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Perceived social disorder in post-WWII housing estates: recent evidence from Finland

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Abstract

Many post-WWII housing estates have a poor reputation that is often related to insecurity and social restlessness or disorder. However, the prior literature is mainly on problematic estates and does not contain a representative view on the matter. Filling this gap, the present article introduces and discusses the findings of two recent large-scale studies on perceived social disorder in Finnish housing estates built in the 1960s and 1970s. The research questions were the following: First, do housing estates differ from other kinds of neighbourhoods in terms of perceived social disorder, and to what extent does socio-economic disadvantage contribute to the difference? Next, is tenure structure of the estate related to the perceived social disorder, and does socio-economic disadvantage mediate this relationship? Finally, what is the role of local social life, conceptualised in terms of social integration and normative regulation, in the association of disadvantage and disorder? The data came from two large survey projects. The first project targeted the Helsinki region while the second was used in a study on 70 estates around the whole of Finland. Multivariate regression analyses provided the following findings: First, estate neighbourhoods did not markedly differ from the other multi-storey areas in terms of perceived social disorder; there was a significant difference, but it was quite small in substantial terms. Thus, the negative image in the public discourse seems to be misleading. Second, estates are rather diverse in terms of tenure structure and socio-economic situation: rental-based estates exposed their residents to higher levels of perceived social disorder because of a higher socio-economic disadvantage; moreover, weaker normative regulation partly mediated the association of disadvantage and disorder. Finally, the findings are discussed from the perspectives of housing markets, disadvantage–disorder nexus, and tenure mixing.

1 Introduction

Social disorder in the neighbourhood, such as threatening behaviour, vandalism or public intoxication, has been found to increase feelings of insecurity (Brunton-Smith/Sturgis 2011; Kemppainen et al. 2014) and expose residents to health problems (Steptoe/Feldman 2011). Disorder may also shape moving intentions and behaviour in ways that deepen segregation (Skifter Andersen 2008). In many European countries, post-WWII housing estates have received a negative reputation, one associated with insecurity and disorder (e.g. Hastings 2004; Dekker et al. 2005; Dekker/Van Kempen 2005). However, it remains unclear to what extent this negative reputation is consistent with residents' experiences. Are the post-WWII estates in general more restless and disordered than other neighbourhoods? This study aims to respond to this question, which is difficult to answer solely on the basis of prior literature.

Although estate residents' experiences and perceptions have been widely studied (e.g., Hopton/Hunt 1996; Hastings 2004; Boyce 2006; Van Beckhoven/Van Kempen 2006; Musterd 2009; Dekker et al. 2011; Lindgren/Nilsen 2012; Kovács/Herfert 2012; Kabisch/Grossman 2013), there is a scarcity of reliable, large-scale evidence on where estates in general stand in terms of local social life compared to other kinds of neighbourhoods. Many recent large-scale studies stem from the RESTATE project, which examined thirty post-WWII housing estates across Europe that were selected in a non-random fashion on the basis of problems such as insecurity, unemployment, physical decay, and stigmatisation. Dekker and Van Kempen (2004) report that the physical structure typical for these estates, together with vacant properties and a lack of meeting places for the youth, tends to create problems with disorder and crime. Highly relevant is also the study by Skifter Andersen (2002) on a large number of Danish housing estates, which were targets of policy support because of different kinds of problems; the study found that large size, urbanisation, a low level of social activities, the physical environment's poor quality and the socio-economic disadvantage of the estate were related to disorder, as measured in surveys.

Most of the prior large-scale studies focus exclusively on problematic estates, which leaves us with insufficient means for assessing the overall situation and living conditions in the estate neighbourhoods in general. It is even possible that the one-sided focus on problematic estates in the research literature may have further strengthened the unfavourable reputation of these neighbourhoods. In our recent studies, we have addressed this gap in the literature by analysing large sets of estates and other neighbourhood that cover their entire socio-geographical spectrum in a representative manner. This article presents findings from two of these studies, focusing on

perceived social disorder in post-WWII housing estates in Finland. Moreover, the text extensively discusses the implications of these results from various perspectives, including housing markets and tenure mixing.

