



W05 – Poverty neighbourhoods

DOES SOCIAL CAPITAL AFFECT RESIDENTS' PROPENSITY TO MOVE FROM RESTRUCTURED NEIGHBOURHOODS?

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**Does Social Capital Affect Residents' Propensity to Move from
Restructured Neighbourhoods?**

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Abstract

In the major Dutch cities, social rented housing in post-war neighbourhoods is demolished and largely replaced by more expensive owner-occupied and rental housing. Through residential mobility, these measures can trigger substantial population changes. In two recently restructured neighbourhoods in the city of Rotterdam, we studied residents' social capital. Herewith, we distinguish between the stayers, movers and newcomers. In a neighbourhood context, social capital refers to the benefit of cursory interactions, shared norms, trust and collective action of residents. Survey data show that social capital is not only an asset of long-term stayers, but that in particular newcomers are relatively rich in social capital. The central question is this paper is: to what extent are residents' levels of social capital associated with the propensity leave the restructured neighbourhood? Especially for policymakers, knowledge of the stability of restructured neighbourhoods is important.

A logistic regression analysis points out the predictors of the propensity to move within five years. After controlling for housing features and satisfaction as well as and neighbourhood satisfaction, social capital was no longer a significant predictor. Strikingly, the higher-income households (especially newcomers) report a significantly higher propensity to leave the restructured neighbourhood than stayers and movers. This runs counter to the policy goals of restructuring. Explanations and suggestions for further research are presented.

1. Introduction

Urban regeneration policies are a common phenomenon in Western European countries. Comparisons demonstrate that policy contents and implementation differ strongly between countries, but there are also similarities. One is the growing importance of the concept of social capital in the discourse of urban regeneration. Many policymakers claim that urban regeneration should not only improve the physical quality of neighbourhoods, but also the social well-being of their residents (see e.g. Flint and Kearns, 2006; Kearns, 2004; Kleinhans *et al.*, 2007; Lelieveldt, 2004; Middleton *et al.*, 2005). Recently, the notion of social capital has been conquering the discourse of urban regeneration. According to Middleton and colleagues (2005) put it: "Social capital is seen as the foundation on which social stability and a community's ability to help itself are built; and its absence is thought to be a key factor in neighbourhood decline" (*ibid.*, p.1711). Notwithstanding social and economic programmes, Urban regeneration efforts primarily target the housing stock of problematic neighbourhoods. Frequent interventions are demolition and upgrading of social rented housing and new construction of owner-occupied housing. In the Netherlands, urban restructuring is a commonly used term for those measures.

Urban restructuring measures cause a considerable temporary turnover of residents, because significant residential mobility out of, within and into the restructuring area is inevitable. Afterwards, the question rises how stable the post-intervention neighbourhood is. Especially, who are planning to move out? And to what extent does social capital play a part in the propensity move? These are the central issues of this paper. Following Morris *cum suis* (1976), the term 'propensity to move' refers to people's desires, plans, inclinations or expectations about future mobility (cf. Van Ham and Feijten, 2005). Earlier research has shown that social ties with other residents are important for residential satisfaction and the propensity to move (Amerigo and Aragonés, 1997; Hooimeijer and Van Ham, 2000; Pevalin and Rose, 2003). More general, we still do not have a proper grasp on how neighbourhood factors affect residential mobility (see Clark *et al.*, 2006, p. 324; Van Ham and Feijten, 2005, p.2). This holds true especially for neighbourhoods that have undergone significant changes in terms of housing stock and population.

Many commentators observe that restructuring policies not only aim to improve the housing stock and housing career opportunities, but are also deliberately trying to preserve or create socially mixed neighbourhood populations (e.g. Kearns, 2004; Ostendorf *et al.*, 2001; Tunstall, 2003). Local authorities, housing associations and care providers try to stimulate neighbourhood involvement, common norms, mutual trust, promoting self-help of residents and voluntary work in community groups (Dekker, 2007; Lelieveldt, 2004; Ministerie van VROM, 2000, p. 174-175; WRR, 2005). These issues are related to the concept of social capital, which Dutch policymakers recently started to use in urban restructuring discourse (see Kleinhans *et al.*, 2007). It is likely that social capital will become increasingly important in the Dutch policy discourse, as in Great Britain and Denmark (Flint and Kearns, 2006, p. 33).

Social capital generally refers to resources that are accessible through social contacts, social networks, reciprocity, norms and trust (Bourdieu, 1986; Coleman, 1988, 1990; Field, 2003; Halpern, 2005; Putnam, 2000). In a neighbourhood context, social capital concerns the benefits of cursory social interactions, shared norms about treating each other and behaviour in space, trust, and of residents acting collectively for a shared purpose. Several of these aspects can be recognised in policymakers' assumptions (see above). Social capital can provide a useful perspective on the social climate in neighbourhoods after restructuring. As Putnam (2000) states it: "Neighborhoods with high levels of social capital tend to be good places to raise children. In high-social-capital areas public spaces are cleaner, people are friendlier, and the streets are safer" (*ibid.*, p. 307). Although related to social cohesion, social capital is a different concept in several respects that I will briefly discuss in this paper.

Currently, we know little about residents' social capital in socially mixed neighbourhoods that experienced substantial population changes. The reasons are twofold. First, much research has studied 'traditional' neighbourly contacts, while neglecting other social capital aspects, such as unwritten social norms, reciprocity and trust. Second, policymakers and researchers do often not discern all relevant groups in restructured areas. At best, they distinguish between original and new residents, following the classical study of Elias and Scotson (1965).

