



Social Cohesion Indicators Flanders

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IS SOCIAL COHESION ONE LATENT CONCEPT?

**Investigating the dimensionality of social cohesion on the basis of the
Kearns and Forrest (2000) typology.**

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Abstract

One of the most abundantly used concepts in contemporary social sciences and among policy experts is ‘social cohesion’. However, it is difficult to grasp how social cohesion is defined or measured. In this paper, we follow the line of reasoning of urban sociologists Kearns and Forrest (2000), who ascribed five dimensions to social cohesion. Although frequently used in theoretical discussions, methodological rigorous tests on the dimensionality of these five social cohesion dimensions are absent. Using data of the “Social Cohesion Indicators in Flanders” (SCIF) project, we investigate the dimensionality structure of social cohesion. We apply exploratory and confirmatory factor analysis, together with scaling techniques to study the underlying structure of the rich set of proxy indicators and consequently, we assess whether social cohesion can be thought of as a latent concept.

1. Introduction

Since the definition and measurement of social cohesion differs among disciplines and research topics, it is considered to be a vague and abstract concept. Indeed, the general nature of social cohesion makes it difficult to find a well-defined concept that suits all contexts. Nevertheless, a mutual feature in most definitions is the fact that social cohesion is described as a multidimensional concept. The elements or dimensions that are commonly used to describe the term social cohesion are among others social order (Sampson et al. 1997, Hirschfield & Bowers 1997), common identity (Cantle 2001), migration (Easterly et al. 2006), economic inclusion (Easterly et al. 2006, White 2003) and social capital (Friedkin 2004). Still, other authors (Jenson 1998, Bernard 1999, Stanley 2003) combine several of these dimensions to study the concept of social cohesion.

In this paper, we continue on the reasoning of Kearns and Forrest (2000, 2001). They envision five dimensions of social cohesion. First of all, a cohesive society is one in which there are common values and a lively civic culture. Secondly, social cohesion also refers to a society in which social disorder is absent and social control mechanisms are established. Thirdly, social solidarity and strategies to reduce wealth disparities must be present in socially cohesive societies. Fourthly, cohesive societies are characterized by social capital, which encompasses social networks and civic participation. And finally, territorial belonging and a shared identity among the members of a society, makes that society more cohesive.

Our main objective in this paper is to answer the question whether there is an underlying social cohesion dimension that encompasses a wide range of variables that corroborate with the five Kearns and Forrest dimensions of social cohesion that have been described. In other words, is there a considerable amount of communality shared by common values, social order, reductions in wealth disparities, social capital and territorial belonging? Based on data reduction techniques, like factor analysis, we will identify whether one or, on the other hand, several dimensions of cohesion describe social reality.

After this brief introduction, we elaborate on the rich SCIF-dataset and the methods for examining the dimensionality of the concept social cohesion.

2. Data and Methods

If we look at the measurement of social cohesion, we are faced with the methodological issue that social cohesion is seen as a community or societal characteristic, while it is been measured at the individual level. However, we question whether social cohesion can be measured at the individual level and if so, whether the sum of individuals equals the community or not. Social cohesion will therefore, in this study, be measured using only societal indicators. The five dimensions that were established by Kearns and Forrest will be investigated using the unique and rich dataset of the Social Cohesion Indicators in Flanders or SCIF-project, that contains a rich set of indicators at the municipal level (n=308). Data was initially collected from the National Institute of Statistics, the Federal Department of Economy, the Roman Catholic Church (data from 2006), the EHSAL (data from 2001) and the study centre of the Flemish Government.

2.1. Data

As mentioned earlier, we follow the reasoning of Kearns and Forrest (2000) to measure common values, social order, social solidarity and social capital as dimensions of social cohesion. Since their fifth dimension, namely a sense of membership, is measured at the micro level while other dimensions of social cohesion can be traced back to the municipality level, we will not include this dimension in our structuring of the dimensionality of social cohesion. In the following section, we discuss the proxy indicators of these four dimensions.