The first study compared housing estates built in the 1960s and 1970s to other kinds of neighbourhoods, concentrating on the Helsinki region in the Southern Finland (Kemppainen/Saarsalmi 2015). Our research aim was to *examine whether housing estates differ from other kinds of neighbourhoods in terms of perceived social disorder*. Furthermore, we studied *to what extent socio-economic disadvantage contributes to the matter*, in the spirit of disorganisation tradition (e.g. Sampson/Raudenbush 1999). For example, if the level of perceived disorder turns out to be higher in estate neighbourhoods compared to other high-rise areas, is it because of corresponding differences in disadvantage? As outlined above, the prior literature does not provide sufficient means for establishing hypothesis for the first question because the samples have been biased towards problematic estates. However, should the difference exist, it is quite probable that socio-economic disadvantage is involved because it is one of the most established ecological determinants of social disorder (Skifter Andersen 2002; Sampson/Raudenbush 1999).

In the second study (Kemppainen et al. forthcoming), 70 Finnish housing estates were examined to disentangle the factors that distinguish these neighbourhoods from each other in terms of perceived disorder. The following were the specific aims: First, *we examined the association of tenure structure of the estate with perceived social disorder and the mediating role of socio-economic disadvantage in this relationship*. Second, *we studied the role that the local social life, conceptualised in terms of social integration and normative regulation, plays between disadvantage and disorder*. We expected that rental-dominated estates are more disadvantaged, which should imply a higher level of social disorder; moreover, we hypothesised that normative regulation, at least partly, mediates the association between disadvantage and disorder (Sampson et al. 1997; Sampson/Raudenbush 1999; Skifter Andersen 2002).

2 Perceived social disorder in housing estates and other kinds of neighbourhoods

In both of our studies, the focus was on housing estates built in the 1960s and 1970s, which was a period of very intensive estate construction in Finland.¹ As a type of built environment, these neighbourhoods constitute a category of their own and are clearly different from the previous and

¹ To avoid excessive repetition, the rest of the text refers to these estates without always mentioning the time period they were built in.

later suburban developments (Figure 1). In addition, the estates built in this era often have quite a negative image.

Figure 1. A typical estate view in Finland: three-to-seven-storey flat-roof blocks in square layout, separated by tree-filled yards, parking spaces and walkways and situated outside the local city centre. Gesterby, a Southern Finnish housing estate built in the late 1960s and early 1970s. Photograph was taken by the author in November 2016.

The data came from a large survey project (Katumetro, Helsinki Metropolitan Region Urban Research Program) that targeted the residents of Helsinki and the surrounding municipalities; the Finnish- and Swedish-speaking residents aged between 25 and 74 years were the target population. The data were collected in 2012 with a stratified random sample of 26,000 individuals, and the response rate was 36 per cent (for further technical details, see Laaksonen et al. 2015). The survey data were combined with contextual register data on the socio-demographic and physical characteristics of the neighbourhood, and statistical grids of 250 metres by 250 metres were used as the contextual units (Statistics Finland 2009).

For comparative purposes, we divided the grids of our study area into three categories. First, a grid was categorised as *housing estate built in the 1960s and 1970s* if at least 50 per cent of its residents resided in multi-storey blocks built in this period and if the grid was located outside the central area of the town in question (Stjernberg 2013). Next, the remaining grids were divided into two groups on the basis of the share of low-rise house apartments, and 50 per cent was used as the cut-off: thus, estates were compared with *other multi-storey neighbourhoods* and *low-rise areas*. *Perceptions of social disorder* were measured using survey items on how much the respondent had perceived the following behaviours or signs in the residential area: uncleanliness or vandalism, public drunkenness, disturbances caused by neighbours, drug use or trade, trouble-making or threatening behaviour and thefts of damages (cf. Sampson 2009). The factor score of the dominant factor was used as the outcome measure. Finally, four different socio-economic grid indicators were constructed from the register data: tenure type, educational structure, income level and unemployment.