This contribution targets social capital and propensity to move of different categories of residents in recently restructured neighbourhoods. Two research questions are central to the paper. First, what are levels of social capital among stayers, movers and newcomers in the neighbourhood? Second, to which extent are social capital and residents' propensity to move related, if controlling for socioeconomic characteristics, neighbourhood perceptions and housing aspects? Put differently, has social capital an autonomous effect on residential stability? In sum, this paper aims to contribute to a better understanding of social capital and residential mobility in recently restructured neighbourhoods. The *policy* effects of urban restructuring are beyond the scope of the paper, as social capital data are only available for the situation after the completion of the urban restructuring in our study areas.

This paper is divided into seven sections. The second section describes the residential mobility implications of urban restructuring, explaining the distinction between stayers, movers and newcomers. Section three discusses theories of social capital, mainly in the context of urban neighbourhoods. The fourth section presents the research areas, data and methods. Fifth, the main results are described, followed by a discussion in the sixth section. The final section presents the concluding remarks and policy implications.

2. Urban Restructuring and Residential Mobility

In many Dutch cities, early post-war neighbourhoods receive full attention of policymakers and researchers. Low-cost social rented apartments often dominate the housing stock in these areas. These post-war neighbourhoods are threatened by problems such as low education, high unemployment and poverty, social insecurity, conflicts between residents, neglect of public spaces and limited housing career options. Trust in the local authorities, housing associations and in the future of the neighbourhood is often low (Dekker, 2005, Kleinhans *et al.*, 2007; Ministerie van VROM, 2000; Priemus, 2004). In 1997, the Dutch government launched an ambitious restructuring program to tackle the problems of these areas (Ministerie van VROM, 1997; Van Kempen and Priemus, 1999). Demolition, sale or upgrading of social rented housing and the new construction of more expensive owner-occupied and rental housing create more diversity in the housing stock. The public space, services and infrastructure are improved simultaneously.

Recently, urban restructuring has shifted from a predominantly physical strategy to a more socially oriented and economic approach (Kearns, 2004; Priemus, 2004). In practice, demolition and new construction are often still so substantial that significant residential mobility out of, within and into the renewal area is inevitable. Since 1997, more than 80,000 social rented dwellings have been demolished, indicating the sheer magnitude of urban restructuring and other measures (Van der Flier and Thomsen, 2006). In the coming decade, tens of thousands of households are directly affected. This renewal-related mobility changes the population characteristics more fundamentally than regular residential mobility patterns. The more the new and upgraded dwellings differ from the previous housing with regard to housing type, price and tenure, the more differences in population characteristics usually arise. From that perspective, urban restructuring preserves or increases a social mix in the neighbourhood population. As mentioned before, restructuring has a variety of goals. Most prominent are housing stock improvement, creating housing career opportunities, enhancing

liveability and socially mixed neighbourhood populations (Dekker, 2005; Ministerie van VROM, 1997; 2000). Attracting and retaining middle-class residents is supposed to reinforce social networks of current residents and provide role models for behaviour and aspirations of lower-income households (e.g. Ministerie van VROM, 1997, p. 80-81; Uitermark, 2003). In general, the assumed consequences of urban restructuring involve both the 'original' residents and newcomers. I will argue that this view is too limited in its coverage of resident categories.

Selective migration is one of the most pressing problems of post-war neighbourhoods. Middle and higher-income households often ignore these areas in their search for a new dwelling. But even if these households live in those post-war districts, they often leave because of a lack of attractive housing career opportunities (Dekker, 2005; Van Kempen and Priemus, 2002; Ministerie van VROM, 2000; Priemus, 2004, p. 203). This is why the national government claims that restructuring should not only aim at newcomers, but also target middle-income households who are considering a move out of areas with much social rented housing (Ministerie van VROM, 2000, pp. 176-177). In sum, a successful restructuring policy may tempt wealthier residents to take advantage of new housing career opportunities within the same area. This also applies to residents who are not completely new to the restructuring site, as they live in neighbourhoods adjacent to the area subject to restructuring. Therefore, we cannot study the social mix in restructured neighbourhoods in terms of a simple dichotomy of old versus new residents. The variety in moving distances, previous locations and changes in housing situation asks for a more refined typology:

- **Stayers** who remain living in the same dwellings in the restructured area. It is quite common that only part of the neighbourhood is demolished. In the other parts, restructuring measures did not require the stayers to move. Either their houses were subject to limited renovation or to no physical measure at all.
- **Movers within restructured neighbourhoods** to untouched, renovated, or newly constructed houses. This group also includes residents who experienced forced relocation from demolished dwellings within the same neighbourhood.
- **Movers from surrounding neighbourhoods.** This category includes all movers from adjacent neighbourhoods to the restructured area. A common finding in housing research is that many moves cover short distances (e.g. Mulder and Hooimeijer, 1999).
- **Newcomers** are new residents from anywhere outside the restructured area and its surrounding neighbourhoods. The newcomers mainly moved to the newly constructed houses, but also to the original or the renovated houses.
- **Forced movers out of restructured areas:** residents who are forced to move to a different neighbourhood, due to demolition or upgrading of their dwelling. This issue is beyond the scope of this paper, as the focus is on social capital within restructured neighbourhoods. However, the issue of forced relocation and its consequences is studied in depth in other papers (Allen, 2000; Clampet-Lundquist, 2004; Ekström, 1994; Goetz, 2002; Kleinhans, 2003; Popp, 1976).

As mentioned in the introduction, this paper cannot present a 'pure' ex-post evaluation that uses data of the situation before and after the intervention. Still, our resident typology can be related to the extent to which the current population characteristics are the result of urban restructuring. Subsequently, we can analyse current levels of social capital and compare between the stayers, movers and newcomers. However, the application of the social capital concept in a neighbourhood context has its pitfalls. In the next section, we therefore explore theoretical backgrounds of social capital.

