Master thesis University of Utrecht

"The Impact of Residential Mobility on Social Participation in Neighbourhoods: Exploring the Moderating Role of Family Households"

Sociology and Contemporary problems

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**Municipality of Amsterdam** 

Supervisor: Paul Sellies Second assessor: Luuk Mandemakers Research towards family influence on the city of Amsterdam

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#### ETHICAL APPROVAL

Study: "The Impact of Residential Mobility on Social Participation in Neighbourhoods: Exploring the Moderating Role of Family Households"

Principal investigator: S.N. van Egdom

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The study is approved by the Ethical Review Board of the Faculty of Social and Behavioural Sciences of Utrecht University. The approval is based on the documents sent by the researchers as requested in the form of the Ethics committee and filed under number 23-1613. The approval is valid through 03 July 2023. The approval of the Ethical Review Board concerns ethical aspects, as well as data management and privacy issues (including the GDPR). It should be noticed that any changes in the research design oblige a renewed review by the Ethical Review Board.

Yours sincerely,

Peter van der Heijden, Ph.D. Chair This is an automatically generated document, therefore it is not signed

#### Acknowledgement.

Coming straight from the faculty of social sciences, I present the Master thesis with the title, "The Impact of Residential Mobility on Social Participation in Neighbourhoods: Exploring the Moderating Role of Family Households. This thesis has been written to meet the graduation requirements of the master's program in Sociology and Contemporary at Utrecht University. Whereby I have been researching and writing my thesis from February to June 2023. It was a long period with many highs and lows, where sometimes the walls were broken, only to run into them again the next day. I thank my supervisor, Paul Sellies, for the excellent guidance and support during the process. Secondly, I would also like to thank Robert Kok of the Municipality of Amsterdam for giving data collection and for helping me during these five months to lead this thesis to an excellent final result. I also want to thank the municipality for providing tools to align, analyse, and transform my data. Finally, I would like to thank my brothers and sister for being there for me during my research process. And as all, I want to thank the sounds of CHIC and the house mixes of Folamour for swinging me through every blue Monday of my internship period.

I wish you a lot of reading pleasure.

Stan Noah van Egdom

#### Abstract.

In recent years, there has been a growing concern within the council of the municipality of Amsterdam that the migration of families in Amsterdam may lead to decreased social engagement. Families are often at home and present in the city, ensuring social cohesion and neighbourhood involvement. This thesis aims to reveal the impact of families on the city through the intricate interplay between residential mobility, the presence of family households, and social engagement. Whereby it sought to shed light on the factors that shape social engagement and provide valuable insights for urban planning and community development efforts. By employing four multiple regression models which suggest that high residential mobility affects the degree of social engagement in neighbourhoods in Amsterdam. Whereby the presence of families will significantly impact this mechanism. Family households still play a vital role in community building. The part of family households in neighbourhoods emerged as a significant aspect of the statistical results. Families have long been recognised as building blocks of communities, fostering a sense of community, social cohesion, and connectedness. Whereby this thesis will not disprove these claims. By recognising the complexities of these dynamics, this study could offer additional insight into sociology and social geography. After all, the findings underscore the significance of promoting stability, social connections, and a sense of belonging in neighbourhoods, particularly in high residential mobility.

#### **Introduction Thesis Research.**

"A Quantitative Study of the Relationship between Residential Mobility, social engagement, and the Moderating Effect of Family Households in Urban Neighbourhoods"

#### **1.1 Introduction**

Since 2012, the emigration of families has seen a noticeable rise in Amsterdam. Hence, a mounting apprehension arises amongst the council of the municipality of Amsterdam regarding the potential decline in social participation due to the migration of these households. It is noteworthy that families tend to spend a considerable amount of time in their homes and are frequently visible in the urban landscape. They ensure social cohesion and improve neighbourhood involvement (Couzey, 2017). However, families face numerous challenges in the housing market. For instance, the rising cost of living (CBS, 2019), the pressure on the urban housing market after the crisis of 2008, a booming labour market and the emergence of other forms of housing use (Booi et al., 2019). This all leads to families' migration, leaving the city to seek better opportunities in other municipalities with more suitable and affordable housing (Miechelsen et al., 2019; Lennartz & Vrieselaar, 2018; Booi, 2021). Secondly, the families formed in the city increasingly have a higher income. The municipality of Amsterdam stated that the higher the payment, the greater the chance a family will leave. There is a paradoxical mechanism visible. Because the opportunity for a young family with a low income to move to the region is lower than that of a high-income family. They have more choices in the housing market and choose life outside of Amsterdam (Booi, 2021). This phenomenon runs in parallel with the research from the MRA, whereby higher-income couples with young children are the most inclined to move (69%) (De Graaff et al., 2021; CBS, 2019).