Figure 2 portrays the unadjusted levels of perceived social disorder in the three residential contexts. The main division runs between multi-storey neighbourhoods and low-rise areas. Even though the housing estates built in the 1960s and 1970s differ in a statistically significant way from other high-rise neighbourhoods, the difference is quite small. A design-based regression analysis (Table 1, model IV) shows that this small difference is explained by the socio-economic disadvantage of the grid because estates are, on average, somewhat more disadvantaged than other multi-storey neighbourhoods. When comparing the level of perceived disorder in estates and low-rise neighbourhoods, the regression models show that disadvantage contributes to this difference as well, but also other factors are at play. All in all, the socio-economic disadvantage of the neighbourhood matters significantly, and it is one of the key factors that distinguish the neighbourhoods with high levels of disorder from the more peaceful ones.

Figure 2. Perceived social disorder (PSD) in housing estates built in the 1960s and 1970s compared to other high-rise areas and low-rise neighbourhoods. Mean factor scores with 95 per cent confidence intervals.

Table 1. Neighbourhood type and perceived social disorder: results from design-based regression models.

	I		II		III		IV	
	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Estate	ref.	.	ref.	.	ref.	.	ref.	.
Low-rise	-0.831	****	-0.465	****	-0.306	****	-0.139	*
High-rise	-0.115	**	-0.116	**	-0.121	**	-0.072	ns.
I: neighbourhood classification + individual-level control variables (gender, age, education, main activity, household type and subjective economic situation)								
II: I + building and tenure type of the respondent								
III: II + demographic structure of the grid								
IV: III + socio-economic grid variables								
Note: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, **** $p \leq 0.0001$; ns. non-significant								

3 Tenure structure and perceived social disorder: a multi-level study on 70 Finnish housing estates

In the second study, we examined the variation of perceived social disorder in a large cluster sample of Finnish estates. Within the framework of the PREFARE project (2012–2015), funded by the Academy of Finland, we constructed a data structure on housing estates built in the 1960s and 1970s. This was done at a national level, using register data on buildings and statistical grids; the work of the Finnish urban geographer M. Stjernberg was pivotal in this process (Kemppainen et al. forthcoming; see also Stjernberg 2013). Further specifying the operational definition of a housing estate, presented above, we required at least five multi-storey buildings dating from the 1960s and 1970s within a close range (maximum distance 250 metres) from each other. Furthermore, a lower limit to the population size was defined (at least 300 residents) with the aim of capturing a certain degree of urbanity and a sufficient sample size. The underlying statistical grids were merged to match the size and shape of the estates.

Using stratified random sampling, 71 estates were originally selected out of the 318 areas fulfilling our criteria. The gross sample included 20,000 individuals, and the response rate was 39 per cent. On average, there were 109 respondents per estate (s.d. 59; range: 14–298). One estate with only 14 respondents was excluded from the analyses because of its small *n* at level-1; the other 70 estates had a minimum of 35 respondents per estate. Further technical details can be found in Kemppainen et al. (forthcoming). Content wise, the measurement of perceived disorder was somewhat modified from the first study by measuring uncleanness and vandalism as separate items and inquiring also about poorly managed built environment.

We first examined how perceived social disorder varies within the estate stock. For this purpose, we divided the estates into deciles, according to the share of rental apartments: in the first decile, the share of rental apartments was 22 per cent while in the tenth, it was 93 per cent. Because of the data source, the category *rental* included private and social rental housing as well as the so-called right-of-occupancy tenures.² Figure 3 shows how socio-economic characteristics vary by the rental decile. Income and unemployment levels vary quite consistently with tenure structure (cf. Musterd/Andersson 2005); going from the first to tenth decile, the share of low-income earners increases by almost 50 per cent while the share of unemployed residents nearly doubles. Also, the education level varies accordingly, except in the first decile. Using survey data, we also estimated

² The right-of-occupancy scheme (*asumisoikeus*) involves an initial deposit sum, a permanent dwelling right and a rent level somewhat lower than the market prices.

how much of the rental stock is social rental housing, with the finding that the share of social housing increases along with the overall rental share, as seen in Figure 3. Next, using linear random intercept models (model II, Table 2), we found that the overall rental proportion and the share of social housing within the rental stock were related to the level of perceived social disorder via socio-economic disadvantage.³ In other words, tenure matters because it participates in shaping the socio-economic reality of the estate.