3. Social Capital in a Neighbourhood Context

3.1 Theories of Social Capital

Social capital has come into the international spotlight through the works of Bourdieu (1986), Coleman (1988) and Putnam (1993, 2000). But it is by no means a novelty: “The term social capital itself turns out to have been independently invented at least six times over the twentieth century, each time to call attention to the ways in which our lives are made more productive by social ties” (Putnam, 2000, p. 19). Generally, social capital refers to resources that are accessible through social interactions and social networks, reciprocity, norms and mutual trust (Bourdieu, 1986; Coleman, 1988; Fine, 2001; Portes, 1998; Putnam, 1993, 2000). For comprehensive overviews of the literature on social capital, see e.g. Field (2003), Fine (2001), Halpern (2005) and Kearns (2004).

The usefulness of social capital as an analytical concept has been questioned in the scientific debate (see Middleton et al., 2005, p. 1713-1717). Basically, however, the concept of social capital is rather straightforward. By making connections with one another, and maintaining these contacts over time, people are able to work together. They are able to achieve things that they either could not achieve by themselves, or only with difficulty and at high costs. To the extent that social interactions and networks constitute a resource, they form a kind of capital (Field, 2003, p. 1). But “it is important to distinguish the resources themselves from the ability to obtain them by virtue of membership in different social structures, a distinction explicit in Bourdieu but obscured in Coleman” (Portes, 1998, p. 5). Portes defines social capital as the ability to mobilise resources from a social network. Thus, an individual must be connected to others to reap social capital benefits. Apart from definition issues, many authors observe a distinction between inward-looking and outward-looking social capital. While a few authors have added a third dimension, i.e. linking capital (e.g. Halpern, 2005; Woolcock, 1998), the distinction between bonding and bridging capital has received most attention. Bonding capital is a resource created in the strong social ties between individual people, i.e. certain family members, close friends, and members of certain ethnic groups. Strong ties are a major source of emotional and material support (bonding capital). This type of capital can be very important within poor and excluded communities (Kearns, 2004). The social networks that produce bonding capital can be so strong that they exclude outsiders from the network and impose suffocating norms on group members (Briggs, 1998; Portes, 1998). This is known as the dark side of social capital (Portes and Landolt, 1996).

Bridging capital is hidden in the weak, less dense, cross-cutting social ties between heterogeneous individuals such as friends of your friends, indirect acquaintances, or certain colleagues from your work. This form of capital helps people to ‘get ahead’ through access to opportunities and resources in other social circles than your own. Thus, it contains a different type of resources than bonding capital. A classic example of bridging capital is information about job opportunities, passed on between loosely connected people through a common acquaintance. The weak ties concept originated from research of Granovetter. “Whatever is being diffused can reach a large number of people and traverse greater social distance when passed through weak ties rather than strong ties (ibid., 1973, p. 1371).

Thus, bonding and bridging capital have their own specific merits and drawbacks. But they are not ‘either-or’ categories into which social networks can be neatly divided, but ‘more or less’ dimensions along which we can compare different forms of social capital (Putnam, 2000, p. 23). If Dutch policymakers try to stimulate shared social norms, involvement and collective action between residents, they aim mainly at weak ties and bridging capital. However, the application of these network terms is problematic in a neighbourhood context.

3.2 Social Capital in Neighbourhoods

Studying social capital in neighbourhoods poses several problems. Most important is that neighbourhoods and networks are completely different entities that almost never converge (e.g. Wellman *et al.*, 1988). 'Neighbourhood' is a socio-spatial or imagined unit with a specific, but a limited social significance for its residents. It is only one of the many contexts in which people establish and maintain their social networks. Thus, neighbours and other residents usually form just a small part of residents' social networks (Bridge, 2002, p. 25; Fisher, 1982, p. 41; Henning and Lieberg, 1996).

However, the neighbourhood is a context that residents choose or are forced to live in. Therefore, we are interested in cursory, everyday social interactions between residents that may produce social capital without necessarily being a member of each other's network. These cursory ties may develop into strong ties (bonding), but they usually remain of a weak nature and of "a shifting, moving, fluid character" (Lofland, 1985, p. 118). In her book *A World of Strangers*, Lofland studied social interactions in public space, characterised by limited verbal communication and a short duration. While Lofland emphasises evasive behaviour, we will argue that cursory social interactions may have a positive social capital value. "Like pennies dropped in a cookie jar, each of these encounters is a tiny investment of social capital" (Putnam, 2000, p. 93). Neighbourhood residents 'accidentally' run into personal encounters in staircases, on the street, on squares, in playgrounds and in neighbourhood facilities such as shops and community centres. To a certain level, there is a form of mutual dependency. This dependency is hidden in the extent to which residents live peacefully alongside each other, succeed to maintain common norms and trust, and cooperate successfully if a shared neighbourhood interest is at stake. The dependency is felt clearly if nuisance occurs. However, the benefits of shared norms, trust and collective action are a resource from cursory, everyday social interactions. These benefits are forms of social capital.

Cursory social interactions can yield public familiarity. Public familiarity implies that residents get sufficient information from everyday interactions to recognise and 'categorise' other people (Fischer, 1982, p. 60-61; cf. Blokland, 2003, p. 90-93). Public familiarity can result in social capital in the sense of a favourable social climate, but also in more tangible forms of social capital. We will give some examples to clarify our argument. We first refer to work of Henning and Lieberg (1996), who studied the role of weak ties between residents. They define weak ties as the "unpretentious everyday contacts in the neighbourhood" (*ibid.*, p. 6). These contacts range from a nodding acquaintance to modest levels of practical help. The number of weak ties outnumbered the strong ties. Weak ties not only appeared to be significant for support, but also for a feeling of home and security (Henning and Lieberg, 1996; Briggs, 1998, p. 88; Skjaeveland and Garling, 1996; cf. Crawford, 2006). Forrest and Kearns (2001) argue that "the less robust and less deep-rooted are neighbourhood networks, the more stable and conflict-free may be the social order in which they sit" (*ibid.*, p. 2134). According to Bridge (2002), what we can reasonably expect from other residents is neighbourliness. This is the exchange of small services or support in an emergency against a background of routine convivial exchanges, such as greetings and brief chats over the garden fence or in the street (*ibid.*, p. 15).

