terugval is te zien. Bovendien moet de ontwikkeling niet alleen voor Nederland als geheel zichtbaar zijn, maar ook voor verschillende sociale groepen in de Nederlandse samenleving.

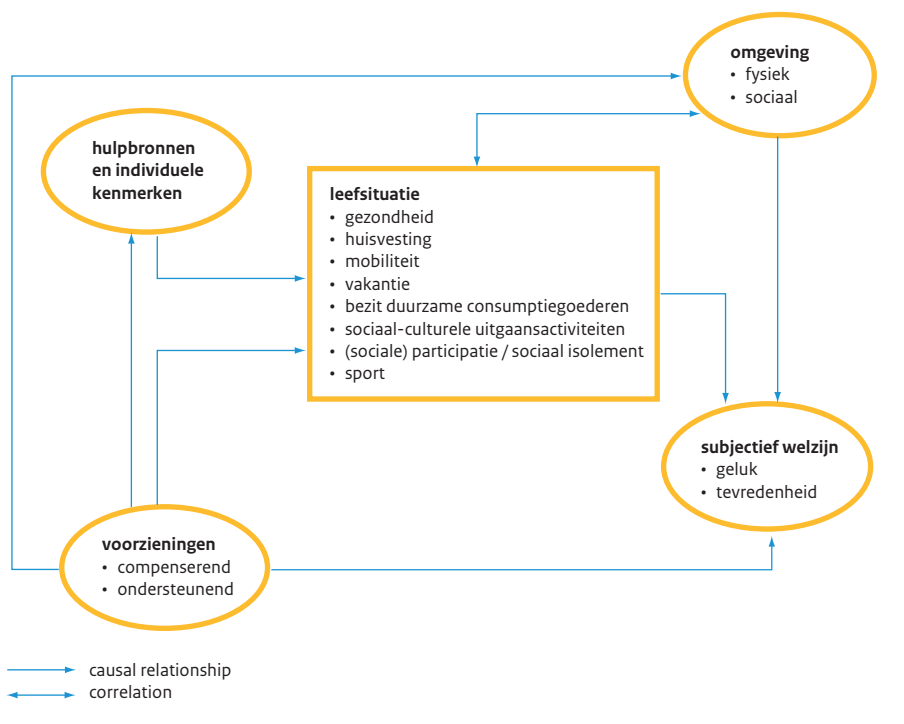
Een ander uitgangspunt is dat we de beschrijving van de leefsituatie willen plaatsen in een ruimer kader van achtergrondgegevens. We maken daarom gebruik van een conceptueel kader, waarin de leefsituatie centraal staat (zie figuur S.1). In het conceptueel kader zijn ook determinanten van de leefsituatie opgenomen: naast persoonlijke kenmerken (zoals leeftijd en huishoudenssituatie) ook opleiding, werk, inkomen en gezondheid (die we hier hulpbronnen noemen). Ook de omgeving speelt een rol bij de leefsituatie van burgers. Deze heeft zowel een fysieke component (in welke stad en in welke buurt woont iemand; hoe ziet die buurt er uit, is het er veilig?) als een sociale component (hoe is de bevolkingssamenstelling van de buurt).

In de leefsituatie-index zelf zijn indicatoren opgenomen die betrekking hebben op de feitelijke toestand, niet op de evaluatie ervan. In het bredere conceptueel kader kijken we naar beide. Daarbij gaan we er van uit dat de leefsituatie van mensen van invloed is op hun geluk en tevredenheid. Tot slot is in het conceptueel kader het gebruik van overheidsvoorzieningen opgenomen. Het idee daarbij is dat de overheid ondersteunend

optreedt om maatschappelijke achterstanden te voorkomen en, als die achterstanden toch ontstaan, deze zoveel mogelijk compenseert.

Niet in het conceptueel kader opgenomen zijn de ontwikkeling van de leefsituatie (het is een statische schets) en preferenties en waarden en normen die leiden tot bepaald gedrag.

Figuur 5.1
Conceptueel kader bij de leefsituatie



De leefsituatie is nu beter dan 30 jaar geleden

In de afgelopen 30 jaar is de leefsituatie van de Nederlandse bevolking, zoals we die meten met de leefsituatie-index, verbeterd. Deze verbetering geldt voor alle sociale groepen, maar niet voor alle groepen in gelijke mate. Zo gingen mensen tussen de 55 en 74 jaar, hoger opgeleiden, alleenstaanden en paren zonder kinderen er meer dan gemiddeld op vooruit, en 25-34-jarigen, de laagst opgeleiden en eenoudergezinnen minder dan gemiddeld.

De leefsituatie van mensen die werken, een hogere opleiding hebben of een hoog inkomen hebben is beter dan gemiddeld. Sinds 1974 is het verschil in leefsituatiescores tussen de uiterste groepen toegenomen. In 2006 is het verschil in leefsituatie tussen

werkenden en niet werkenden, tussen hoog- en laag opgeleiden en tussen hoge en lage inkomens dus groter dan in 1974.

De determinanten (inkomen, opleiding, werk, gezondheid, leeftijd en huishoudenssamenstelling) verklaren een groot deel van de verschillen in de leefsituatie: in 2006 54%, in 1974 45%.

De leefsituatie verschilt niet alleen tussen sociale groepen, maar ook tussen geografische eenheden. In het algemeen geldt dat hoe stedelijker het gebied is of hoe groter de stad, hoe minder goed de leefsituatie is. Door de jaren heen worden de verschillen echter kleiner, vooral als gevolg van de verbeterde leefsituatie in de grote steden.

Tot slot is er een positief verband tussen de feitelijke leefsituatie en de evaluatie ervan: mensen met een goede leefsituatie zijn gelukkiger en meer tevreden dan mensen met een slechte leefsituatie. Het verband met de leefsituatie is sterker voor persoonlijke aspecten (zoals tevredenheid met de vriendenkring en de opleiding), dan met politieke aspecten (zoals tevredenheid met de Nederlandse samenleving). Het persoonlijk geluk is echter maar voor een beperkt deel afhankelijk van de leefsituatie. Belangrijker voor geluk zijn de tevredenheid met onderdelen van de leefsituatie en het hebben van een partner en vrienden.

De keuze van domeinen en indicatoren van de leefsituatie

Aan de leefsituatie-index ligt een reeks databestanden ten grondslag, gebaseerd op enquêtes waarin uitgebreid gevraagd is naar alle onderdelen van de index, achtergrondgegevens en andere aspecten van het conceptueel model. De opgebouwde tijdreeks is één van de grote pluspunten van het onderzoek: pas met een tijdreeks kunnen immers ontwikkelingen worden geschetst. Maar het betekent niet dat de index van nu exact dezelfde is als die uit het begin. Sinds 1974 is een aantal veranderingen doorgevoerd in de samenstelling van de index, in het verzamelen van de gegevens en in het samenvoegen van de gegevens tot één index. Dergelijke veranderingen zorgen soms voor (ongewenste) moeilijkheden bij het vergelijken van de leefsituatie door de tijd, maar bieden ook de mogelijkheid om (gewenste) aanpassingen door te voeren. Bijvoorbeeld als het gaat om het bij de tijd houden van indicatoren, zoals bij het bezit van duurzame consumptiegoederen waar de diaprojector is vervangen door de computer.

Doordat we met de index de leefsituatie door de tijd kunnen volgen krijgen we een waardevol beeld over sociale ontwikkelingen: wordt de leefsituatie beter of juist slechter; zijn er groepen die achterblijven? Bovendien geeft de index inzicht in hoe het gaat op een breed scala aan terreinen tegelijk, doordat welvaart en welzijn worden verbonden: zowel materiële aspecten als immateriële aspecten zijn er in opgenomen. Op die manier ontstaat er een veelzijdig beeld van de ontwikkeling.

Het brede en veelzijdige begrip leefsituatie is geoperationaliseerd aan de hand van acht domeinen:

- 1 gezondheid;
- 2 huisvesting;

- 3 mobiliteit;
- 4 vakantie;
- 5 bezit duurzame consumptiegoederen;
- 6 sociaal-culturele vrijetijdsactiviteiten;
- 7 (sociale) participatie/sociaal isolement;
- 8 sport.

Voor een deel is de keuze voor deze domeinen gebaseerd op hun beleidsrelevantie (waarbij de Grondwet, en het politieke en maatschappelijke debat als uitgangspunt genomen zijn) en voor een ander deel is de keuze gebaseerd op discussies in de internationale sociale indicatoren beweging. Daarnaast speelt ook de 'face validity' van de acht domeinen een rol: in een verzorgingsstaat zijn dit de kerndomeinen van wat in het algemeen onder de leefsituatie wordt verstaan. De keuze van domeinen is in het boek geïkt aan internationaal beschikbare indexen en monitoringssystemen en aan wat mensen *zelf* van belang vinden. Een dergelijke ijking is niet eenvoudig, omdat elke index en elk monitoringssysteem zijn eigen uitgangspunten en doeleinden heeft. Zo is de keuze anders als descriptieve indicatoren worden gebruikt dan wanneer evaluatieve indicatoren worden gebruikt. Toch komen dezelfde domeinen voortdurend terug in verschillende sociale indexen.

Het belangrijkste verschil met andere indexen is dat in de leefsituatie-index geen domeinen en indicatoren zijn opgenomen die betrekking hebben op de determinanten van de leefsituatie (zoals onderwijs en werk). Deze determinanten worden door het SCP beschouwd als hulpbronnen die benut kunnen worden om de leefsituatie te verbeteren. Binnen elk domein moet een relevante selectie van kernindicatoren worden gemaakt om daarmee de leefsituatie-index te construeren. De indicatoren van de leefsituatie moeten aan vijf uitgangspunten voldoen, naast uiteraard de gangbare uitgangspunten die voor indicatoren in het algemeen gelden (zoals meetbaarheid en betrouwbaarheid). De indicatoren moeten:

- 1 te interpreteren zijn in termen van positief en negatief;
- 2 op iedereen van toepassing zijn;
- 3 op individueel niveau gemeten zijn;
- 4 descriptief zijn;
- 5 gericht zijn op output en gerealiseerd welzijn.

Aan de hand van het eerste criterium kunnen we aannames maken over de bijdrage van de indicatoren aan de leefsituatie. Zo verwachten we bijvoorbeeld dat sporten positief bijdraagt aan de leefsituatie en niet-sporten negatief; wel vrijwilligerswerk positief, geen vrijwilligerswerk niet. Wanneer deze verwachtingen niet empirisch gestaafd kunnen worden kan dat een teken zijn dat die indicator niet past bij de andere indicatoren, bijvoorbeeld omdat de indicator geen betrekking heeft op de leefsituatie, maar op iets anders. Het is dan beter om dergelijke indicatoren niet in de leefsituatie-index op te nemen.