First of all, the common values dimension can, foremost in the Flemish context, be identified with the longstanding influence of the Roman Catholic Church. Even though the Flemish society has, to a large extent, been secularized since the 1960, for instance only about 8 percent of the Flemish population attends church weekly, there are various indications that the Catholic values are still spread through various organizations and associations. As such, religion is seen to create certain norms and values and a sense of belonging and inclusion. The variables that we use are percentage of baptisms (number of baptisms/number of births*100), percentage of marriages (number of marriages in church/number of civil marriages*100), percentage of funerals (number of funerals/number of deaths*100). These three variables represent participation at rites of passage. Furthermore, we have Christmas Mass attendances, measured per 1000 inhabitants between 5 and 69 years old. Data for this civic culture

dimension was given by the Roman Catholic Church in Belgium, who assembled data from every parish in Belgium, asking their ministers to register in 2006 the number of churchgoers on Christmas Eve and Christmas day and the number of baptisms, marriages and funerals in church.

Second, the social order dimension refers to the social control that is executed by a socially cohesive municipality. As such, we can expect that in municipalities characterized by a low level of social cohesion, social disorder, expressed in a high number of deviant behaviour and crime, will be present. In our dataset, eight crimes are included. Seven crimes can be categorised as violent crimes (intentional assault and battery, vandalism aimed at cars, vandalism aimed at other material goods, and destruction and damaging) or property crimes (theft from motor vehicles, stealing motor vehicles and burglary). The eighth reported crime is homicide, which refers to the act of murder and the occurrence of homicide. Since research has also shown that dense communities are also prone to deviant behavior, also the population density is taken up as indicator of social disorder. Data for this social order dimension was assembled via the directorate of operational police information of the Belgian federal police. It included all recorded crimes in 2005.

Third, the social solidarity dimension considers the strategies to reduce wealth disparities. According to the theories, municipalities where large socio-economic gaps between its citizens exist will have low levels of community cohesion. As such, social solidarity and reductions in wealth disparities will be measured via proxy variables, measuring socio-economic inclusion or equality within a municipality. Socio-economic inclusion will be measured by the mean income in a municipality, to look at the overall well-being of the municipality, but also by looking at the differences between the rich and the poor in a municipality. This inequality within a municipality is measured via an inter-quartile coefficient, a ratio calculated by subtracting the upper quartile incomes and the lowest quartile incomes, multiplied by 100. These income distribution measurements are used to indicate the cleavage between those who have and those who have not. The hypothesis is that social cohesion will be indicated by equally distributed economic wealth among the inhabitants. Furthermore, we look at variables that indicate inclusion in a municipality. We are mostly interested in the ratio of long-term jobless persons (unemployed, longer than one year) the unemployment rate (the percentage of unemployed in comparison to the percentage of the total labor force), the ratio of underprivileged births, (measured by the Flemish governmental

agency Kind en Gezin), and the percentage of recipients of minimum subsistence income in a municipality. Data was collected for 2005 from the National Institute of Statistics, the National Employment Office and the Study Service of the Flemish Government.

Fourth, the social capital dimension of social cohesion expresses was measured via the number of socio-cultural associations in a municipality. This number reflects the possibilities for citizens to create social networks and to participate in their municipality and consequently enhancing social capital. While the social capital literature emphasizes the distinction between the structural component, i.e. associational life, and a cultural component, i.e. norms of reciprocity and generalized trust, it is self-evident that the latter is rather an individual asset while the first one can be attributed to the municipality level. The data covering the number of socio-cultural associations for 2001 was collected by Katrien Lauwerysen and Jan Colpaert from EHSAL/ Hogeschool-Universiteit Brussel.