A second element of social capital concerns social norms. In a neighbourhood setting, norms are unwritten social rules and opinions with regard to social interactions with other residents and behaviour in public spaces. Social capital then consists of benefits of shared norms and social control, such as nuisance that fails to occur, agreements how to use scarce parking space, and parents also keeping an eye on other playing children than their own (cf. Foley and Edwards, 1999; Putnam, 2000). Related is the concept of collective efficacy, defined as social cohesion among neighbours combined with their willingness to intervene on behalf of the common good (Sampson *et al.*, 1997, p. 918). Sampson and colleagues showed that collective efficacy is negatively associated with variations in violent crime in

neighbourhoods. Residents' willingness to intervene in unpleasant situations partly depends on the quality of social interactions and mutual trust (ibid., p. 919; Coleman, 1990; Duncan *et al.*, 2003). Social capital theory claims that effective enforcement of norms is only possible if a social structure has closure (Coleman, 1988, p. 105-107). Closure refers to the extent to which different actors in a social setting are interconnected, i.e. know each other. In a neighbourhood, this would mean that residents must know each other if they want to exercise social control. However, Bellair (1997) has suggested that the mere presence of social interactions is sufficient for a basic level for social control. Moreover, certain explicitly agreed norms can be enforced top-down by landlords. They can also stimulate initiatives of residents who want to draw up basic norms for their apartment buildings. This 'codification' may simplify residents' efforts of norm enforcement (Kleinhans, 2005, p. 265).

Trust, a third component of social capital, is a complex issue. "The causal arrows among civic involvement, reciprocity, honesty, and social trust are as tangled as well-tossed spaghetti" (Putnam, 2000, p. 137). A basic level of trust is a condition for social interaction, support and reciprocity. Trust may also develop as a positive consequence of interactions and mutual support (Brehm and Rahn, 1997). In a neighbourhood context, trust refers mainly to predictability of residents' behaviour. A deteriorating neighbourhood poses threats to this predictability and social interactions (Fukuyama, 1995, p. 26; Lelieveldt, 2004; Ross *et al.*, 2001). However, an improving neighbourhood may have beneficial effects for trust levels. Residents may perceive investments in the physical infrastructure as a sign of public interest in their neighbourhood, raising optimism and trust in its future (cf. Flint and Kearns, 2006).

In sum, I have described how social capital can be analysed in a neighbourhood context. While strong ties in a neighbourhood can produce bonding social capital, it seems that weak ties, i.e. casual and cursory connections between residents, are far more likely to occur. These connections can produce a variety of resources, supporting a favourable social climate. Therefore, social capital has both an individual and a collective dimension. The resources accrue to both the 'groups' of residents involved in cursory connections, as well as individual residents. But there is no such thing as the social capital of a neighbourhood, which is not a social entity. Streets and building blocks are far more important levels for social interaction than the neighbourhood level, especially in mixed-tenure neighbourhoods (see e.g. Jupp, 1999). We designed our survey to match this line of reasoning. Moreover, we acknowledge results of recent Dutch research, which found that social mix as a result of urban restructuring has not improved social cohesion, but has resulted in social divisions on the neighbourhood level (see e.g. Van Beckhoven and Van Kempen, 2003; Dekker and Bolt, 2005). However, here we use a different analytical perspective, both in spatial terms (interactions between relatively small 'groups' of people on the micro scale of streets and building blocks) and in terms of the central concept: social capital.

It is important to note that social cohesion and social capital are not identical concepts. Whereas social capital refers to *resources* accessible through social networks, norms and trust, social cohesion commonly denotes the networks, values, norms and solidarity themselves. Social cohesion often conjures up the notion of intensive relations in social networks, while social capital pays more attention to the added value of many-branched networks and weak ties (Kleinhans *et al.*, 2007). Social capital is, by definition, limited to interactions between people, excluding relations between people and places. Several authors consider social capital as a dimension of social cohesion, with the other dimensions being common values and civic culture, social order, solidarity, and place attachment/identity (Forrest and Kearns, 2001, Dekker and Bolt, 2005). This suggests that place attachment is not a part of social capital. But excluding a connection between place and social capital would be unwise. Therefore I introduce 'place' in the form of independent variables, i.e. satisfaction with the dwelling and with the neighbourhood (see next section).

3.3 Social Capital and Propensity to Move

“Residential stability or instability has been viewed as an important indicator of social capital in that residential instability cuts the links people have to their immediate community. It has also been posited as a significant causal process in social disorganisation theories when communities are largely transitory for the individuals and families in them at any one time” (Pevalin and Rose, 2003, p. 50). Research has provided evidence for a relation between years of residence and (preparedness to contribute to) social capital in the neighbourhood (e.g. DiPasquale and Glaeser, 1999; Saegert and Winkel, 2004). But what about *future* residential stability? In other words, does social capital play a part in residents' propensity move?

Following Morris cum suis (1976), ‘propensity to move’ refers to people’s desires, plans, inclinations or expectations about mobility in the near future (cf. Van Ham and Feijten, 2005). Apart from obvious life course changes, peoples’ propensity to move and leave the neighbourhood may stem from perceived problems in the residential environment. Earlier research has shown that social ties with other residents are important for residential satisfaction and the propensity to move (Amerigo and Aragonés, 1997; Hooimeijer and Van Ham, 2000). Individuals or families with more social attachment to local groups and networks may be less likely to leave the area (Pevalin and Rose, 2003, p. 54; Temkin and Rohe, 1998).