Bij de keuze van indicatoren is het ook van belang dat zij onderscheidend vermogen hebben: als iedereen een telefoon heeft, is het niet zinvol om telefoonbezit als indicator op te nemen. Dat betekent dat zo nu en dan specifieke indicatoren vervangen moeten

worden door andere indicatoren: niet alleen als ze gemeengoed zijn geworden, maar ook als ze ouderwets zijn en niemand ze meer heeft. De geschiedenis van de leefsituatie-index laat zien dat dergelijke veranderingen geen gevolgen hebben voor de uitkomsten: de patronen in leefsituatiescores veranderen er niet door.

Anders dan het bij tijd en wijlen aanpassen van de gekozen duurzame consumptiegoederen, is er momenteel geen reden om de domeinen van de index of de indicatoren grondig te herzien. De opgenomen domeinen en indicatoren bieden tezamen een samenvattend beeld van de leefsituatie van Nederlanders.

Een ander uitgangspunt is dat het individu centraal staat, en niet de gemeente, de provincie, een instituut of een instelling. Het individu is de analyse-eenheid: de woning maakt onderdeel uit van de leefsituatie, maar niet de omgeving waarin die woning staat. Uiteraard functioneert een individu binnen een omgeving, maar de leefsituatie heeft uitsluitend betrekking op het individu zelf. In het conceptueel kader wordt de individuele leefsituatie gerelateerd aan de omgeving van het individu, waardoor het mogelijk is om vragen te stellen als: wonen mensen met een slechte leefsituatie in onveilige buurten, of: wonen mensen met een goede leefsituatie in buurten met veel sociale cohesie?

We kiezen er niet voor om in de index descriptieve en evaluatieve indicatoren te combineren omdat het twee verschillende invalshoeken zijn die elk een eigen beeld van 'de werkelijkheid' weergeven. Er blijkt slechts een geringe samenhang te zijn tussen descriptieve en evaluatieve indicatoren, zelfs als ze min of meer direct aan elkaar gerelateerd zijn. De belangrijkste reden daarvoor is dat mensen hun tevredenheid snel aanpassen aan een (nieuwe) situatie. Bovendien speelt mee dat tevredenheid ook afhankelijk is van persoonlijke eigenschappen.

Constructie van een samengestelde leefsituatie-index

Als de domeinen en indicatoren eenmaal zijn vastgesteld, zijn er verschillende manieren om de indicatoren samen te voegen. Bij elk van de manieren om tot een index te komen zijn kanttekeningen te plaatsen, wat het kiezen van 'de beste' manier lastig maakt. Een belangrijke keuze is of de indicatoren gewogen of ongewogen worden opgeteld. Bij de constructie van de leefsituatie-index hanteren we verschillende gewichten voor de indicatoren. Deze gewichten worden langs statistische weg bepaald, waarbij het uitgangspunt is dat de indicatoren zowel onderling moeten samenhangen als met de uiteindelijke index (ic de leefsituatie). Niet-lineaire canonische correlatie analyse leent zich daar goed voor. Deze methode heeft een aantal andere voordelen, zoals de mogelijkheid om de (theoretisch onderscheiden) domeinen in de analyse op te nemen, waardoor een domein met veel indicatoren niet de overhand krijgt. Een ander voordeel is dat de antwoordcategorieën 'geherwaardeerd' worden, waardoor bijvoorbeeld het verschil tussen niet sporten en het doen van één sport anders kan zijn dan het verschil tussen een sport en twee sporten. Verder is een voordeel dat er de mogelijkheid is om nominale variabelen op te nemen.

Op een aantal punten heeft het samenvoegen van sociale indicatoren tot een samengestelde index meerwaarde boven het gebruik van losse indicatoren. Ten eerste heeft de index, ten opzichte van losse indicatoren, een meerwaarde in de communicatie, niet alleen met beleidsmakers maar ook met het publiek. Verder maakt een index cumulatieve effecten zichtbaar. Deze effecten zijn relevant voor het beleid omdat ze de ernst en de mate van achterstand laten zien; iets wat met het presenteren van afzonderlijke indicatoren veel lastiger is. Verder is het inzichtelijk maken van complexe begrippen een belangrijke meerwaarde van één index boven het gebruiken van afzonderlijke indicatoren. Het algemene begrip leefsituatie wordt in het debat, hoewel het complex en multidimensionaal is, gebruikt als één begrip waardoor er ook behoefte is aan een beschrijving van dat begrip als één geheel. Bovendien is het met één index ook gemakkelijker om groepen met elkaar te vergelijken dan met veel verschillende indicatoren. Doordat de index op individueel niveau wordt berekend kan bekeken worden van welke groepen de leefsituatie verslechterde, waar dat aan ligt en of de verslechtering op het ene terrein gecompenseerd kan worden door een verbetering op een ander terrein. Vanwege al deze redenen is een index nog steeds behulpzaam bij het (beleidsrelevant) beschrijven van de leefsituatie van Nederlanders.

Sensitiviteit en stabiliteit

Hoewel de leefsituatie bestaat uit verschillende domeinen, zijn we op zoek naar de gemeenschappelijke basis van de domeinen, ofwel, in statistische termen: we zijn op zoek naar één enkele dimensie, naar een eendimensionale oplossing. Dit heeft tot gevolg dat we domeinen (en indicatoren) die op een andere dimensie laden (en niet op de ene) uitsluiten. Wanneer indicatoren uitsluitend op een andere dimensie laden betekent dat immers dat ze iets anders meten dan de andere indicatoren.

De domeinen die in eerste instantie op inhoudelijke gronden voor de leefsituatie-index zijn gekozen, blijken ook empirisch met elkaar samen te hangen. Het is mogelijk om met de gekozen domeinen (en de indicatoren binnen die domeinen) een zinvolle, te interpreteren index voor de leefsituatie te construeren.

De vraag is of de het voor de meting van de leefsituatie uitmaakt wat er in de index zit: doet de keuze van domeinen en indicatoren er toe? Uit de uitgevoerde stabiliteitsanalyses in deze studie en uit de geschiedenis van de index blijkt dat de keuze van domeinen van groter belang is dan die van de precieze indicatoren binnen een domein. Bij het operationaliseren van een begrip is het belangrijk dat de verschillende domeinen een gemeenschappelijke basis hebben en zodanig met elkaar samenhangen dat ze naar hetzelfde, achterliggende concept verwijzen: een index voor de leefsituatie zal uit andere domeinen bestaan dan een index voor sociaal kapitaal. Uit de uitgevoerde analyses blijkt dan ook dat het combineren van willekeurige, niet samenhangende domeinen leidt tot een niet te interpreteren geheel.

Sensitiviteitsanalyses laten zien welke gevolgen het heeft als we een index berekenen voor specifieke groepen (zoals ouderen of vrouwen). Het maakt weinig uit of de leefsituatie berekend wordt met gewichten op basis van alle respondenten of slechts van

specifieke groepen. Wel heeft de ene indicator voor sommige groepen een wat grotere invloed dan voor andere, maar het effect op de uiteindelijke uitkomsten is gering. Dat betekent dat de index stabiel is en dat er geen reden is om verandering aan te brengen in de theoretische overweging dat we één index willen om verschillende sociale groepen te vergelijken. Overigens sluit het kiezen voor één algemene leefsituatie-index niet uit dat voor specifieke groepen of geografische eenheden aparte indexen kunnen worden gemaakt. Er zijn immers ook aparte maatstaven voor sommige van de leefsituatie-domeinen (zoals gezondheid, waarvoor een enorme hoeveelheid maatstaven en indexen bestaat).

Het wel of niet gebruiken van gewichten heeft eveneens nauwelijks gevolgen voor de resultaten.

Het grote voordeel van het niet gebruiken van gewichten, maar van het simpelweg optellen van indicatoren is de eenvoud van de procedure. Tegenover dat voordeel staat echter een aantal problemen die maken dat we kiezen voor het gebruik van verschillende gewichten: ten eerste het bepalen van de juiste volgorde bij nominale indicatoren (flat, eengezinswoning), ten tweede de mate van verschil binnen die volgorde (is het verschil tussen een en twee sporten doen hetzelfde als tussen twee en drie sporten doen?); en tot slot vervalt het inzicht in eventueel afnemende ‘meeropbrengsten’, zoals we vonden bij de diversiteit van participatie (meer is niet altijd beter). Dit laatste is een belangrijk inhoudelijk gezichtspunt.

Om de gewichten te bepalen gebruiken we bij de leefsituatie-index een statistische methode die is gebaseerd op correlaties. Dat heeft als voordeel boven het simpelweg optellen dat er een check wordt ingebouwd die laat zien of de gekozen indicatoren met elkaar samenhangen. Wanneer dat niet het geval is zal het gewicht van die indicator laag zijn. Wanneer indicatoren louter om theoretische redenen worden gekozen en vervolgens worden opgeteld, is deze check er niet.

De in deze studie uitgevoerde analyses leiden niet tot aanpassing van de gebruikte methode om de index te construeren.

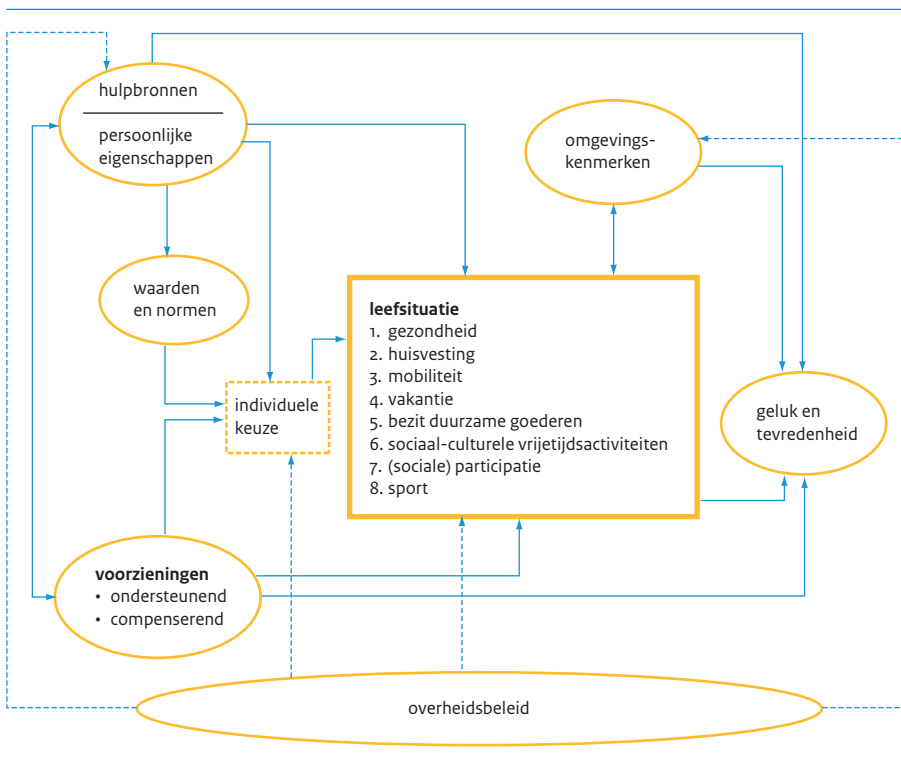
Voorstellen voor de toekomst

In dit boek is uiteengezet waar de index precies uit bestaat en hoe de vorming en ontwikkeling er van past binnen de nationale en internationale context. Voor de toekomst kunnen we een aantal richtingen aangeven waarin de leefsituatie-index en het conceptueel kader zich kunnen ontwikkelen; aanpassingen die tot een betere beschrijving en analyse van de leefsituatie moeten leiden.