Table 2. Tenure structure of the estate and perceived social disorder: results from random intercept models.

	I		II					
	B	Sig.	B	Sig.				
Rental / all apartments	0.80	**	0.18	ns.				
Social rental / rental apartments (ref: Low)	.	.	.	.				
- Mid	0.14	ns.	0.07	ns.				
- High	0.26	*	0.14	ns.				
I: Tenure structure of the estate + individual level control variables (age, gender, education, income, occupational status, time one has lived in the neighbourhood, household type, tenure and building height)								
II: I + socio-economic disadvantage of the estate								
Note: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, **** $p \leq 0.0005$; ns. non-significant								

³ Because of multicollinearity problems, we chose a latent variable approach. A factor analysis was performed for education, income and unemployment of the housing estates. The factor score of the dominant factor serves here as the indicator of disadvantage.

Figure 3. Socio-economic characteristics of the estates by rental structure (in deciles).⁴

We also examined the social life in different estates. In the neighbourhood literature, there are two major factors of local social life. On the one hand, there are the structures and processes of social integration (interaction, bonds, networks, ties), and on the other hand, there are factors related to normative regulation (informal social control, collective efficacy, norms and sanctions) (e.g. Sampson et al. 1997; Kearns/Forrest 2000; Thorlindsson/Bernburg 2004; see also Kemppainen, forthcoming). Portraying perceived social disorder and other indicators of local social life by rental deciles (Figure 4), a clear pattern emerges: as the rental proportion increases, so does the level of perceived social disorder while social cohesion and informal social control (i.e. collective efficacy) (Sampson et al. 1997) decrease. In other words, the regulative aspect of the local social life is closely associated with the tenure basis. In contrast, and quite interestingly, social interaction does not seem to vary linearly with tenure structure; instead, the most mixed estates seem to be somewhat higher on social interaction compared to others, which is a finding that merits attention in future studies.

⁴ Low income: gross individual income per year 14,000 EUR or less; tertiary education per population aged 18 years or more; unemployment per total population.

Figure 4. Social characteristics of the estates by rental structure (in deciles).

Next, we wanted to examine to what extent social cohesion, informal social control and the level of local interaction mediate the impact of disadvantage on disorder. To this end, we first divided respondents randomly into two equal subsets. We calculated the estate-level indicators of local social life from one subset and merged these results with the other subset, with which we then estimated the models. This way, we were able to avoid the possibly problematic individual-level confounding between the outcome and the measures of local social life. According to our analyses, the level of social interaction does not play any role regarding perceptions of social disorder; hence, it was omitted from the final model. In contrast, both high social cohesion and high informal social control were associated with lower values of disorder perceptions. They also partly mediated the effect of socio-economic disadvantage (model II, Table 3). In concrete terms, this means that the more disadvantaged estates have a lower collective efficacy, which partly explains their heightened level of perceived social disorder.

4 Discussion

In conclusion, we found that estate neighbourhoods do not substantially differ from other multi-storey areas in terms of perceived social disorder, which is a new and important finding in estate literature. Thus, the negative image in the public discourse seems to be somewhat misleading. Furthermore, estates are rather diverse in terms of tenure structure and socio-economic situation. We found that rental-based estates exposed their residents to higher levels of perceived social disorder because of their higher socio-economic disadvantage. Weaker normative regulation partly

mediated the association of disadvantage and disorder. These findings are in line with the well-established insights gained from the social disorganisation tradition (e.g. Sampson et al. 1997; Sampson/Raudenbush 1999).