From these findings, I hypothesise that residents’ propensity to move from the neighbourhood is affected by the social capital they have access to. Residents who claim to move within a few years, can usually clearly indicate the main triggers of their intentions. This enables us to study the potential meaning of social capital in making plans for a move or staying put in the neighbourhood. However, mobility intentions do not always result in actual relocations. Many factors compound the relation between satisfaction, moving intentions and actual moves and give rise to behavioural inconsistencies in residential mobility (Lu, 1998, 1999). Actual mobility behaviour occurs in the absence of constraints and restrictions that prevent intentions from being realised (Lu, 1999; Mulder and Hooimeijer, 1999). Van Ham and Feijten (2005) stress that if we only study moving behaviour, we overlook all residents who want to move, but are not able to. “In a very tight housing market like the Netherlands housing market this might prevent us from understanding the mechanisms at play because it can be expected that when the housing market relaxes, more people will be able to effectuate their moving plans” (ibid, p. 3). In sum, residents’ propensity to move is worth looking at, especially the possible association with social capital.

4. Data and Methods

4.1 Data collection

For this paper, I use extensive fieldwork data from two peripheral post-war neighbourhoods in the city of Rotterdam: De Horsten and Hoogvliet Northwest. Both neighbourhoods were built during a period of severe housing shortages as a result of the Second World War. The area of Hoogvliet was also meant for housing employees of the petrochemical industry nearby. The areas were dominated by multi-family apartment buildings in the social rented sector. During the 1990s, extensive urban restructuring transformed the housing stock of De Horsten and Hoogvliet Northwest. Today, both neighbourhoods consist of approximately 1,000 dwellings of different forms, tenures, prices and quality. We distributed 1,941 written questionnaires among all households in both study areas. Subsequently, we recollected the questionnaires in a personal door-to-door campaign. This yielded a response of 917 usable questionnaires, i.e. 47 per cent, almost equally spread between the areas. Then, neighbourhood census data were acquired, such as household composition, age, ethnic background and tenure. These data were compared with the equivalent survey variables. This analysis (not printed here) showed that

the response is a representative sample of the population in both areas. Several questions in the questionnaire enabled categorisation of respondents (see table 1).

Table 1. Resident categories in De Horsten and Hoogvliet Northwest

Category	De Horsten		Hoogvliet Northwest	
	N	Per cent	N	Per cent
Stayers	42	9.0	199	44.4
Movers within the neighbourhood	63	13.4	58	12.9
Movers from surrounding neighbourhoods	136	29.0	94	21.0
Newcomers	219	46.7	96	21.4
Missing (unknown)	9	1.9	1	0.2
Total (n=917)	469	100.0	448	100.0

A striking difference between the research areas is the relative size of the categories. In Hoogvliet Northwest, stayers are the largest category and also form a much bigger share of the population than in De Horsten. On the other hand, the proportion of newcomers is much higher in De Horsten than in Hoogvliet Northwest. The size and nature of the executed restructuring efforts determines these differences. In De Horsten, almost 70 per cent of the total housing stock has been demolished or renovated. For Hoogvliet Northwest, this figure amounts to 40 per cent. The proportion of movers within the neighbourhood is the same in the response. The newcomers in both areas are mainly from other districts in Rotterdam, as well as other municipalities.

4.2 Measures

The propensity to move is a dummy variable, indicating an expectation to move in less than five years or not, measured on the moment of answering the question. Therefore, a logistic regression analysis is appropriate to establish the predictors of the propensity to move.

From section three, it is clear that social capital is a multidimensional concept (cf. Foley and Edwards, 1999; Fine, 2001; Narayan and Cassidy, 2001; Putnam, 2000). The survey contained 22 indicator variables of social capital (see Appendix 1). These variables reflect both the nature of the specific type of social capital and the means to 'access' it. All variables on social interactions, norms and trust are designed in a way to indicate cursory connections, but not to exclude possible strong ties. Most variables are measured on a five-point Likert-scale. We need a composite measure that simultaneously includes social interactions, norms and trust. A Principal Components Analysis (see Appendix 1) has indicated three relevant components: social interactions and the resulting public familiarity, norms and trust, and associational activity. However, the separate indices of norms and trust, and associational activity have Cronbach's α -values just below 0.7. Moreover, the three indices are highly correlated, which prohibits their inclusion as separate independent variables in the regression analysis. Therefore, we combined all variables in a Social Capital Index (cf. Putnam, 2000, p. 291). Cronbach's α -coefficient is 0.75.

Apart from social capital, the multivariate analysis includes other potential predictors of residents' propensity to move. To capture the respondents' socioeconomic characteristics, included are age (in years), household composition (households with or without children), labour market position (paid employment or otherwise), net household income per month (lower versus middle and higher income), and ethnic background (native Dutch or ethnic minority). Unfortunately, data on educational levels were not available. Length of residence is also excluded from the analysis. A major problem with studying correlates of residential stability by way of length of time at a particular residence is that this measure is highly correlated with the age of the respondent (Pevalin and Rose, 2003, p. 50). However, the inclusion of resident categories provides a proxy for length of residence, as the newcomers

and movers have, by definition, only been living in their house since the completion of the restructuring. Simultaneously, the problem of multicollinearity is overcome.