Looking at the numbers, the annual departure rate of families was 6% in the 1990s. In 2019, this increased to 10%. The economic crisis of 2009-2013 caused a temporary dip in departures. However, there has been an increase over an extended period (Municipal of Amsterdam, 2019). Even newer numbers stated that in Amsterdam and Diemen, the share of families within relocated households is lowest within the metropolitan region in 2021 (13% and 15%, respectively) (De Graaff et al., 2021).

#### **1.2 Relevance and research question**

The inquiry that remains pertains to the impact of the emigration of these families on a city. Generally, it is assumed that families serve as the social foundation of a neighbourhood. Het Parool (2017) stated that families form a cement layer in the city, which is already crumbling because of increasing individualisation, as stated by Jan Latten, professor of Social Demography at the UvA. When families engage in civic activities and promote social engagement, they can influence their extended family, friends, and neighbours (Kegler et al., 2005; Rossi et al., 2016). This ripple effect is a gradually spreading influence or series of consequences caused by a single action or event (Henderson et al., 2016), which can lead to broader community engagement. Engaging in various activities and building relationships can facilitate knowledge-sharing and interaction. This helps to expand social networks through casual social connections and makes it possible to enhance social supervision and cultivate a sense of community. (Kegler et al., 2005). This makes a community more likely to have substantial social capital, which can help promote community resilience, social cohesion, and collective action (Halpern,2005; Whitman,2012). Furthermore, the presence of families was said to boost the local economy through new shops and more facilities. The social strength of the community is also growing because it often concerns people who take the initiative more quickly and can find official bodies more efficiently (Doff & Van der Sluis, 2017).

Rotterdam was one of the pioneering cities that actively sought to attract middle-class families. The "Promising Neighbourhoods" policy specifically targets families with highly educated (higher vocational education or higher), working or job-seeking parents who do not receive social assistance benefits and who (want to) live in a more expensive rental or owner-occupied home. Permentier's (2018) study indicated a significant change in social and economic status in various neighbourhoods where these families were situated. Many of these families choose to leave Amsterdam, potentially impacting urban life. Doff and van der Sluis (2017) have previously researched the positive impact of family households on civic participation and organizational strength in densely populated urban areas. This research will also continue regarding families' impact on city life and try to expose their possible added value. By exploring the interaction between residential mobility and the presence of family households concerning social engagement and considering a moderated role of the family, the research recognises that the relationship between residential mobility and social engagement is not straightforward and can be influenced by contextual factors. Whereby we are adding complexity to the understanding of social dynamics within the neighbourhoods of Amsterdam. Working with a multidisciplinary approach, bridging theories and perspectives from multiple disciplines, will allow for a more comprehensive exploration of the impact of residential mobility and family households on social participation. Lastly, the study has practical implications for urban policymakers by identifying the factors that promote or hinder social engagement in urban neighbourhoods and informing interventions to strengthen community ties and promote social cohesion.

The research is divided into three questions, a descriptive question, explanatory questions and a policy question. These are formulated as follows: *What are the current levels of social engagement in Amsterdam's neighbourhoods with a high level of residential mobility, and how does this compare to neighbourhoods with lower levels of residential mobility?* The descriptive question focuses on measuring the current status of social involvement in neighbourhoods with high and low levels of residential mobility. The understanding that emerges from this question is the level of involvement in community activities, their perceptions of the social climate in their neighbourhoods, and how it is affected in neighbourhoods where residential mobility is high. Secondly, *to what extent does the* 

presence of family households act as a moderator in the relationship between residential mobility and social engagement in neighbourhoods? This question aims to measure the extent to which family households act as moderators in the relationship between residential mobility and social involvement in neighbourhoods. The measurement in this question involves collecting data on residential mobility and social engagement and data on the presence and composition of family households in these neighbourhoods. A statistical regression would then determine to what extent the presence of family households moderates the relationship between residential mobility and community involvement. Third, What policies or programs can promote social engagement and community-building neighbourhoods with high levels of residential mobility, and how can families be preserved to contribute to the city's social structures? This question aims to identify specific policies or programs that can help to promote social engagement and community building in neighbourhoods with high levels of residential mobility, taking into account that the family plays a positive role in the social structures in the city. By identifying effective strategies for promoting social engagement and harnessing the positive influence of family households, this research can contribute to developing policies and programs that support community building and social cohesion, particularly in rapidly changing or transient neighbourhoods.