2.2. Methods

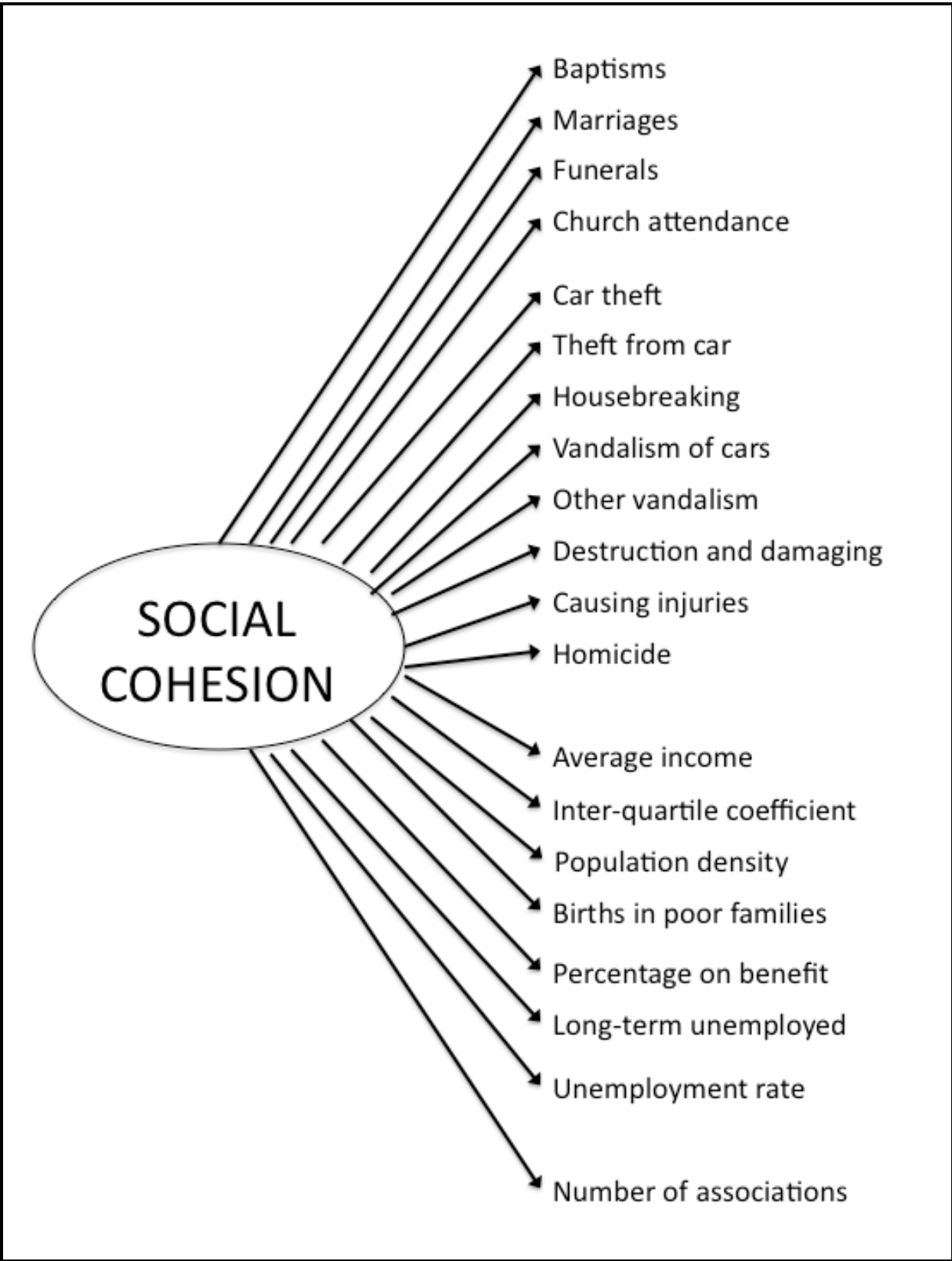
The main objective of this research note is to make clear whether one social cohesion dimension can be found given the various indicators that corroborate the theoretical description of the dimensions of social cohesion. The first step that we undertake is a confirmatory factor analysis in which we define one latent concept – social cohesion – and figure out whether this latent concept loads on all the indicators that have been described higher. If the model has a high misfit, we will perform exploratory factor analysis to determine which indicators fit together and, if possible, we will try to label the extracted indicators in accordance to the theories that have been provided earlier.

3. Analysis

3.1. Confirmatory Factor Analysis

In this first analytical step, we have defined one latent social cohesion concept and have defined a model in which this latent concept loads on all of the 20 indicators that have been provided by several Flemish or Belgian data sources.

Figure 1. Confirmatory Factor Analysis on the Social Cohesion Indicators



Chi-sq = 1590.018; df = 170; p < 0.0001 | RMSEA = 0.166; TLI = 0.339

The several model fit indicators make clear that it is hard to hold on to a description of social cohesion as being one-dimensional. Having access to various indicators that, according to several authors, are indicative for cohesive societies or societies in disorder, it can be safely said that social cohesion is expressed in more complex terms than in just one dimension.

3.2. Exploratory factor analysis

To figure out how many and which dimensions can be detected out of the data, we now fall back to exploratory factor analysis. By taking this step, it is possible to ‘let the data speak for itself’ instead of ascribing various indicators to dimensions that have been described in the literature. As thresholds for the exploratory factor analysis, we will hold on to a factor loading of at least .50 and that a cross-loading higher than .10 with other factors is not tolerated.