Relevant housing features in the analysis are tenure (social or private rented versus owner-occupied) and dwelling type (single- or multi-family dwelling). Urban restructuring strongly modifies the housing stock in these terms. Measures of housing and neighbourhood perception are also included. Most straightforward are satisfaction with the current dwelling and the general satisfaction with the current neighbourhood dwelling (both scales ranging from 1 = very unsatisfied to 5 = very satisfied). Perceived neighbourhood quality is a measure of residents' perceptions of the physical quality of their immediate living environment. It is an index, consisting of five items measuring how often vandalism, graffiti on buildings, litter and dog dirt on the streets, nuisance of other residents and unsafety on the streets occur, according to the respondent (cf. Brown et al., 2003; Ellaway et al., 2001; Parkes *et al.*, 2002). Each item is measured on a four-point scale (1 = often occurs here, to 4 = never occurs). Scales with reversed meanings were recoded accordingly. The scores of the perceived neighbourhood quality index range between 1 and 4 (Cronbach's $\alpha = 0.80$).

5. Results

The starting point is the calculation of the average Social Capital Index scores as well as the propensity to move for each of the resident categories in the research areas (see table 2 and 3). This yields three interesting results. First, the resident categories in both neighbourhoods differ significantly in the average SCI-score. In De Horsten, stayers have a much lower level of social capital than the movers and newcomers. Contrary, the stayers score highest of all groups in Hoogvliet Northwest. Secondly, the newcomers in both areas have a relatively high level of social capital. If length of residence is a strong predictor of social capital, the newcomers would score much lower than stayers. The total average SCI-score does not differ significantly between the research areas (Student's $t=1.37$, $df=869$, $p=0.17$). Third, it appears that 20 per cent of respondents in de Horsten and 17 per cent in Hoogvliet expects to move within five years (see table 3). In de Horsten, the stayers stand out in their relatively high propensity to move. In Hoogvliet, especially newcomers relatively often report the intention to move. The overall propensity to move does not differ significantly between the research areas (Pearson $\chi^2=6.04$, $df=3$, $p=0.11$). In sum, the resident categories not only differ within the neighbourhoods, but also in comparison to their counterpart in the other area. For that reason, I added interaction terms for joint effects of resident category and neighbourhood.

Table 2. Social Capital Index: mean scores per resident category (n=871)

Areas	Stayers	Movers within	Movers from	Newcomers	Average per area
		restructured neighbourhoods	surrounding neighbourhoods		
<i>De Horsten</i>	2.27	2.64	2.68	2.71	2.65
(SD)	(0.39)	(0.41)	(0.32)	(0.34)	(0.37)
<i>Hoogvliet Northwest</i>	2.73	2.68	2.61	2.68	2.68
(SD)	(0.32)	(0.27)	(0.34)	(0.33)	(0.32)

Social Capital Index: all respondents with more than five missing values for variables in the index are excluded. The higher the index score, the higher the average level of social capital of the resident category (index range: 1 - 5).

De Horsten: ANOVA Sum of Squares between groups = 6.62; $df = 3$; $F = 18.06$; $p < 0.001$

Hoogvliet: ANOVA Sum of Squares between groups = 0.87; $df = 3$; $F = 2.83$; $p < 0.05$

Table 3. Propensity to move, per cent

Areas	Stayers	Movers within	Movers from	Newcomers	Average per area
		restructured neighbourhoods	surrounding neighbourhoods		
De Horsten	(38)	(60)	(134)	(216)	(448)
In less than two years	21.6	11.7	6.0	7.8	8.9
In two to five years	10.8	8.3	8.2	13.8	11.2
In five years or more	13.5	36.7	35.8	28.1	30.4
I don't know	54.1	43.3	50.0	50.2	49.6
Total*	100.0	100.0	100.0	100.0	100.0
Hoogvliet-Noordwest	(193)	(58)	(94)	(96)	(441)
In less than two years	6.7	3.4	5.3	8.3	6.3
In two to five years	7.8	6.9	8.5	19.8	10.4
In five years or more	23.8	29.3	34.0	20.8	26.1
I don't know	61.7	60.3	52.1	51.0	57.1
Total*	100.0	100.0	100.0	100.0	100.0

*Percentages excluding the missing values of 21 cases (4.5 per cent) in de Horsten and 7 cases (1.6 per cent) in Hoogvliet. The absolute numbers of respondents are between brackets.

De Horsten: Pearson $\chi^2 = 18.21$; $df = 9$; Cramer's $V = 0.12$; $p < 0.05$

Hoogvliet: Pearson $\chi^2 = 17.70$; $df = 9$; Cramer's $V = 0.12$; $p < 0.05$

Research areas (difference): Pearson $\chi^2 = 6.04$; $df = 3$; Cramer's $V = 0.08$; $p = 0.11$ (not significant).

Table 4 depicts three logistic regression models of the propensity to move, with the third model being the final one. As such, we can study the relation between residents' social capital and their propensity to move, if we subsequently control for additional dependent variables. The final model includes the resident classification, area designation, interaction terms for joint effects of resident category and neighbourhood, the social capital index, socioeconomic characteristics, dwelling and neighbourhood satisfaction, tenure, dwelling type and perceived neighbourhood quality. Table 4 confirms that movers from the surrounding neighbourhoods exhibit lower social capital scores than newcomers. To some extent, this goes against the expectations of policymakers. They would expect higher levels of social capital with residents who moved only a relatively short distance, i.e. from adjacent neighbourhoods. However, none of the interaction effects is significant in the final model.

Most importantly, the final model shows no significant relationship between social capital and the propensity to move, while there was a highly significant connection in the preceding models. The positive association between social capital and propensity to move disappeared after controlling for dwelling and neighbourhood satisfaction, housing features and the perceived neighbourhood quality. Age and labour market position, i.e. having a paid job, also has a negative effect on propensity to move. At the same time, higher-income households are three times more likely to move than the lowest income groups. Household composition and ethnic background have no significant association with propensity to move.

The effect of housing and neighbourhood characteristics is also interesting. Dwelling satisfaction has a negative relation with the propensity to move. In other words, the more satisfied residents are with the dwelling, the less likely they are planning a move. Exactly the same applies to the perceived neighbourhood quality. General neighbourhood satisfaction and tenure have no significant impact. Dwelling type strongly matters. Living in a single-family dwelling is associated with a much lower propensity to move than for residents in living in multi-storey apartments, all else being equal.