- 1 De keuzes, preferenties en het normen- en waardenpatroon van mensen krijgt een rol in het conceptueel kader. De normen en waarden bepalen, in ieder geval deels, de preferenties, afwegingen en keuzes die mensen maken en die leiden tot bepaald gedrag.
- 2 Het opnemen van zelfredzaamheid (het hebben van voldoende vaardigheden om te kunnen participeren in de samenleving) bij de hulpbronnen.
- 3 Toetsing van het gehele model met behulp van structurele vergelijkingsmodellen: hierdoor kan een beter inzicht verkregen worden in de causale relaties tussen en binnen de blokken en in de effecten van de hulpbronnen en achtergrondkenmerken op de leefsituatie

Als we deze voorstellen verwerken in het conceptueel kader, ontstaat een iets gewijzigd kader, zoals in figuur S.2 is weergegeven.

Figuur S.2
Aangepast conceptueel kader bij de leefsituatie



Dit aangepaste conceptueel kader kunnen we in de toekomst gebruiken om de leefsituatie te beschrijven, met als blijvend doel het signaleren van sociale ontwikkelingen ten behoeve van beleid en in het bijzonder van sociaal beleid dat er op is gericht om achterstanden te voorkomen en, als er onverhoopt achterstanden zijn, die te verhelpen. Discussies over nut en noodzaak van de leefsituatie-index, over de keuze van de indicatoren en over de manier van samenvoegen zullen echter altijd blijven. Deze discussie krijgt nieuw leven ingeblazen door de hernieuwde aandacht voor het ontwikkelen van alternatieven voor het BNP, de aandacht voor duurzaamheid en kwaliteit van leven en de aandacht voor 'brede welvaart'. De in dit boek beschreven gedachten achter en keuzes bij de leefsituatie-index kunnen in deze discussie een rol spelen.

Notes

- 1 According to Land (2000), Duncan was the first to speak about a movement, in 1969: 'At the end of the 1960s, the enthusiasm for social indicators was sufficiently strong and broad-based for Duncan to write of the existence of a Social Indicators Movement.'
- 2 The eighteen domains of 'social quality' are divided across four quadrants: 'socio-economic security' domains: financial resources; housing and the environment; health and care; work; education); 'social cohesion' (domains: trust; other integrative norms and values; social networks; identity); 'social inclusion' (domains: citizenship rights; labour market; public and private services; social networks); and 'social empowerment' (domains: knowledge base; labour market; openness and supportiveness of institutions; personal relations). For an overview of the sub-domains and indicators, see Van Der Maesen et al. (2005).
- 3 The twelve domains used by the European Foundation are: health and healthcare; employment and working conditions; economic resources; knowledge, education and training; families and households; community life and social participation; housing; local environment and amenities; transport; public security and crime; recreation and leisure activities; and culture and identity, political resources and human rights, including the European dimension.
- 4 It is worth noting that, since 2001, the general overview of the life situation in the Netherlands has increasingly shifted from the Social and Cultural Report to The Social State of the Netherlands, and that the Social and Cultural Report is acquiring a slightly different character, with less attention to a general overview and more attention to special and exceptional developments (SCP 2006: p. 6-7).
- 5 See also the comment by Sharpe and Smith: 'the index is a strong tool for measuring living conditions in the Netherlands, since it is available on a more or less comparable basis for such a long time period' (Sharpe and Smith 2005: p. 35).
- 6 In the past the Ministry of Health, Welfare and Sport published a report on wellbeing and sport (*Branche rapport welzijn en sport*) which used the life situation index to describe the wellbeing level of the population (Van Dam et al. 2003). And in a report on the operation and outcomes of the healthcare system published in 2004, the Council for Public Health and Care (RVZ) includes the life situation index as an indicator to measure the effectiveness of wellbeing in a 'sample balanced scorecard' (RVZ 2004: p. 50).
- 7 In late 2005 a large number of researchers active in the area of quality of life published a document entitled 'Guidelines for National Indicators'. However, this document contained definitions rather than actual guidelines, including a definition of 'quality of life': 'In contrast to subjective wellbeing, which is based on subjective experience, quality of life is often expressed as more 'objective' and describes the circumstances of a person's life rather than his or her reaction to those circumstances.' (Diener et al. 2006: p. 4).
- 8 A change in the departmental name – with the Ministry of Welfare, Health and Culture becoming the Ministry of Health, Welfare and Sport – also reflected the reduced policy-based attention to the concept of welfare/wellbeing. In the 2006 budget the fundamental policy principle was expressed as follows: 'Social policy is aimed at strengthening the life situation in the Netherlands' (Lower House, session year 2005–2006, 30 391 xv1, no. 2, p. 26; departmental budget 2005).
- 9 Incidentally, the principle that the indicators must be of a general nature does not alter the fact that it is possible to develop specific indicators and indices for separate social groups. If comparison

with other groups or with a national average is not an issue, then it is possible to choose a specific index for old people or rural populations. Such an index could then of course include indicators which apply specifically to them. A major problem here is what criteria should be used to determine the specific groups. Let us say that, as part of a report on the countryside, we want to make an index which describes the life situation of rural people. Leaving aside which indicators should be selected, there is also the issue that the group in question is difficult to demarcate. Who do we count among rural people? Moreover, should we not make two indices, one for rural people with low incomes and one for those with high incomes? And should we not make a distinction between the level of urbanisation, or age or education?

- 10 Kahnemann even speaks of 'objective happiness': with the help of 'experience sampling' it is possible to determine objective happiness on the basis of many snapshots during many different moods (see Alexandrova 2005, also for a critical discussion of this approach).
- 11 There is also the possibility that people will scale their goals to their opportunities: 'People tended to choose personal goals for which they had relevant resources, and the degree of congruence for individuals' goals with their resources predicted their [subjective wellbeing].' (Diener and Suh 1997: p. 202).
- 12 Incidentally, the government in a welfare state is not only concerned with individual citizens and their wellbeing, but also with cohesion and integration at the level of society as a whole (Schnael 2004, sCP 1998b).
- 13 A somewhat more practical argument can be added here: 'Since in practice it is often easier to determine people's actual actions rather than the opportunities available to them, empirical research will often have to rely on the former as an indicator of the standard of living.' (De Beer 2001: p. 119). Robeyns and Van der Veen (2007: p. 57) also take the view that there are 'ontological reasons for not focusing a concept of quality of life exclusively on capabilities'.
- 14 In the first instance, the person representing the Netherlands in this OECD working party was from Statistics Netherlands (Dr. M. Mootz), who however transferred to the sCP on its formation.
- 15 That is the reason why employees are not allowed to sell their statutory minimum of four weeks' holiday a year. The European Court of Justice pronounced this judgment in April 2006 in proceedings instituted by the Dutch Trade Union Federation against the State of the Netherlands. The right to holidays is also provided for in the European Union's (unratified) Constitutional Treaty, drafted in 2004. Article 11-91, paragraph 2 states: 'Every worker has the right to limitation of maximum working hours, to daily and weekly rest periods and to an annual period of paid leave.'
- 16 This may come as a surprise, but not everyone in the Netherlands owns a bicycle. There is admittedly an average of one bicycle for each Dutch person, but about 12% of Dutch households do not have a bicycle (Ministry of Transport, Public Works and Water Management 2005). Robeyns en Van der Veen (2007) also propose including such indicators in the life situation index.
- 17 In 2007, about 50% of all holidays were spent abroad. Continuous Holidays Survey (www.tns-nipo.com, consulted on 11-12-2008).
- 18 Incidentally, desirable or undesirable cohesion might give rise to a lively discussion. Some examples of this are undesirable social networks at radical mosques, or groups of football fans that attack one another (see also sCP 2008: p.15).
- 19 Although the domains are practically identical in the Netherlands and Belgium, two more should be added to the Belgian standard for wellbeing on theoretical grounds. However, they decided against this because it was difficult to operationalise the domains properly, or because there was a lack of

reliable indicators. The domains in question form part of the Belgian definition, which considers them to be 'components of wellbeing':

- normative integration (feeling at home in a group's culture; criminal behaviour or cutting oneself off from social contacts);
- self-fulfilment ('wellbeing also relates to personal development and to satisfying people's cultural and spiritual needs': 'we feel we may assume that the development of a well-functioning social personality is partially based on social interaction and on participation in social relationships'.

In short, these are already in a different dimension) (Breda 1997: p. 26-28).

20 Incidentally, this study does not include health as one of the options for selection.

21 This type of approach is not unusual; see e.g. Cummins et al., which describes a sequence from physical impairments to impairments experienced and subsequently to health experienced (2004a: p. 416).

22 However, the government did add a rider: 'In the government's opinion, this does not alter the fact that support is sometimes necessary in order to enable people to arrange their own lives. That is the purpose of the Social Support Act.'

23 However, there is still a great deal of obscurity regarding the exact relationship between descriptive and evaluative indicators, and why they are not more closely interconnected. There is also a debate going on with respect to the causation between evaluative indicators. For instance, does happiness depend on satisfaction with partial aspects, or is the reverse the case, and are people happier in proportion to the number of matters with which they are satisfied? (see also scP 2003)

24 It should be noted here that public services do not have to have a positive effect by definition. Discussions on e.g. the degree of regulation indicate that people sometimes feel that there are too many regulations and facilities (although this does not usually mean that their objective is called into question). As the scP puts it: 'We have observed time and again that it is the people themselves, either as individuals or as organisations, on their own or in groups, for themselves or for others, who constitute the driving force behind change. It is often the case that government or group institutions are more a hindrance than a help in this respect, and support sometimes exists more frequently in rhetoric than in practice.' (scP 2006: p. 7). Examples given in the 2006 Social and Cultural Report can be found in education (the mainstream education system does not provide many opportunities for developing one's talents) and on the labour market (endeavouring to create more full-time jobs is not really consistent with the need for improving the distribution of work and care).