Table 1. Exploratory Factor Analysis on the Social Cohesion Indicators

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Baptisms	-0.252	-0.117	0.626	-0.030	0.039
Religious marriages	-0.011	-0.160	0.667	-0.089	0.101
Religious funerals	-0.221	0.109	0.635	-0.217	-0.029
Church attendance	-0.199	0.195	0.634	-0.047	-0.062
Car theft	0.693	0.254	-0.125	0.178	0.060
Theft from car	0.774	0.016	-0.248	0.056	0.031
Housebreaking	0.748	-0.247	-0.099	0.056	0.138
Vandalism of cars	0.473	0.268	-0.185	0.618	-0.044
Other vandalism	0.281	0.215	-0.164	0.613	-0.086
Destruction and damaging	-0.084	0.075	0.020	0.456	0.067
Deliberate causing injuries	0.251	0.297	-0.259	0.664	0.284
Homicide	-0.020	0.015	0.044	0.025	0.176
Average income	0.274	-0.739	-0.241	-0.276	-0.083
Inter quartile coefficient	0.124	-0.798	-0.089	-0.231	-0.015
Population density	0.591	-0.032	-0.308	0.147	0.102
Percentage births in poor families	0.120	0.357	-0.123	0.322	0.387
Percentage on benefit	0.342	0.131	-0.268	0.570	0.434
Long-term unemployed	0.214	0.704	-0.208	0.127	0.408
Unemployment rate	0.294	0.785	-0.172	0.193	0.360
Number of socio-cultural associations	0.121	0.118	-0.010	-0.003	0.308

While the exploratory factor analysis reveals that about 5 factors can be extracted, a quick glance at the fifth factor makes clear that hardly any indicator fits into this model. On the other hand, the first factor, which explains most of the variance, is highly theoretically

relevant. In this indicator, car theft, theft from cars, housebreaking and population density are the corresponding variables. Making abstraction from the population density indicator, which to a considerable extent can be regarded as a cause of crime, we can label this indicator as 'property crime'. The second factor that is extracted corroborates the 'social solidarity and reductions in wealth disparities' dimension of social cohesion, as described by Kearns and Forrest. In this factor, average income, the inter-quartile coefficient, the percentage long-term unemployed and the unemployment rate fit together. As is clear from the analysis, the negative signs associated with the first two indicators make clear that there is a negative correlation between the general wealth and income inequality on the one hand, and the percentage long-term unemployed and the unemployment rate on the other hand. The common values dimension of social cohesion also pops up out of the data. All the four provided indicators – baptisms, religious marriages, religious funerals and church attendance – correlate together to one factor. Last but not least, a fourth factor has been extracted as well. In this factor, which contains the two types of vandalism together with data on deliberately caused injuries and the number of people on benefit, can, again discarding the fourth indicator that will be investigated more closely in a further phase, be referred to as 'violent crime'.

4. Discussion

During the last decade, the research efforts into social cohesion have been significantly increased. While various authors approach social cohesion from distinct disciplines – sociology, political science, criminology, economics, and so on – and try to find out where social cohesion is good for according to their field of interest, the theoretical and empirical investigation into the specific conception of social cohesion has largely been neglected. Based on the Kearns and Forrest dimensions of social cohesion, we have gathered a wide range of proxy indicators to encapsulate social cohesion in a rather broad term.

Starting with confirmatory factor analysis to reduce the complexity of the data, we have discovered that social cohesion is not a one-dimensional concept that is constituted out of the various indicators that have been assembled. On the other hand, using exploratory factor analysis, we have found out that several social cohesion dimensions are extracted – property and violent crimes are indicative for the inverse of the 'social order' dimension, the social solidarity and reductions in wealth disparities dimension is also nicely portrayed in the data,

just as the common values dimension which falls back to a number of religious indicators.

As this research is still in its preliminary phase, the research outcomes make clear that the multidimensional approach to social cohesion is justified. While the initial aim of this paper was to reduce the complexity in the concept of social cohesion, we need to acknowledge that social cohesion is a highly complex phenomenon that is difficult to reduce to one latent conception. Nevertheless, further research will need to reveal whether other dimensions of social cohesion can be detected and, consequently, how the various dimensions of social cohesion are related to each other.

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