4.1 Estates in the housing markets

We will first discuss these findings from the perspective of housing markets. As in many cities, low-rise living is fairly expensive in the Helsinki region, and is bundled with spacious apartments, private yards, middle-class status value, and, as seen above, peaceful living conditions. On the other hand, multi-storey residences in central urban areas provide a lot of different services for an urban lifestyle, such as trendy restaurants and bars for upper middle-class tastes, venues for elite culture, including museums and classical music halls, and a certain urbanist status value; as a part of the deal, one gets a certain level of disorder. From this perspective, the situation of housing estates appears somewhat weaker because their service supply is typically poor compared to the central areas. Also, their status value is often lower compared to other kinds of neighbourhoods. There is less privacy than in low-rise areas, but still, there is the urban, or rather suburban, disorder.

This perspective shows a rather pessimist vision concerning the future of housing estates. However, in line with the early planning visions and the Finnish anti-urbanist home ideology, estate neighbourhoods typically come with good access to forests and parks (Ruonavaara 1996), which are assets that many consider valuable in the Finnish culture. Also, good public transportation connections make the notion of peripheral location quite relative in the case of many estates; for example, the factual service supply may be wide with good transportation connections. At the same time, it should be remarked that many estates remain peripheral because of poor transportation connections. Hence, making clear-cut general predictions is far from easy, and it is crucial to take into account the developments taking place at a wider geographic scale: the trajectory of a given estate is not completely determined by its position in the local housing markets but will likely depend on more macro-level factors, such as regional development, as Stjernberg (2015) recently observed in an important large-scale register study on Finnish estates.

4.2 From disadvantage to disorder: on the role of regulation and agency

According to our findings, socio-economic disadvantage is a key factor that distinguishes estates from each other. From this point of view, tenure structure seems to be of central importance. In our context, rental tenure is often the only choice for the less-affluent households. In addition, social rental housing typically has upper limits to income. In other words, the tenure structure constitutes

part of the mechanism behind the spatial distribution of social disadvantage. In terms of local social life, socio-economic disadvantage can be considered a pathway through which rental-based tenure structure leads to behaviours and signs that we called social disorder. Further still, weaker normative regulation in the estate seems to partly explain why the more disadvantaged estates are typically also more disordered.

Nevertheless, this explanation is only partial, implying that there is also something else in the disadvantage–disorder nexus. Concretely, there may be other relevant factors not captured by our measures of regulation or not covered by the theoretical framework of integration and regulation. A possible direction might be to extend the focus beyond the control side of disorder (Wikström 2010) and reflect on the motivations to engage in disorder or incivilities. As Kearns and Forrest (2000, 998) aptly point out, a possible way to cope with disadvantaged and excluded positions is to search for alternative ways to achieve ‘a sense of utility, efficacy and power through engaging in conflict with others, often over the defence of territory’. Hence, contextual disadvantage may echo such attempts to gain a modicum of agency, belong to a group of peers, or simply rebel against the mainstream norms of a society—a society possibly seen as hostile, indifferent and denying inclusion and protection. Combined with less efficient normative regulation, this *agency-in-exclusion* may, at least to some extent, explain why disadvantage often comes in the form of social life labelled disorder in the research literature.

A related finding was that neighbourhood integration was not clearly associated with disadvantage or disorder. Theoretically, this finding suggests focusing more on the contents of interaction, instead of their formal characteristics, such as density of social ties in the neighbourhood. Might it be the case that, because of its possibly different contents, interaction has more regulative impact in more advantaged neighbourhoods? Or is the normative aspect of local social life completely independent of local social interaction? Be this as it may, the disadvantage–disorder relationship is not totally clear yet, and future studies might be able to shed further light on it. Finally, there is also a practical implication because policy initiatives aiming at fostering local interaction in neighbourhoods might not necessarily lead to improvements in social order, even though they would be otherwise successful.