25 Besides decentralisation, the government has also privatised many public services. A debate is going on with respect to the consequences of privatisation: 'This has caused a structural dilution of the primacy of public and collective facilities. Some say that this is also the end of 'solidarity', and see evidence to support this in the fact that people on the lowest incomes are lagging behind average welfare developments. They claim that this will give rise to a new dichotomy between those able to afford the privatised facilities and those who have to make do with the – greatly reduced – public services.' (RMO 2004: p. 17)

26 The RMO refers to three types of 'errors' in the (implementation of and adjustments to the) welfare state. The first error comes into being in the event that not everyone has access to a basic public service. Generic adjustments are made in response to this, which give more people access to the public service in question, including people who could very well do without it: this is the second type of error. The response to this constitutes the 'third type of error', i.e. generic cutbacks or curtailments

- in the relevant public service, which means that those people for whom the remainder of the public service is not sufficient have to go short (RMO 2004: p. 12).
- 27 According to the economist Paul de Beer, the combination of employed persons' insurance schemes and national insurance schemes, which are characteristic of the Dutch welfare state, is slowly but surely disappearing. National insurance schemes provide security to all citizens regardless of income or employment history (or regardless of their contributions to national insurance). The last two national insurance schemes have come under pressure and are the subject of debate: an increasing number of income tests are being included in the Exceptional Medical Expenses Act (AWBZ), and the universal nature of the General Old Age Pensions Act (AOW) is also being questioned (e.g. by making exceptions for physically demanding occupations) (De Beer 2009).
- 28 In connection with this, the RMO considers the fact that the welfare state is incapable of 'ensuring that public services are allocated to those citizens who have the most need of them' to be a 'major shortcoming' (RMO 2004: p. 7).
- 29 Drewnowski did envisage the possibility that his level of living index could serve to measure the effects of policy: if policy focuses on improving the level of living, this would mean that level of living indicators would have to be included in the plans (Drewnowski 1974: p. 39). If the indicators stated in the policy are equal to the indicators measured with an index, this naturally makes it considerably easier to measure the effects of policy.
- 30 One can extend this metaphor still further and say that evaluative data is necessary in order to find out how hot the patient actually *feels*.
- 31 Some critics of the use of constituent indicators even maintain that 'the compilation of a single indicator places statisticians in the seat of politicians' (Van de Ven et al. 1999: p. 8).
- 32 'Composite indices are of a cardinal nature, but remain ordinal insofar as differences in index values cannot be interpreted meaningfully' (Booyesen 2002: p. 115). There are more points for criticism of the Human Development Index, such as the small number of indicators (and the dubious nature of their representativeness), and the fact that distribution factors have been neglected in the index (Noll 2002c: p. 325-326).
- 33 Others (naturally) disagree with this: 'A possible objection to social indicators is that wealth accounts for so much variance in them, that they are not needed. [...] Even with a correlation between the two types of measures that is virtually unheard of in the social sciences [0.91; JB], the two are not equivalent, and each gives us valuable information not contained in the other indicator.' (Diener and Suh 1997: p. 192-193).
- 34 Examples of indices where descriptive and evaluative indicators are used in the same measuring instrument are Veenhoven's Happy Life Expectancy index (Veenhoven 2002b), the Health Adjusted Life Expectancy index and the SF-12 index.
- 35 There are some exceptions to this, such as the Genuine Progress Indicator, which expresses all the indicators included in terms of money. Incidentally, social accounting systems too no longer express everything in terms of money, but in 'actual terms'; see e.g. Statistics Netherlands' System of Economic and Social Accounting Matrices: 'each indicator uses the most suitable measurement unit for the phenomenon it describes' (Van de Ven et al. 1999: p. 9).
- 36 Although determining the scale for each indicator is actually a certain normative form of weighting too, it does make a difference whether an indicator contains ten categories or only three.

- 37 Drewnowski's approach is an exception to this. In actual fact, he introduces an implicit weighting by determining the critical points: 'The relative rates at which indicator units are transformed into index points constitute weights between indicators' (Drewnowski 1974: p. 28).
- 38 Evans and Kelley (2004) for instance, demonstrate that the difference between differing responses to a question on people's satisfaction with life is unequal. The difference between the categories that indicate satisfaction is much smaller than the difference between categories that indicate dissatisfaction.
- 39 Russell et al. (2006) examine 21 domains with respect to the quality of life for people on drugs administered by injections, which range from 'feeling useful' and safety to health and housing. The correlation coefficient between the importance allocated to a domain and people's satisfaction with it runs from -0.13 to 0.31 .
- 40 A study on the use of weights based on 'importance', carried out by Hagerty and Land, shows that consensus among individuals regarding the index is the greatest when using equal weights: 'Agreement is maximized by using the average weights from a survey of individuals' importances. Alternatively, if no surveys exist, equal-weighting of indicators is the minimax estimator that minimizes disagreement even among diametrically opposed individuals' (Hagerty and Land 2004: p. 29-30; see also Land 2004).
- 41 The scp previously used principal component analysis and homogeneity analysis. For an overview of the methods used in the past, see Boelhouwer and Stoop (1999).
- 42 More precisely, 'Standard canonical correlation analysis is an extension of multiple regression, where the second set does not contain a single response variable, but multiple ones. The goal is to explain as much as possible of the variance in the relationships among two sets of numerical variables in a low dimensional space. Initially, the variables in each set are linearly combined such that the linear combinations have a maximum correlation. Given these combinations, subsequent linear combinations are determined that are uncorrelated with the previous combinations and that have the largest correlation possible. The optimal scaling approach expands the standard analysis in three crucial ways. First, Overals allows more than two sets of variables. Second, variables can be scaled as either nominal, ordinal, or numerical. As a result, nonlinear relationships between variables can be analyzed.' (SPSS 1999: p. 37). The resulting weightings are comparable to regression coefficients (SPSS 1994: p. 96).
- 43 Categories of nominal indicators are rescaled in such a way that the correlation with other indicators is maximised. All being well, a detached house will ultimately score better in the analysis than a flat. It should not matter whether the detached house originally had category value 3 or 1 and the flat the reverse (1 and 3).
- 44 With other techniques, like factor analysis, the four indicators that belong to the housing domain are given greater weights than the two indicators in the sports domain. Although the domains are given an equal weight in Overals, this is not the case for the indicators and categories of these indicators – they can be given different weights: 'Analogously to the situation in multiple regression and canonical correlation analysis, Overals focuses on the relationships between sets; any particular variable contributes to the results only inasmuch as it provides information that is independent of the other variables in the same set' (SPSS 2001a).
- 45 Using the statistical correlation gives rise to an unintended, yet positive, effect in the method used: the choices people make become indirectly included. In addition, it can be derived from these choices that people appreciate the indicators that are used: 'Subjective appreciation does play an indirect

- role because the statistical correlation between the various items that determine the weights of the individual items in the calculation of the life situation in the Overals analysis, are partly determined by the choices that individuals make (revealed preferences)' (De Beer 2001: p. 203).
- 46 The distribution around the mean can be determined using the standard deviation: around 75% of the respondents deviated by less than one standard deviation and about 95% deviated by twice the standard deviation. The mean and the standard deviation of the Overals analysis are transformed from 0 and 1 to 100 and 15. Enlarging the standard deviation makes it easier to see the differences between population groups. The procedure followed resembles the method whereby the IQ is generally represented. The formula can be found in appendix B.
- 47 With the eigenvalue, combined with the number of sets, we can calculate the canonical correlation, which in this case is 0.30 (see appendix B for the formula and the calculation).
- 48 Although the starting point is to describe developments since 1974 in this chapter, it may sometimes be that a shorter period is covered, primarily as a result of the lack of data.
- 49 Because of these changes, combining the data for these years is impossible. The datasets on which the analyses are based cover three periods: 1974-1993; 1997-2002; 2004-2006.
- 50 It would be of interest to include the life situation index, or a trimmed down version of it, in research specifically aimed at people in institutions. Incidentally, a limited survey of senior citizens in institutions, using the experience sampling method, showed that residing in an institution in combination with old age does not by definition lead to a less good life situation (Baas 2006).
- 51 Changes in index values are actually percentage changes: a rise from 100 to 102 can be described as an improvement of the life situation by 2%. Economic growth, where increases of tenths of one per cent are relevant, is an example of another area where similar variables apply.
- 52 Figure 7.6 shows only the development of income groups since 1986, because from that time data was available in deciles; before that it was in octiles. Appendix C lists the data for 1974-1983. The conclusion in the main text does not change.
- 53 The AnswerTree package was used for this analysis. This stipulates that a group should consist of at least 25 people and that the alpha for splitting is 0.05. The Bonferroni adjustment was also used. It is also possible to allow the package itself to determine the most important feature, which in this case would be the position on the employment market.
- 54 The G21 consists of the following municipalities: Almelo, Arnhem, Breda, Deventer, Dordrecht, Eindhoven, Enschede, Groningen, Haarlem, Heerlen, Helmond, Hengelo, Leeuwarden, Leiden, Maastricht, Nijmegen, Schiedam, 's Hertogenbosch, Tilburg, Venlo and Zwolle.
- 55 It is possible to make a link between the area where people live and their life situation by using the postal code of each respondent. A district here is therefore defined as a four-figure postal code area. As mentioned previously in the chapter, a poor life situation is defined as a score lower than 85, an average life situation score is between 85 and 115, while a good one is over 115.
- 56 This concerns the quality of the residential environment in 2002. Districts with a good and a poor residential environment are defined here as the 10% best and 10% worst districts. See also SCP 2005, appendix 12.10.
- 57 The life situation of residents of socially deprived areas is calculated using analyses in the regular survey. This basically means that the values and weights from the regular survey, which are obtained from the Overals analysis, are used in the database for socially deprived areas. The category quantifications that result are used to recode the values of the indicators, and these are then multiplied by

the weights of the indicators. The mean for each domain is then calculated, and these eight means are then added up. This procedure enables us to compare the scores with each other.