Table 4. Predictors of residents' propensity to move (n=871)

Independent variables	(1)		(2)		(3)	
	B	SE	B	SE	B	SE
Category of residents						
- Stayers (reference category)	0	0	0	0	0	0
- Movers within the neighbourhood	-0.35	0.49	-0.92	0.52	-0.89	0.55
- Movers from surrounding neighbourhoods	-0.18	0.37	-0.88 *	0.40	-0.87 *	0.44
- Newcomers	0.85 **	0.32	0.14	0.37	-0.06	0.40
Neighbourhood (0 = Hoogvliet; 1 = Horsten)	0.56	0.45	0.48	0.48	-0.55	0.54
Interaction category * neighbourhood						
- Stayers in Horsten compared to Hoogvliet	0	0	0	0	0	0
- Movers within Horsten compared to Hoogvliet	-0.04	0.73	0.48	0.77	0.90	0.81
- Movers from surrounding neighbourhoods (De Horsten compared to Hoogvliet)	-0.36	0.61	0.33	0.65	0.64	0.69
- Newcomers in Horsten compared to Hoogvliet	-0.94	0.54	-0.57	0.58	0.27	0.62
Social Capital Level (index)	-1.17 ***	0.28	-1.30 ***	0.31	-0.19	0.37
Age (in years)			-0.06 ***	0.01	-0.06 ***	0.01
Household with children			-0.40	0.23	-0.26	0.25
Labour market position (0 = unemployed, retired; 1 = paid employment)			-0.68 **	0.26	-0.54 *	0.27
Net household income per month						
- Less than € 1,500 (reference category)			0	0	0	0
- € 1,500 - € 2,500			0.22	0.26	0.47	0.28
- More than € 2,500			0.73	0.29 **	1.10 **	0.35
- Missing			-0.46	0.38	-0.29	0.41
Ethnicity (0 = ethnic minority; 1 = native Dutch)			0.13	0.23	0.16	0.25
Satisfaction with the current dwelling					-0.59 ***	0.15
Satisfaction with the current neighbourhood					-0.23	0.14
Tenure (0 = rented; 1 = owner-occupation)					0.13	0.29
Dwelling type (0 = single-family home; 1 = multi-family dwelling)					0.96 ***	0.29
Perceived Neighbourhood Quality (index)					-0.40 *	0.18
Constant	1.38		5.22 ***		5.52 ***	
Improvement (Initial -2LL = 752.92)	34.67		57.39		52.15	
Df	8		15		20	
Significance	0.000		0.000		0.000	
Nagelkerke R ²	0.07		0.18		0.27	

NOTE: Logistic regression for the propensity to move: 0 = no move expected or planned within five years/don't know; 1 = Move expected or planned within five years. Significance levels: * p<0.05 ** p<0.01 *** p<0.001 (two-sided).

All respondents with more than five missing values for variables in the Social Capital Index are excluded from the analyses.

This step decreases the number of incomplete index values for the three other indexes to six per cent or less.

6. Discussion

I have applied the concept of social capital in the context of two recently restructured neighbourhoods that have experienced substantial residential and social instability. Thus, the results are only valid for our case studies, and not necessarily for the general Dutch situation. The multivariate analysis showed which factors explain the residents' propensity to move, or failed to do. Most importantly, social capital has no autonomous effect on the propensity to if one controls for the socioeconomic and housing characteristics, dwelling and neighbourhood satisfaction and the perceived neighbourhood quality. Even if residents have access to relatively high levels of social capital, their propensity to move appears unaffected by it. Earlier research has demonstrated that residents want to leave their local community if it fails to meet their aspirations, despite strong neighbourhood attachment and intensive local participation (Kasarda and Janowitz 1974, p. 329). Which factors, then, are important?

Age has a significant dampening effect, which is congruent with the literature and other research (e.g. Dieleman and Mulder, 2002; Mulder and Hooimeijer, 1999). The older the respondent, the lower the chances that he or she reports a propensity to move within five years. Paid employees are less likely to report a propensity to move than residents who are retired, unemployed or otherwise fall outside the labour market (Hooimeijer and Van Ham, 2000). Simultaneously, higher-income households are three times more likely to move than the lowest income groups (cf. Ministerie van VROM, 2004, p. 62). Closer inspection of the income data (not shown) reveals that we are dealing predominantly with middle-income households and relatively few high-income households. The number of households with a net household income considered as high (€ 3,000 per month or more) amounts to only 12 per cent in De Horsten and 7 per cent in Hoogvliet-Northwest.

The effect of dwelling satisfaction follows the prediction in housing theories (e.g. Speare *et al.*, 1975). As the satisfaction with the current dwelling increases, the propensity to move appears to decrease. Likewise, a higher perceived neighbourhood quality (cleanliness and safety) is connected to a lower propensity to move (cf. Ministerie van VROM, 2004, pp. 62-63). General neighbourhood satisfaction, while just not significant ($p=0.11$), shows the same kind of association. Dutch research shows that urban restructuring often positively affects dwelling and neighbourhood quality (see Kleinhans, 2004 for an overview). It would be interesting to know whether physical and social improvements through restructuring significantly diminish the overall propensity to move. Unfortunately, the cross-sectional data here make it impossible to measure pre-intervention propensity to move.

Finally, whilst tenure is not significant, residents from multi-family dwellings display a much higher propensity to move than respondents living in single-family dwellings.