#### 2. Theory section - Influences of social engagement.

#### 2.1 Social engagement concepts and frameworks

The present study centres on the concept of binding power within the spatial domain of neighbourhoods. To explore this phenomenon, the research draws upon the work of different concepts of social engagement, the Social and Cultural Planning Office (2002), which delineates the operationalisation of social cohesion in a spatial context for the purpose of empirical investigation. They argue that social cohesion in neighbourhoods refers to social control, shared values, (in)formal networks, trust and helpfulness. An essential aspect of this is the factor of social engagement, which refers to the various forms of participation and interaction that individuals have with their social environment, including their families, friends, neighbours, and broader community. Prohaska et al. (2012) noted that the term sometimes has been used inconsistently in the literature and, therefore, it can be confused with other similar but distinct concepts in the social sciences. Some examples like Avison et al. (2007) defined the term as "the extent to which an individual participates in a broad range of social roles and relationships," while Zhang et al. (2011). described it as "the commitment of a member to stay in the group and interact with other members." This description closely resembles the description of Levasseur et al. (2010), which described it as "an individual's involvement in activities that provide interaction with others in society or the community". The essential components of social engagement include participating in social activities, interacting with multiple individuals or groups, engaging in social exchange, and demonstrating a willingness to initiate and engage in

activities that may benefit others (Avison et al., 2007).

In summary, *social engagement* is an individual's involvement, participation and interaction in their community or society. Specific characteristics, including education, employment, income, marital status, and age, are strongly related to the likelihood of an individual becoming socially engaged (Casciano, 2007). Thus, social engagement can be seen as a form of pro-social behaviour and refers to how individuals participate and interact in their communities and society (Putnam, 2000; Lin & Mele, 2005). Often this concept is measured using self-reported levels of trust, volunteering rates or membership rates in local organisations. Such measures are associated with various outcomes across regions and countries, ranging from economic growth to political accountability (Putnam, 2000b; Chetty et al., 2022).

#### 2.2 The influence of residential mobility on social engagement

Residential mobility, or the frequency at which individuals move from one location to another, has become increasingly common today. While moving has many benefits, such as pursuing new job opportunities or experiencing different lifestyles, high residential mobility can negatively affect social engagement (Song & Lim, 2021; Magre et al., 2016). Literature shows that at an aggregate level, municipalities with high rates of recent population growth show lower turnout levels of engagement in society than those with lower or even negative growth. Specific, lower average levels of community engagement in local communities are present in neighbourhoods with a higher volume of residential mobility than those that have gained less population or even have lost it (Magre et al., 2016).

Various sociological literature has already pointed out that the length of residence is a critical factor for community attachment (Kasarda & Janowitz, 1974; Theodori, 2004). Living longer in a community increases opportunities for socioeconomic transactions, eventually strengthening individuals' emotional bonds towards the community (Kasarda & Janowitz, 1974). Thus, a community where people move often in or out, can significantly threaten individuals within a community. This is because it is directly related to how they perceive their environment and act and interact, as stated by Song & Lim (2021). The authors stated that people expecting to move to other places could close themselves off from interacting with other community. This can make it harder for them to feel connected to their community and motivated to participate in activities that promote their well-being (Magre et al., 2016).

A high residential mobility within the neighbourhood weakens the willingness to participate in the community, as prospective movers could believe they can only partially enjoy the fruits of their participation and interaction (Manturuk, 2012). Individuals moving to another place means that social capital built in the current environment will be discarded, preventing people from engaging in social relationships with other community members (Berry & Kasarda, 1977; Oishi et al., 2012; Song & Lim, 2021). Gay (2012) describes this as the social costs of mobility since 'mobile citizens report

fewer social ties to people in their neighbourhood, and social connectedness is a powerful predictor of civic-minded activity'. So on the contrary, it is believed that people who think they will stay in the community will likely actively engage in social activities because they see their environment as stable and lasting, whereby short-term residents have developed less attachment towards their communities because of mobility expectations which reduces their devotion substantially (Song & Lim, 2021).