- 58 This chiefly concerns a lesser degree of car ownership; residents of socially deprived areas (which of course are generally located in large cities) are more likely to have public transport season tickets. However, this weighs less heavily on the life situation than does car ownership.
- 59 The public nuisance index consists of bicycle theft, car break-ins, damage to cars, vandalism to cars, car theft, burglary, aggression in traffic, traffic collisions, rubbish on the street, vandalism to public telephones or bus shelters, graffiti on walls and buildings, groups of young people hanging around causing a nuisance, people drunk on the street, people being pestered on the street, threatening and violent behaviour. These items are converted into a ten-point scale.
- 60 The SF-12 is a mix of descriptive and evaluative indicators and is used in a large number of countries. Although a mix of indicators of this kind in one index does not enjoy general acceptance, the number of participating countries involved makes it suitable for comparisons between countries. For more critical notes, see Cummins et al. (2004a).
- 61 For the other groups, we find the following relatively large deviations: for people with an income below the poverty line, having a public transport season ticket is more important than it is for the population as a whole; to inhabitants of the G4 the question of being restricted at home or not is more important, while for those with average educational qualifications, going out (socialising) is less important.
- 62 Similar analyses have previously been carried out on the life situation index, with comparable results (Mootz and Konings-Van der Snoek 1990). However, at that time the index was constructed using Homals, and the focus was on discrimination values. If we calculate the current index using Homals instead of Overals, the results are more or less the same (the correlation coefficient between both methods is 0.98; see appendix B). The most important reason for changing over to Overals was the ability to explicitly refer to domains, allowing the technology to be better suited to the theory.
- 63 There are however some exceptions, in particular in the case of the age groups again. For example, a living room with a small surface area makes a positive contribution to a person's life situation in the case of the lowest age group (which includes many students). In certain cases, the divergent results are related to impossible or unusual combinations, such as young people living in accommodation designated for the elderly (category quantification is therefore 0.00) or young people who are severely handicapped (exceptions of this kind disrupt the overall pattern). See appendix F for the results.
- 64 If weights from previous years are used, they will occasionally have to be recalibrated. After all, it may be that changes have occurred in the intervening period.
- 65 The greatest difference can be seen in the case of people living alone: in 1997 and 1999, they would have scored (after the figures had been rounded off) one point more if the weights from 2002 only had been used instead of the combined data from 1997 + 1999 + 2002. However, in 2002 the difference would have been less than one point (again, after rounding off the figures).
- 66 The adjustment that is most difficult to determine is that of mobility, and in particular having a public transport season ticket. We assume that having a ticket for trains, buses, trams and metro has the most favourable impact on a person's life situation, followed by one for buses, trams and metro, then one for just trains, and finally none at all. In the case of type of home, we assume a decreasingly positive effect on the life situation as follows: a detached house, single-family dwelling, a flat or apartment, accommodation for the elderly, student accommodation, flat above a shop, other categories.

- 67 The domain scores in the table are those calculated by Overals; in other words, the optimal category quantifications. This produces optimal correlation with the life situation index.
- 68 The set up and values used in these tests can be found in appendix I, as can the program for calculating them.
- 69 A random number was first allocated to every respondent. It was then determined, based on these random numbers, whether or not people would remain in the 'owns a car' category or be placed in the 'does not own a car' category. If in this way we increase car ownership from 81% via 94% to almost 100%, the weight of the indicator changes correspondingly, and falls via 0.20 and 0.12, ultimately to a negligible 0.01. If we reduce car ownership from 81% via 19% to 0.7%, the weight changes again: from 0.19 via 0.13 to 0.04 (the exact details are in appendix I).
- 70 In an essay about changes in the welfare state, Vuijsje and Wouters make an interesting observation about the changing role of safety in society: 'Becoming a victim of violence has moved from being a case of sad fate or bad luck to outright injustice. For example, bag-snatching has moved on from being theft to theft with violence, while more and more forms of sexual harassment are now classified as sexual violence.' (Vuijsje and Wouters 1999: p. 42).

Appendix A Life situation index indicators and domains since 1974

Since 2004, the life situation index has consisted of eight domains, in which nineteen indicators have been selected. The nineteen indicators were derived from 52 questions in a written questionnaire (see table A.1).

Table A.1

Domains, indicators and a number of variables of the life situation index

domains	indicators		number of variables
1 housing	a type of home		1
	b owner-occupied or rented		1
	c number of rooms		1
	d surface area of the living room		1
		4	4
2 health	a hindered in carrying out household activities		1
	b hindered in carrying out leisure-time activities		1
		2	2
3 ownership of durable consumer goods	a number of household articles		2
	b amount of hobby equipment		3
		2	5
4 socio-cultural leisure activities	a number of socio-cultural activities		10
	b number of hobbies		7
	c diversity of membership of societies		1
		3	18
5 mobility	a possession of a car		1
	b possession of public transport season ticket		1
		2	2
6 social participation	b voluntary work		10
	c social isolation		6
		2	16
7 sports	a number of times doing sports per week		2
	b number of different sports		1
		2	3
8 holidays	a been on holiday in past twelve months		1
	b been on foreign holiday		1
		2	2
total number of indicators - questions		19	52

Since 2004, the life situation index includes the following domains and indicators:

Health

- is hindered in carrying out daily activities at home by one or more chronic conditions, illnesses or handicaps;
- is hindered in carrying out leisure-time activities, doing sports and travelling by one or more chronic conditions, illnesses or handicaps.

Housing

- type of home;
- owner-occupied or not;
- number of bedrooms, living rooms, study rooms, work rooms;
- surface area of the living room.

Social participation

- a social isolation scale, consisting of the following items:
 - There are people I feel I can communicate with.
 - I feel isolated from other people.
 - There are people I can turn to.
 - There are people who really understand me.
 - I am one of a group of friends.
 - I only have superficial social contacts.
- carrying out voluntary work for:
 - a choir, a music society or a drama society;
 - a sports club;
 - a hobby-related club;
 - a political organisation;
 - a trade union, employee or employer organisation;
 - a religious or ideological organisation;
 - a school, crèche or kindergarten (such as parents' committee, board of governors or other assistance at a school);
 - neighbours, the elderly or people with a handicap;
 - an organisation with social objectives (such as human rights, nature conservation, animal welfare);
 - a residents' association or community centre;
 - a specific ethnic-minority based organisation;
 - other types of society or organisation.

Doing sports

- variety of sports;
- intensity of sporting activity.

Leisure activities

- visits to cultural amenities:
 - classical music concert
 - pop concert
 - opera
 - theatre
 - ballet
 - cabaret
 - musical
 - cinema
 - museum
 - dance or house party
- membership of:
 - a choir, a music society or a drama society;
 - a sports club;
 - a hobby-related club;
 - a political organisation;
 - a trade union, employer or employee organisation;
 - a library;
 - an association with religious aims;
 - a specific ethnic-minority based association;
 - another society or organisation.
- variety of hobbies

Ownership of durable consumer goods

- DVD player (not in a PC);
- microwave oven;
 - dishwasher;
 - personal computer.

Mobility

- possession of a car;
- possession of a public transport season ticket.

Holidays

- been on holiday in the past twelve months;
- been on a foreign holiday.

The composition of the index has not always been the same. Table A.2 gives an overview of the indicators that have been included at some point since 1974.

Table A.2

Changes of indicators in the life situation index down the years

	1974	1977	1980	1983	1986	1989	1990- 1993	1997- 2002	2004- 2006
<i>housing</i>									
owner-occupied or not	x	x	x	x	x	x	x	x	x
type of home	x	x	x	x	x	x	x	x	x
physical state of building	x	x	x	x	x	x			
central heating present		x							
desire to relocate				x	x				
average number of rooms				x					
number of rooms								x	x
surface area of living room								x	x
intimidating areas in the neighbourhood								x	
year of construction								x	
<i>health</i>									
number of chronic conditions	x	x	x						
number of psychosomatic complaints	x	x	x	x	x	x	x	x	
stayed at home, ill (past three months)	x	x	x						
any of eight serious conditions				x	x	x	x	x	
number of other conditions				x	x	x	x	x	
feels ill		x							
admitted to hospital (past twelve months)				x					
hindered in daily activities at home									x
hindered in leisure activities									x
<i>owns durable consumer goods</i>									
number of consumer goods	x	x	x	x	x				
number of household articles					x		x	x	x
amount of hobby equipment					x	x	x	x	x
<i>socio-cultural leisure-time activities</i>									
number of leisure-time activities	x	x	x						
number of hobby activities				x	x	x	x	x	x
number of socio-cultural leisure activities				x	x	x	x	x	x
contact with people in neighbourhood		x							
membership of societies				x	x	x	x	x	x
<i>mobility</i>									
possession of a car	x	x	x	x	x	x	x	x	x
possession of a public transport season ticket								x	x
<i>social participation</i>									
active contribution to society activities								x	
voluntary work				x	x	x	x	x	x
social isolation (scale)	x	x	x					x	x

Table A.2 (continued)

Changes of indicators in the life situation index down the years

	1974	1977	1980	1983	1986	1989	1990- 1993	1997- 2002	2004- 2006
<i>sports</i>									
participation in sports	x	x	x	x	x	x	x		
number of times sport practised per week								x	x
number of different sports								x	x
<i>holidays</i>									
been on holiday (in past twelve months)					x	x	x	x	x
been on foreign holiday								x	x
number of holiday articles					x	x	x	x	
<i>resources</i>									
household income	x	x	x	x					
education level	x	x	x	x	x				
paid employment				x	x				

Appendix B Overals

To calculate the life situation index, we somehow have to add the indicators together. As stated in the main report, we prefer to use different weights for the indicators and it should not matter whether a domain comprises two or ten indicators. Additionally, an accumulation of problems should count more heavily than a problem relating to a single aspect. For these reasons, a statistical multivariate method is adopted to convert the indicators into one index: non-linear canonical correlation analysis (the *Overals* procedure in SPSS).

In the past, the SCP used principal component analysis and homogeneity analysis to merge the indicators. For an overview of the methods used down the years, see Boelhouwer and Stoop 1999.

In this appendix, the *Overals* procedure is examined in greater depth (what it is and what it does) and the differences with other ways of forming indicators into a single index. A more technical explanation of *Overals* can be found in Van der Burg et al. (1994) and the *Overals* algorithm is described in detail in SPSS (2001).

What Overals does

Overals is used to determine the weights of the various indicators for the life situation index. This basically means that *Overals*, which is a variant of principal component analysis, calculates the indicators, so that the item-total correlation is maximised. *Overals* is a technique that performs ‘non-linear canonical correlation analysis’ and differs in a number of areas from the standard canonical correlation analysis:

Standard canonical correlation analysis is an extension of multiple regression, where the second set does not contain a single response variable, but multiple ones. The goal is to explain as much as possible of the variance in the relationships among two sets of numerical variables in a low dimensional space. Initially, the variables in each set are linearly combined such that the linear combinations have a maximum correlation. Given these combinations, subsequent linear combinations are determined that are uncorrelated with the previous combinations and that have the largest correlation possible. The optimal scaling approach expands the standard analysis in three crucial ways. First, Overals allows more than two sets of variables. Second, variables can be scaled as either nominal, ordinal, or numerical. As a result, nonlinear relationships between variables can be analysed. Finally, instead of maximizing correlations between the variable sets, the sets are compared to an unknown compromise set defined by the object scores. (SPSS 1999: p. 37)

The resulting **weights** are comparable with regression coefficients: ‘Weights are the regression coefficients in each dimension for every quantified variable in a set, where the object scores are regressed on the quantified variables.’ (SPSS 1994: p. 96). The weights give an idea of the contribution made by each variable to the dimension, within each set.