7. Concluding remarks

This paper has focussed on the social capital of four different resident categories in two Dutch restructured post-war neighbourhoods. In this context, social capital is operationalised as the benefit of cursory interactions, shared norms, trust and collective action of residents. In the study areas, social capital appears hardly as an asset on neighbourhood level, but usually on much lower spatial scales: in building blocks, streets, parks, playgrounds and over garden fences. A survey among stayers, movers within the neighbourhood, the movers from surrounding districts and the newcomers yielded social capital levels of these groups.

The first research question dealt with the average social capital levels in each group. Surprisingly, newcomers appear to enjoy (access to) relatively high levels of social capital, compared to stayers and the movers. While stayers scored highest in Hoogvliet Northwest, stayers in De Horsten have far less access to social capital than movers and newcomers. In both study areas, movers from surrounding neighbourhoods are just behind the newcomers in their social capital scores. These results imply that length of residence is not a decisive determinant of social capital; other factors are at stake (see also Kleinhans *et al.*, 2007).

The second research question aims at the connection between social capital and residents' propensity to move. The multivariate analysis showed no significant relationship between these variables, when controlling for socioeconomic characteristics, neighbourhood perceptions and housing aspects. In other words, residents desiring or planning to move within a few years do not have lower levels of social capital than residents without any moving plans or intentions. Other factors do affect the propensity to move. Growing age and paid employment have a restraining effect. Being satisfied with the dwelling and having positive perception of neighbourhood quality is also inversely correlated with the propensity to move. However, residents with higher incomes and residents living in a multi-family dwelling are significantly more inclined to move within five years.

An obvious shortcoming of this study is its cross-sectional nature. We cannot trace the true nature of the links between social capital and propensity to move, in any, and the further development of differences between the resident categories. Nevertheless, the empirical evidence clearly points at significant associations between several socioeconomic, housing and perception indicators, and propensity to move. Several policy implications can be deduced from the findings, even though I did not study the effects of restructuring policy. First, measures that are likely to improve residents' dwelling satisfaction and neighbourhood quality, are also likely to 'slow down' part of residents' propensity to move. Of course, this does not apply to a growing propensity to move because of changes in household cycle, labour market career or other factors that bear no direct relation with 'neighbourhood'. Second, the research appears to confirm that providing attractive housing career opportunities for movers within the neighbourhood is a sensible strategy from a social capital viewpoint (cf. Dekker and Bolt, 2005, p. 2467). Social capital levels of movers within the neighbourhood are higher than or comparable to those of long-term stayers. This seems to suggest that their access to social capital is not disturbed by their intra-neighbourhood move (cf. Piachaud, 2002, pp. 17-18). Lacking longitudinal data, a proper test of this hypothesis is impossible here. Thirdly, it appears that demolition and new construction improve preconditions for the (re)production of social capital (cf. Flint and Kearns, 2006, p. 52). Urban restructuring usually results in the physical upgrading of the neighbourhood and the provision of attractive housing career opportunities, i.e. new, single-family, owner-occupied dwellings that may attract middle-income families from outside and within the same neighbourhood (see e.g. Van Beckhoven and Van Kempen, 2003, Kleinmans, 2005; Ministerie van VROM, 2000). However, the current study raises new questions with regard to the higher-income residents in restructured neighbourhoods? If restructuring policy can attract them, can they also be maintained? Or is it likely that selective migration out of restructured neighbourhoods will continue, just as in the pre-measure period? Future research, preferably longitudinal, should provide a proper answer to this question.

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Appendix 1: The Social Capital Index

Below is a list of all social capital indicators, as used in our survey. Many indicators are derived from validated social capital surveys (such as Grootaert *et al.*, 2002).

1. In this neighbourhood, we are on good terms with each other
2. I must solve many problems for myself because few people support me *
3. If I help a neighbour with something, I expect him to return a favour in the future *
4. It is not easy to establish contacts with the people around here *
5. In case of emergency, I can always ask someone in this neighbourhood for help
6. There are tensions here between newcomers and people who have lived here for a long time *
7. Actual support offered to neighbours during the last two months +
8. Active membership in a voluntary association (resident organisation, sport club, church, and other) +
9. Voluntary work in an association or in general +
10. Cooperation with other residents in the last year to achieve something for the neighbourhood +
11. The people around here would cooperate well to get something done for the neighbourhood, e.g. a face-lift of the public park
12. In this neighbourhood, there is a good level of social control
13. The residents in this neighbourhood take no account of each other *
14. I feel jointly responsible for the liveability in this neighbourhood
15. The residents have common norms with regard to keeping this neighbourhood tidy
16. Residents should not meddle with each other's affairs
17. If you encounter a person in this area, would you know if he or she lives in this neighbourhood?
18. If a resident parks his car on the sidewalk, would you ask him to move it to a parking place?
19. Generally speaking, residents in this neighbourhood can be trusted
20. When I go on a holiday, I can leave my house key safely with my neighbours or other residents
21. One cannot be too careful in dealing with people you do not know *
22. I don't mind several ethnic groups living in this neighbourhood alongside each other.

* These items have a reversed meaning and are recoded accordingly

+ Bivariate items (0 = no; 1 = yes).

A Principal Components Analysis indicated three relevant components of social capital, each with an eigen value of more than 1 (Kaiser Criterion; see Stevens, 1996, p. 367):

- | | | |
|----------------------------|---------------------------------|-------------------------------|
| C1 Social interactions: | variables 1, 2, 4, 5, 7, 13, 20 | (Cronbach's $\alpha = 0,73$) |
| C2 Norms and trust: | variables 3, 11, 12, 15, 17, 19 | (Cronbach's $\alpha = 0,61$) |
| C3 Associational Activity: | variables 8, 9, 10 | (Cronbach's $\alpha = 0,56$) |

The remaining six variables are joined in three pairs. However, a factor or component with only two variables is, strictly spoken, not a factor (Stevens, 1996, p. 373). Consequently, the 'components' are not analysed separately, but the matching variables are adequately included in the overall social capital index.