The impact of high residential mobility on civic and social engagement may vary depending on an individual's age, socioeconomic status, and race/ethnicity (Campbell, 2009; Egerton, 2003). The type of housing can also impact residential mobility. Renting provides more flexibility to move to a different area if necessary (Gijzel, 2018; Karsten, 2020). Whereby the desire to move is much greater among privately rented sector residents than among other tenants. In the private rented sector, 43% will move to Amsterdam (Dignum & Gemeente Amsterdam Wonen, 2020). Thus, Residential mobility or the frequency individuals move from one location to another, has become increasingly common today. High residential mobility can often have a negative impact on social and community involvement. While moving has many benefits, such as pursuing new jobs or experiencing a different lifestyle, high residential mobility can have a negative impact on social engagement, which has to do with the frequent moves that can make it more difficult for individuals to socialise and participate in community activities, leading to less social engagement and weaker social networks in a neighbourhood (Song & Lim, 2021; Magre et al., 2016). Therefore the first hypothesis is formulated as follows: "*Neighbourhoods with higher levels of residential mobility will have lower levels of social participation than neighbourhoods with lower levels of residential mobility.*"



Figure 1. The direct effect of Residential mobility on social engagement.

#### 2.3 Influence of family-oriented communities on social engagement

Historically, families with children have often been viewed as an unusual household type in urban areas. This perspective has been reinforced by the trend of native families relocating to suburban areas, leading to the perception that families do not belong in the city (Botermans & Karsten, 2015). However, a loss of families in the city could lead to a loss of social engagement with neighbours because of the rise of individualism (Latten, 2017). The concept of individualism has been a central theme in the Western world, with concerns around its potential impact on social engagement (Miller et al., 2016). This tension is between the fear that individualism might grow at the expense of our connections with others and the desire to cultivate it as a personal project. However, families are often

assumed to be seen as counter-mechanism and influence social engagement positively (Bouw & Karsten, 2004). Families have often been seen as the pillars of this urban cohesion (Fonseca et al., 2019). Karsten (2004) stated, "A more child-friendly living environment is essential for developing liveable cities. Families maintain social networks." From analysis, Wonen in Amsterdam (WiA) (2019) shows that families have more contact with neighbours than other households. Moreover, this difference is vast among households that live somewhere for a short time. Families are the baseline for positively influencing social engagement; therefore, many sociologists believe the family is essential within civil society (Eberly, 2000; Eberly & Streeter, 2002). According to Eto (2012), the family's significance lies in its ability to furnish individuals with the foundation for cultivating their social consciousness, thereby promoting the growth of engaged citizens. The family is widely regarded as a socialising agent; parents, in particular, play a pivotal role in providing their children with a framework for interpreting and navigating the social world (Muddiman et al., 2019). In other words, the family is the first socialising agent for children, and it plays a critical role in shaping their beliefs, values, and attitudes. However, the mechanisms responsible for the association are poorly understood (Frazer, 2000; Youniss et al., 2002).

Furthermore, it argued that families living in close proximity could develop strong connections through their children, which can lead to the formation of supportive communities where they exchange assistance and advice (Bouw & Karsten, 2004; Karsten, 2007). Some people are naturally inclined to participate in civic and social activities. In contrast, others may need more encouragement or motivation to become involved. Therefore it is believed that socioeconomic status (SES) accounts for higher rates of social engagement (Putnam, 2000). Lower SES individuals seemed less socially engaged than individuals from higher SES groups (Foster-Bey, 2008). However, it is essential to note that the relationship between SES-status and engagement is complex and multifaceted. For example, higher SES families may have more resources available but also experience greater work demands and stress, which can impact family dynamics and well-being (Dee,2003). Smith (1996) stated that the poor and working class are often too easily defined as "uncivil". Thus, while higher SES can significantly predict engagement, it should be considered alongside other factors that may shape family dynamics and experiences.

In a recent study of Boterman (2012) which was focused on the transition to parenthood and its influences on urban space. He argued that the transition to parenthood is a significant milestone in many people's lives, changing daily routines and lifestyles. This change in lifestyle and time consumption has an impact on the neighbourhood. His study found that the things families did in their free time and the places they went to changed significantly after having children. One of the most significant changes observed was the lack of time for parents due to the demands of caring for a child. As a result, parents had to adjust their spare time activities and destinations to accommodate their new responsibilities. Most parents spend less time on their own "private" activities. For example, many parents reported spending less time shopping for fun, going to the theatre and museums, playing sports, going to the movies, and engaging in other forms of leisure consumption. This reduction in consumption had implications not only for parents' personal lives but also for the use of urban space. Many of the places associated with particular leisure activities, such as clubs, bars, and restaurants, were visited less frequently by new parents. Instead, parents tended to spend more time interacting and engaging in the neighbourhoods and less exploring other parts of the city. Also seen in the research by Billingham and Kimelberg (2013) argued that middle-class parents often became actively involved in their children's school after deciding to stay in the area. This support can foster a sense of community among family members and contribute to a culture of engagement. This change in urban mobility had significant implications for how families interacted with their surroundings and the opportunities available to them. Therefore neighbourhoods with a higher concentration of families tend to have a stronger sense of community and higher levels of social engagement. A family-oriented community often fosters a sense of belonging, social cohesion, and connectedness among residents (Bouw & Karsten, 2004; Doff & van der Sluis, 2017).