As well as the weights, **component loadings** play an important role in *Overals*. Component loadings can be regarded as factor loadings from a factor analysis (SPSS 1990). Component loadings are ‘projections of the quantified variables in the object space (when there are no missing data, the component loadings are equivalent to the Pearson’s correlation, between the quantified variable and the object scores)’ (SPSS 1990).

It is possible that the weight of an indicator is low, even though the component loading is high (and the reverse is also possible). This is because the component loading shows the correlation, while the weight concerns the *unique* contribution made by the indicator. A low weight in combination with a high component loading occurs when two indicators are very similar to each other or have much in common (for example, ‘do you own a DVD?’ and ‘do you own a DVD player?’). When the weights are calculated, only one of the two indicators is actually ‘needed’ (the other indicator is given a low weight), even though a strong correlation is present.

The standard *Overals* report also mentions the so-called ‘**loss**’. This shows which part of a variation in the scores cannot be explained by the weighted combination of indicators in a set (SPSS 2007).

Related to this is the **eigenvalue**, which shows the extent to which the relationship between the domains is represented by the dimension. For each dimension, the eigenvalue equals 1 minus the average loss. The eigenvalues of the dimensions add up to form the total **fit**. The maximum fit is equal to the number of dimensions.

With this information, it is possible to work out the **canonical correlation**. This can be done with the following formula (in case there are more than two sets, as here):

$$rd = ((KxE)d) - 1 / (K - 1)$$

where d is the dimension, K the number of sets, and E the eigenvalue.

The correlation coefficient shows the extent of the relationship between the sets (domains).

When analysing the results, there are a number of **suggestions** for enhancing the analysis (from SPSS 2007):

- Create as many sets as possible. Put an important variable that you want to predict in a separate set by itself.
- Put variables that you consider predictors together in a single set. If there are many predictors, try to partition them into several sets.
- Put each multiple nominal variable in a separate set by itself.
- If variables are highly correlated to each other and you do not want this relationship to dominate the solution, put those variables together in the same set.

The initial analysis involves carrying out a number of **standard checks** in order to improve the analysis (SPSS 2004). First, it is important to see that there are not too many missings and that the categories are reasonably full. Missings and more-or-less empty cells can

dominate the solution (that is, determine the dimension). Second, it is advisable to plot the object scores in order to detect any outliers in the data. The outliers can significantly affect the solution, because they deviate markedly from the rest. If there are any outliers present, they can either be deleted or an attempt be made to merge categories.

Advantages of Overals

One advantage of *Overals* is that it can deal with **different measurement levels**, even in the same analysis. Indicators do not have to be measured ordinally or at interval level (such as the number of sports or the surface area of the living room): nominal indicators (such as type of home) can also be included in the analysis; the original coding of the indicators is not fixed. Categories of nominal indicators are also rescaled in order to create as close a relationship as possible with other indicators (the result is the **category quantifications** in *Overals*). All being well, a detached one-family house will score better in the analysis than a flat. This can be clarified with the help of an example: suppose that the original coding of the 'number of sports' indicator was 0 = no sports; 1 = 1 sport; 2 = 2 sports, etc. In order to obtain the closest possible relationship, the coding is converted into the following category quantifications: -1.45 = no sports; 1.34 = 1 sport; 1.67 = 2 sports, etc. The example also makes it immediately clear that not doing sports has a negative effect and that doing sports has a positive one, and moreover, that the difference between doing sports and not doing sports is greater than the difference between doing 1 sport or 2. Every indicator or indicator category, can be checked in this way to see, whether it meets expectations regarding its positive or negative effect on a person's life situation. After all, if 'doing sports' were to have a negative impact and 'not doing sports' a positive one, the 'sports' indicator would not be considered usable for the purpose of constructing the life situation index.

Overals can therefore be used to see whether 'doing sports' is given a greater weight than the home, but also the nature of the relationship between the number of times that a person practises sports and the various types of home.

Because indicators with different measurement levels can be included, it is also possible to introduce a check on the assumption, for example, that the number of times sport is practised increases in a linear fashion. The inclusion of the indicators as nominal means that *Overals* is free to construct the indicator (compare Van der Burg and De Leeuw 1987).

Another benefit of *Overals* is that it is possible to use the theoretically distinctive **domains** in the analysis empirically (Van der Burg, De Leeuw & Dijksterhuis 1994). It can be shown in the analysis that the number of sports that a person practises, and how often, together form one domain, and that type of home, owner-occupied home or not, number of rooms and surface area of the living room form a different domain.

In addition, all eight domains carry equal weight: this prevents one domain with a greater number of indicators counting more heavily than one with fewer indicators. With other techniques, like factor analysis, the four indicators that form part of the housing domain, for example, are given greater weight than the two indicators that belong in the sports domain. Although the domains are given equal weight, this does not apply to the indicators or the categories of the indicators: they can be given different weights.

'Analogously to the situation in multiple regression and canonical correlation analysis, *Overals* focuses on the relationships between sets; any particular variable contributes to the results only inasmuch as it provides information that is independent of the other variables in the same set' (SPSS 2001b).

What to do in the case of low weights and low component loadings?

On the basis of the weights, an impression can be gained of the significance of each indicator when the index is being constructed. An indicator with a low weight hardly contributes to the index at all, statistically. The question then is, whether the indicator should be omitted from the index: after all, if it hardly makes any difference to the index, it will not matter whether it is included or not. If the priority is data reduction, describing a concept with as few indicators as possible, this is the strategy that should be adopted and the indicator in question can be left out of the index. However, this is not necessarily the route taken by the SCP with respect to the life situation index – there are cases where indicators with only a slight impact are not omitted. One example of this is the health indicators: in general, they are given low weights (because the relationship with other indicators is slight; see table B.4 for the weights), but nevertheless they are not removed from the index. After all, health should be seen as a part of the life situation, because of the nature of the subject itself.

In 1978, the SCP gave the following reasoning for maintaining indicators with low weights: 'The selection of prosperity indicators was made at an earlier stage and was based on different criteria: plausibility, face validity and a degree of general feeling. The indicators with a moderate loading have therefore been maintained' (SCP 1978: p. 243).

From one *Overals* dimension to one life situation score

As already mentioned, *Overals* is used to determine the common basis of different indicators and therefore their weights as well. The common basis is formed by a latent dimension from the *Overals* analysis. However, the analysis can also reveal several latent dimensions. In practice, it appears that the first dimension is suitable for helping define the life situation.¹ This can be verified by looking at the rescaled categories of the indicators – the category quantifications (see table B.7). All being well, a positive category (doing sports) is given a positive coding and a negative category (not doing sports) a negative one.²

The life situation score is determined on the basis of the scores on the first dimension from the *Overals* analysis. These scores have an average of 0 and a standard deviation of 1. Because the differences between groups are small the figures are subjected to a linear transformation before they are presented. For a long time the index, then known as the wellbeing standard, was presented rather like an exam result, with marks ranging from 0 to 10, but from 1997 it has been treated as a 'true' index. This means that the average life situation score in the Netherlands was set at 100 for the base year, with a standard deviation of 15. The year 1997 was chosen as the base year, because a major shift in the

data trends was observed at that time (because of changes in the data collection; see sc p 1998a and sc p 2001). The formula that is used for the transformation is:

$$\text{Life situation} = ((\text{Overals score} - \text{average}) \times (15 / \text{standard deviation})) + 100$$

In order to compare the data over several years, the various databases have been merged into one entity, which is then used to carry out an *Overals* analysis. The respondents are then selected from the base year and the average *Overals* score and standard deviation calculated. These are entered into the formula, which is applied to the totality of databases. The formula is therefore as follows, using 1999 as an example:

$$\text{Life situation in 1999} = ((\text{Overals score in 1999} - \text{average for 1997}) \times (15 / \text{standard deviation for 1997})) + 100$$

As stated in the main report, there have been occasions when the succession of available data has been disrupted to the extent that comparisons of this kind are impossible. This occurred most recently in the transition from 2002 to 2004, when face-to-face surveys were replaced by paper-and-pencil ones. In that case we assume that the life situation score remained the same: in 2004 the life situation in the Netherlands was, on average, the same as that in 2002 (101.8515; rounded up to 102). This produces the following formula:

$$\text{Life situation in } = ((\text{Overals score in 2004} - \text{average for 2002}) \times (15 / \text{standard deviation for 2002})) + 101.8515$$

Calculating the domains or 'sets'

One of the advantages of *Overals* is that theoretically distinctive domains can be used ('sets' in *Overals* terms). In order to gain an insight of the structure of the total index, to be able to follow developments in the index and to get an idea of the differences between the groups in the domains, scores are needed for the various domains. *Overals* itself does not give these scores, but they can be worked out using the following steps.

- 1 Recode every category of every indicator to the category quantifications from the *Overals* analysis.
- 2 Multiply this by the weights from the *Overals* analysis.
- 3 Then, add up the indicators in each domain, when the respondent has *no* missings (*Overals* assigns a score of 0 – that is, the average – to respondents who do not have a score on an indicator for the *entire* domain of which the indicator forms a part).

Now, a score is calculated for every respondent for every domain.

These scores can be used to work out the **total index score**. To do this, the domain scores calculated above must be added and divided by the eigenvalue.

These calculations also enable **local authorities** to compare their results with national statistics. They use the method described above in order to work out a life situation score for their own data.

Comparing Overals with several other techniques

In the construction of the life situation index we use a multivariate technique, because this enables us to put into practice the principle that the indicators have to be related. Suitable multivariate techniques look for a common base. Other techniques can be used as well as *Overals*, including *Homals* (homogeneity analysis), *Princals* (non-linear principal component analysis), *CatPca* (categorical principal component analysis) and factor analysis. It does not appear to matter very much which technique is used to calculate the life situation index: the correlations with the *Overals* method are 0.96 and higher (see table B.1).