4.3 Reflections on tenure structure as a policy instrument

The spatial concentration of disadvantage has been a recurrent source of worry since the early industrialisation period, and our late modern era is not an exception. Relatedly, there has been vivid

discussion on the possibilities of managing this issue, and, for example, tenure mix has been suggested as a tool. Mixing strategies are in fact explicitly mentioned by many European governments, including the Finnish (see Van Ham/Manley 2010). As outlined in the literature (e.g., Musterd/Andersson 2005; Rowlands et al. 2006; Tunstall/Fenton 2006; Galster 2007; Van Kempen/Bolt 2009; Sautkina et al. 2012), the idea behind mixing social renting and private housing includes various positive expectations; a mixed tenure structure is assumed to create more balanced communities, lead to a mixed income structure, reduce inequalities and promote equal life chances, strengthen communities, reinforce social capital and increase social inclusion. In brief, tenure mix has been considered a tool to introduce a socio-economic mix in the population profile and social interaction across the socio-economic strata. However, for instance, Rowlands et al. (2006) consider that it is unclear to what extent this really happens.

As seen above, tenure structure is related to the income structure and unemployment level of the estate, and as a consequence, it is strongly associated with the local social life in terms of perceived disorder and normative regulation. Based on these results, I would like to propose that there is strong evidence for certain kinds of mixing policies. Not only the studies presented above, but basically all studies documenting the association of local disadvantage with different problematic outcomes—including the entire Chicago tradition of disorganisation—are evidence for policies that alleviate disadvantage in general and its spatial concentration. It is clear that this is not the only relevant point of view in the matter, and for instance, service supply, social interaction within neighbourhood, reputation, social capital and the equality of life chances of the disadvantaged individuals are important perspectives as well—the evidence on these matters is mostly mixed (e.g., Ostendorf et al. 2001; Musterd et al. 2003; Galster et al. 2008; for a recent review, see Sautkina et al. 2012). Moreover, it is obvious that tenure policy alone is not sufficient to create balanced and sustainable neighbourhood communities (Rowlands et al. 2006). But still, the fairly clear association of tenure structure and social disorder cannot be neglected when the evidence base of tenure mix is discussed.

When discussing the positive and negative impacts of tenure mix, the perspective should always be explicated. From the perspective of mono-tenure social housing estates, a mixed structure is clearly beneficial in terms of disorder. Naturally, the situation looks quite different from the opposite perspective, that of mono-tenure, owner-occupied neighbourhoods. Furthermore, the point of view of the entire urban region may be considered as well, following Galster (2007; see also Kearns/Mason 2007): are there threshold effects in the relationship of disadvantage and disorder

that would imply possible net gains? Or is the situation closer to a zero-sum game, in which a fixed amount of disorder is spatially distributed in one way or another? These topics would merit attention in the future. For instance, the question of possible threshold impacts is highly relevant to policy: if there is a certain optimal level of tenure mix, this information might be used in planning new areas and developing old ones.

Finally, it is paramount to acknowledge the role of local context. Finland can be considered a home-owning society, because around two-thirds of the apartments are currently owner-occupied (Statistics Finland 2013). Historically, detached owner-occupied housing has enjoyed a valued ideological position (Ruonavaara 1996; Andersson et al. 2007). The dualised rental market consists of relatively unregulated private markets and a means-tested social housing domain, which has a negative ‘welfare housing’ image (Andersson et al. 2007). It is this kind of societal context where the findings stem from and which informs the presented discussion on tenure mixing. Moreover, the evidence comes from a situation where the tenure variation is a long-term outcome partly determined by the choices made at the time when estates were built whereas the scholarly tenure mix discussion often refers to cases where repair attempts are made afterwards (Ostendorf et al. 2001). In other words, the tenure variation present in our data stems from a preventive approach, which is different from reactive mixing. In fact, the European discussion on tenure mixing differs from our Finnish case in two ways: not only the timing (preventive versus reactive), but also the substance matter (social order versus social mobility, life chances and the like) is different. As a consequence, there is not necessarily any stark contrast between this study and the extensive literature on tenure mixing; the perspectives are simply different, enriching the discussion on the matter.

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