Table B.1

Correlation between several different analysis techniques (2004+2006)

	factor analysis (unrotated)	Overals	Princals	Homals	Catpca	life situation in 2006
factor analysis	1					
Overals	.96	1	.97	.97	.97	1.00
Princals	.97	.97	1	1.00	1.00	.97
Homals	.97	.97	1.00	1	1.00	.98
Catpca	.98	.97	1.00	1.00	1	.98
life situation in 2006	.96	1.00	.97	.98	.98	1

Source: SCP (CV'04, '06).

The differences between the methods can be more closely examined by comparing the scores on the first dimension for a number of social groups. Table B.2 shows that the rankings of the groups are exactly the same, and that the scores for each group are more or less identical. The only exception is the 18-24 age group, which has the best score under *Overals*, while it is 35-44 year-olds who scored best under the other techniques. As a matter of interest, for the year 2004 the 18-24 age group were ranked in the same position under *Overals* as they did under the other methods (this is not shown in the table).

The scalability of indicators can be examined in another way, namely on the basis of the reliability of the sum score. *Cronbach's alpha* is 0.78 (on the rescaled indicators). As the general rule of thumb is that this alpha may not be less than 0.70, the life situation indicators jointly form a valid scale.

Table B.2

Average score on the first dimension, under different methods (2006)

	Overals	Princals	Homals	Catpca	factor analysis
18-24 years	0.44	0.30	0.35	0.27	0.34
25-34 years	0.36	0.33	0.33	0.27	0.29
35-44 years	0.39	0.41	0.41	0.34	0.42
45-54 years	0.22	0.26	0.25	0.17	0.25
55-64 years	0.16	0.17	0.17	0.10	0.22
65-74 years	-0.26	-0.27	-0.28	-0.37	-0.22
≥ 75 years	-1.13	-1.11	-1.13	-1.24	-1.06
no education, basic education	-1.09	-1.04	-1.06	-1.18	-1.07
lbo (form of lower secondary education)	-0.20	-0.18	-0.18	-0.28	-0.29
mavo (form of lower secondary education)	-0.02	-0.02	-0.02	-0.10	0.10
mbo, havo, vwo (forms of upper secondary education)	0.28	0.26	0.27	0.19	0.27
hbo (university-level education), university	0.59	0.57	0.57	0.52	0.58
unemployed	-0.40	-0.40	-0.41	-0.50	-0.33
works <12 hours	0.43	0.30	0.34	0.25	0.31
works >12 hours	0.46	0.46	0.46	0.40	0.44
one-person household	-0.50	-0.58	-0.56	-0.64	-0.49
one-parent family	-0.22	-0.20	-0.21	-0.28	-0.20
couple without children	0.16	0.14	0.13	0.07	0.20
couple with children	0.42	0.46	0.46	0.38	0.46
other	-0.27	-0.29	-0.30	-0.38	-0.12

Source: SCP (CV'06)

More Overals dimensions

The first dimension from the *Overals* analysis is used for the life situation index. The indicators show up well on this dimension, when taking the weights, component loading and category quantifications into account. Below are the results for an analysis with several dimensions. Table B.3 has the weights and table B.4 the component loadings. It can be seen from the tables that the second dimension is determined primarily by type of home, ownership of household articles and possession of a public transport season ticket, the third by membership of societies and voluntary work, the fourth by health and the number of rooms that a home has, the fifth by sports, the sixth by health and holidays, the seventh by indicators distributed over various domains, and the eighth by holidays and two housing indicators.

In some cases, then, there appears to be one dimension that covers one particular domain, while in others there is actually no clear picture of what the same dimension stands for.

Table B.3

Eigenvalue and weights with an *Overals* analysis with eight dimensions (2006)

	1	2	3	4	5	6	7	8
eigenvalue	0.38	0.21	0.18	0.15	0.15	0.14	0.13	0.13
type of home	-0.18	0.60	-0.02	0.15	0.23	0.15	0.43	-0.02
surface area of the living room	-0.24	0.07	-0.06	-0.22	-0.28	-0.58	0.02	0.55
number of rooms	-0.24	-0.20	0.10	0.68	0.34	0.05	0.12	0.22
owner occupied or not	0.41	0.15	-0.07	0.29	0.10	-0.36	-0.33	0.56
hobby activities	0.02	0.09	-0.10	0.42	-0.60	0.32	-0.31	-0.09
socio-cultural activities	-0.60	0.39	0.29	-0.15	-0.03	-0.10	0.05	0.12
membership of societies	-0.25	-0.19	-0.80	-0.10	0.18	0.01	-0.05	-0.16
voluntary work	-0.29	-0.20	-0.71	0.03	0.03	-0.11	-0.01	-0.04
social isolation	-0.36	0.22	0.15	-0.14	-0.07	0.14	-0.18	0.29
number of times doing sport per week	-0.39	-0.17	0.06	-0.50	1.07	0.08	-0.48	-0.01
number of different sports	-0.23	0.40	-0.25	0.30	1.11	-0.06	0.30	-0.12
holidays	-0.51	-0.19	-0.20	0.09	0.06	0.51	-0.01	0.78
foreign holidays	0.24	-0.30	-0.30	0.20	0.13	0.63	-0.01	0.79
household articles	-0.33	-0.55	0.18	-0.24	-0.22	0.12	0.53	0.11
hobby equipment	-0.49	0.25	0.15	0.42	0.19	-0.13	-0.49	-0.15
possession of public transport season ticket	0.20	-0.49	0.15	-0.19	-0.14	-0.23	-0.47	-0.03
possession of car	0.58	0.38	-0.14	-0.25	-0.01	-0.03	-0.11	0.10
hindered in carrying out activities at home	-0.26	0.08	-0.07	0.78	0.20	-0.91	0.31	-0.08
hindered in carrying out leisure activities	-0.25	0.08	0.31	-0.75	-0.03	0.95	-0.46	0.04

Source: SCP (CV'06)

Table B.4

Component loadings with an *Overals* analysis with eight dimensions

	1	2	3	4	5	6	7	8
type of home	0.04	0.70	-0.07	0.03	0.17	0.10	0.29	0.00
surface area of the living room	-0.38	-0.09	-0.02	-0.21	-0.27	-0.48	0.08	0.43
number of rooms	-0.37	-0.45	0.13	0.48	0.18	0.04	0.11	0.11
owner occupied or not	0.52	0.38	-0.09	0.14	0.12	-0.17	-0.26	0.31
hobby activities	-0.11	0.13	-0.15	0.39	-0.59	0.31	-0.31	-0.09
socio-cultural activities	-0.67	0.35	0.03	-0.11	-0.08	-0.05	-0.02	0.06
membership of societies	-0.43	-0.06	-0.73	-0.09	0.10	0.02	-0.08	-0.13
voluntary work	-0.34	-0.17	-0.70	0.02	0.02	-0.09	-0.03	-0.01
social isolation	-0.40	0.19	0.07	-0.13	-0.07	0.13	-0.18	0.28
number of times doing sport per week	-0.57	0.16	-0.14	-0.26	0.18	0.04	-0.23	-0.10
number of different sports	-0.54	0.27	-0.20	-0.10	-0.25	0.01	-0.08	-0.12
holidays	-0.67	0.01	0.00	-0.04	-0.03	0.10	0.00	0.26
foreign holidays	0.58	-0.17	-0.16	0.14	0.10	0.29	0.00	0.27
household articles	-0.52	-0.45	0.24	-0.08	-0.15	0.07	0.35	0.05
hobby equipment	-0.62	0.04	0.22	0.32	0.11	-0.08	-0.29	-0.11
possession of public transport season ticket	0.08	-0.57	0.18	-0.14	-0.14	-0.22	-0.44	-0.05
possession of car	0.54	0.48	-0.17	-0.21	0.02	0.01	-0.01	0.11
hindered in carrying out activities at home	-0.46	0.14	0.19	0.17	0.18	-0.13	-0.06	-0.05
hindered in carrying out leisure activities	-0.46	0.14	0.26	-0.10	0.13	0.20	-0.20	-0.03

Source: SCP (CV'06)

Relationship between the various life situation domains

The canonical correlation for the life situation index (or the first dimension of the *Overals* solution) can be calculated using the formula stated previously:

$$rd = ((K \times Ed) - 1) / (K - 1) \quad \text{where } d \text{ is the dimension, } K \text{ is the number of sets, and } E \text{ is the eigenvalue}$$

If we fill in the details from the first *Overals* dimension, we get $((8 \times 0.39) - 1) / (7) = 0.30$. (NB: for the second dimension the canonical correlation is 0.09 and increasingly lower for subsequent dimensions).

Table B.5 gives an overview of the relationship between the dimensions themselves and between the dimensions and the index. To obtain these results, the dimensions have been calculated using the procedure described above for calculating domain scores on the basis of the *Overals* results. These domain scores therefore include the rescaled indicators (that is, transformed in such a way that the closest possible relationship is achieved). The relationship between the domains and the index varies from 0.49 for health to 0.73 for socio-cultural leisure time activities. This relationship corresponds to the ‘fit’ of the sets that is produced by the *Overals* method.

The relationships between the individual domains vary from 0.16 (between participation and mobility) to 0.47 (between housing and ownership of consumer goods). The relationships between the domains are therefore not particularly close and in some cases quite distant. This is not surprising, given that we use different life situation domains for the life situation index. If the relationships were very close, that would suggest that the domains were, to all intents and purposes, the same.

Table B.5

Relationships between the life situation domains

	housing	socio-cultural leisure activities	partici- pation	sports	holidays	con- sumer goods	mobility	health
housing	1.00							
socio-cultural leisure activities	0.33	1.00						
participation	0.21	0.39	1.00					
sports	0.23	0.46	0.24	1.00				
holiday	0.34	0.44	0.27	0.31	1.00			
ownership of con- sumer goods	0.47	0.35	0.21	0.25	0.34	1.00		
mobility	0.38	0.26	0.16	0.18	0.31	0.38	1.00	
health	0.23	0.26	0.18	0.23	0.25	0.23	0.18	1.00
life situation index	0.67	0.73	0.52	0.59	0.68	0.68	0.58	0.49

Source: SCP (CV'04, '06)

Surprises in the housing domain

This appendix is concluded by examining an outcome that may appear odd at first sight, but which does not cause any problems in the final life situation score. It has previously been stated that the validity of the indicators used can be verified by checking whether the category quantifications meet expectations. This means, for example, that doing sports, owning a car, socio-cultural leisure activities and not being hindered have a positive influence and their opposites a negative one. With most of the indicators, this is indeed the case (see table B.6), but the housing domain forms an exception. If we look at the category quantifications (with which the validity check can be done), we see that

the surface area of the living room and the number of rooms are in line with expectations: the larger the home, the more positive the score (see table B.6). To a degree, this also applies to type of home, except that the nominal character of the indicator makes it more difficult to evaluate (the fact that a detached house has a positive influence and a flat a negative one is what would be expected, but it is not easy to say in advance how accommodation for the elderly will be evaluated). However, in the case of 'owner-occupied or not', the category quantifications are *inverted* in relation to expectations: from this, it seems that renting one's home has a positive influence and buying it, a negative one.

The next step taken by *Overals* in the process of arriving at a final score is to multiply the quantifications with the weights for each indicator (see the previous discussion in this appendix for the subsequent procedure). If therefore the 'owner-occupied or not' indicator were to get a negative weight and the other indicators a positive one, every indicator would ultimately be in line with expectations. However, this does not appear to be the case: although the symbols with 'owner-occupied or not' have been turned the right way, it now appears, after all the category quantifications have been multiplied by the weights, that the categories under type of housing are not as they might be expected (to make the process of interpretation of easier, the symbols before each of the indicators have been inverted in table B.6. This is quite legitimate, because *Overals* does not 'know' whether negative means good or bad; effectively, we have multiplied the overall outcome by -1).

The result of the multiplication suggests that a detached house has a negative impact on the life situation and a flat a positive one. It should be pointed out that the effect is only a slight one. It is the difference between accommodation for the elderly and student accommodation that plays the biggest role in this indicator.

Table B.6

Quantifications, weights and their product (2004)

	quantifi- cation	weight	quantification times weight (and times -1 to obtain the correct direction)	life situation index score
type of home				
detached	0.28		-0.08	106
single-family dwelling	-0.30		0.09	104
apartment/flat	-0.23		0.07	96
accommodation for the elderly	5.31		-1.55	67
student accommodation	-2.83		0.82	103
flat above a shop	0.06		-0.02	107
other	2.46	0.29	-0.72	88
surface area of the living room				
less than 20 m ²	-1.54		-0.37	92
20-30 m ²	-0.76		-0.18	97
30-40 m ²	0.03		0.01	104

Table B.6 (continued)

	quantifi- cation	weight	quantification times weight (and times –1 to obtain the correct direction)	life situation index score
40-50 m ²	1.35		0.32	110
50 m ² or more	1.53	-0.24	0.37	109
number of rooms				
1 or 2 rooms	-0.92		-0.14	91
3 rooms	-1.52		-0.23	95
4 rooms	-0.24		-0.04	101
5 rooms	0.95		0.15	107
6 rooms	0.98		0.15	109
7 rooms or more	1.77	-0.15	0.27	110
owner occupied or not				
owner of the home	-0.84		0.30	108
not the owner of the home	1.31	0.36	-0.47	92
hobby activities				
no hobbies	-1.39		-0.16	94
1 hobby	-0.33		-0.04	101
2 hobbies	0.37		0.04	104
3 hobbies	1.41		0.16	107
4 hobbies	-0.05		-0.01	105
5 hobbies	-0.41		-0.05	104
6 hobbies or more	-2.18	-0.12	-0.25	102
socio-cultural leisure activities				
no socio-cultural leisure activities	-1.65		-0.86	86
1 socio-cultural leisure activity	-0.19		-0.10	100
2 socio-cultural leisure activities	0.42		0.22	105
3 socio-cultural leisure activities	0.60		0.31	107
4 socio-cultural leisure activities	0.78		0.41	109
5 socio-cultural leisure activities	1.05		0.55	111
6 socio-cultural leisure activities	1.21		0.63	113
7 socio-cultural leisure activities or more	0.95	-0.52	0.50	110
membership of societies				
not a member of any society	-1.61		-0.50	90
member of 1 society	0.30		0.09	103
member of 2 societies	0.56		0.17	107
member of 3 societie	1.14		0.35	110
member of 4 societies	1.39		0.43	111
member of 5 societies	1.15		0.35	111
member of 6 societies or more	0.35	-0.31	0.11	106
voluntary work				
no voluntary work	-0.78		-0.24	98
voluntary work for 1 organisation	0.83		0.26	105

Table B.6 (continued)

	quantifi- cation	weight	quantification times weight (and times -1 to obtain the correct direction)	life situation index score
voluntary work for 2 organisations	1.42		0.44	108
voluntary work for 3 organisations	2.44		0.75	113
voluntary work for 4 organisations	1.56		0.48	108
voluntary work for 5 organisations	1.58		0.49	110
voluntary work for 6 organisations or more	1.90	-0.31	0.59	110
social isolation				
most isolated	-2.34		-0.75	91
score 12 or 13	-1.43		-0.46	94
score 14	-1.24		-0.40	97
score 15	-0.29		-0.09	101
score 16	-0.29		-0.09	102
score 17	0.92		0.30	107
least isolated	0.91	-0.32	0.29	107
number of times sports practised per week				
does not do sports	-0.99		-0.36	93
less than once a month	1.47		0.54	110
1 to 3 times a month	1.23		0.45	111
once a week	0.87		0.32	108
twice a week	1.22		0.45	111
3 times a week	0.96		0.35	111
4 times a week or more	0.72	-0.37	0.26	109
number of sports				
does not do sports	-0.93		-0.21	94
does 1 sport	0.28		0.06	108
does 2 sports	1.55		0.36	112
does 3 sports	2.12		0.49	114
does 4 sports or more	0.73	-0.23	0.17	110
holidays				
not been on holiday	-1.61		-0.82	86
been on holiday once	0.12		0.06	104
been on holiday more than once	0.92	-0.51	0.47	110
foreign holidays				
yes, foreign holiday	-0.84		0.18	108
no	1.20	0.22	-0.26	92
ownership of household articles				
none	-1.32		-0.42	89
one household article	-0.78		-0.25	97
two household articles	1.05	-0.32	0.33	108
ownership of hobby equipment				
none	-2.19		-1.18	81

Table B.6 (continued)

	quantifi- cation	weight	quantification times weight (and times –1 to obtain the correct direction)	life situation index score
one piece of hobby equipment	0.19		0.10	103
two pieces of hobby equipment	0.53	–0.54	0.28	107
possession of public transport season ticket				
yes, NS railcard	–2.07		0.50	105
yes, buses trams or metro	0.98		–0.24	93
yes, NS railcard and buses	–2.49		0.60	102
no	0.45	0.24	–0.11	102
possession of car				
yes, car	–0.53		0.33	106
no	1.91	0.62	–1.19	86
hindered in carrying out household activities				
severely hindered	–2.17		–0.82	84
slightly hindered	–1.43		–0.54	94
not hindered	0.07		0.03	103
no medical condition	0.68	–0.38	0.26	106
hindered in carrying out leisure activities				
severely hindered	–2.90		–0.55	84
slightly hindered	0.83		0.16	98
not hindered	0.44		0.08	101
no medical condition	0.19	–0.19	0.04	106

Source SCP (CV'04)

If all the indicators are now taken together and the total life situation index calculated, it appears that the 'problem' is resolved: the life situation of people who live in a detached house is better than that of people who live in a flat (with life situation scores of 106 and 96, respectively; see table B.6). The final result is therefore in line with expectations. But why would this strange and confusing deviation, which we first noticed with the weights, occur?

It is likely that the *Overals* technology plays a role. The starting point with *Overals* is, among other things, the relationship between the individual indicators. In the case of the housing indicators, the mutual relationships are fairly close: living rooms in flats are generally smaller than those in detached houses, they have fewer rooms and flat dwellers are more often tenants paying rent than homeowners (see table B.7). Additionally, *Overals* attempts to place the two most different groups - people in accommodation for the elderly versus people in student accommodation - as far apart from each other as possible. The result is that the other groups are placed somewhere between the two. In this case, this approach produces what first appears to be an awkward outcome. However, as far as the final life situation scores are concerned, this does not lead to results that cannot be interpreted. Although 'capitalising on extreme

groups' is sometimes difficult (in the sense of interpreting the results), it is no reason to reject *Oversals* as a technique for helping construct the life situation index. It is reason to look at the interplay of indicators within the housing domain. For future research, we should look at the interplay of indicators within the housing domain.

Table B.7

Housing features combined (percentaged vertically)

	flat (22%)	semi-detached one-single-family dwelling (56%)	detached single-family dwelling (15%)
<i>surface area of the living room</i>			
< 30 m ²	51	39	25
30-40 m ²	20	35	29
> 40 m ²	29	26	46
<i>number of rooms</i>			
1 or 2	22	2	2
3	46	9	10
4	24	36	23
5 or more	8	54	65
<i>owner of the home</i>			
owner of the home	31	71	91
tenant	70	29	9

Source: SCP (CV'04)

Notes

- 1 We use the first dimension primarily, because this matches expectations regarding the direction of the indicators (not doing sports is negative, doing sports is positive, etc.); moreover, the first dimension explains more of the variance than other dimensions.
- 2 In practice, the statistical technique selected leads to the use of threshold values. Because the *Overals* analysis produces positive and negative weights, the value 0 can be seen as a threshold. Above is good, below is bad. It is good, if a person does sports, lives in a large house and is healthy and it is bad, if someone does not do sports, lives in a small house and is not healthy. The technique selected makes the threshold value dependent on the relationship with the other indicators and on the relationship with the life situation as a whole. In the case of the sports indicator, the threshold may lie between doing sports and not doing sports (regardless of how much time is spent on the activity), while for voluntary work it may lie at two organisations (so there would be no difference between working for one organisation or none at all). It is not the researcher, but the method that determines the threshold values. Continuing this line of reasoning, it can be said that people themselves determine the threshold values (after all, the method assumes a relationship between indicators and therefore between choices people make; see De Beer 2001: p. 203).

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Curriculum Vitae Jeroen Boelhouwer

Jeroen Boelhouwer was born May 29, 1969, in Stellendam (municipality Goedereede). In 1987 he finished his secondary education at Rijnlands Lyceum in Oegstgeest. From 1987 to 1993 he studied political sciences at the University of Amsterdam and in 1993 he got his Master degree. His thesis discussed why some people vote for local elections and others don't.

Since 1994, Jeroen has been employed as a researcher at the Netherlands Institute for Social Research | SCP, where he does research on social indicators, happiness, index-construction and the life situation of the Dutch population. He has been involved with the life situation index since 1996 and mainly writes about it in the report 'The Social State of the Netherlands' (and its predecessor the 'Social and Cultural Outlook'). Jeroen is one of the four editors.

Articles about the life situation (index), quality of life, happiness, satisfactions and social indicators were published in the journal *Social Indicators Research* (among others). From 2004 Jeroen has also been a member of the Editorial Board of this journal. He has been a member of the *International Society of Quality of Life Studies* since 1995 and served as a Member of the Board of Directors between 2003 and 2006. This year he has also become a member of the Editorial Board of the *Encyclopedia of Quality of Life Research*.