With this theoretical framework in mind, the second hypothesis posited in this study is as follows:. *The presence of family households moderates the relationship between residential mobility and social participation in neighbourhoods. The negative effect of residential mobility on social participation is weaker in neighbourhoods with a higher proportion of family households.* This hypothesis is formulated because of the stability family households can provide and the social support, regardless of the socioeconomic status of these families, that counteract the adverse effects of residential mobility on social participation. This would have to do with the fact that they offer a built-in social network and social capital in the neighbourhoods (Putnam, 2000).



Presence of family households.

Figure 2. The expectation of the effect of residential mobility on social engagement and moderation of the presence of family households in the neighbourhood.

#### **3. Method and data**

#### **3.1 Data**

"Wonen in Amsterdam" (WiA) is a comprehensive dataset that provides valuable insights into the housing market and residential preferences of the residents in Amsterdam. In 2021 the dataset comprised 418.506 respondents across the city; this is a weighted average. (Dataset: Woningmarkt | Website Onderzoek en Statistiek, z.d.). Moreover, it will be used as data to research the linkage between the presence of families, households and social engagement. The dataset includes a wide range of information on housing stock, demographic characteristics of the population, residential mobility, and satisfaction with living conditions in Amsterdam. The City of Amsterdam collected the dataset and provided a rich source of information for researchers and policymakers to better understand the housing market dynamics in the city and develop effective housing policies. The dataset contains information from multiple sources, including surveys, administrative records, and other data sources, and covers various topics related to housing and urban development. The critical variables included in the dataset are the type and size of housing units, ownership status, rental prices, household income, migration patterns, and satisfaction with the neighbourhood and living conditions.

The neighbourhood's demographic data was supplemented by the BBGA from the Amsterdam Municipality. Basisbestand Gebieden Amsterdam (BBGA) is a geographic database managed by the municipality of Amsterdam. It serves as a reference for the administrative division of the city into different geographic areas. The BBGA contains information about the geographical boundaries and characteristics of various regions of Amsterdam, such as districts, neighbourhoods, and other administrative units. This data can be used for spatial planning, statistical analysis, and basic information about the different parts of the city. The BBGA is regularly updated to reflect changes in the administrative division of Amsterdam.

#### 3.2 Research design, sampling strategy and justification

The WiA initiative employs a cross-sectional design to gather data from diverse neighbourhoods in Amsterdam. It adopts a quantitative approach and employs surveys as the primary means of data collection. To recruit participants, the municipality employs a combination of random and convenience sampling techniques. Notably, it adheres to the ethical guidelines for research involving human subjects, and personal data is anonymized, which is stated within the privacy personal data guidelines of the Municipality of Amsterdam (Municipality of Amsterdam, 2018). This ensures that participants' responses are kept confidential and their privacy is respected.

#### 3.3 Variables

Each respondent is bound by his or her neighbourhood dynamics which are included in the variables by the additional BBGA. Variables were generated using data from the BBGA. WiA includes district-level codes, and incorporating data into these codes creates distinct variables

representing district dynamics. Each respondent was assigned their respective neighbourhood code, enabling correlating scores on dependent variables to specific districts. Therefore all variables are measured at the neighbourhood level.

All data from the BBGA database will be shown in the appendix.

#### **3.3.1 Dependent variable**

Within this thesis, social engagement is referred to as follows. Social engagement is "*a person's involvement in activities that provide interaction with others in society or the community*" (Levasseur et al., 2010). An addition of data from BBGA had to be made to create the variable of the used definition of social engagement. As a result, a group average could be made per district to get the variable at the right level as independent and moderator variables. The data from BBGA is described and calculated based on the following statements:

- 1. People hardly know each other in this neighbourhood.
- 2. People in this neighbourhood pleasantly treat each other.
- 3. I live in a nice neighbourhood where people help each other.
- 4. I feel at home with the people who live in the area.

The following four indicators have been widely recognised as important measures of social connectedness and community involvement in the neighbourhood: (1) the extent to which people help each other, (2) the degree of contact residents have with each other, (3) the level of social participation, and (4) the overall perception of neighbourhood involvement. These aspects are integral parts of the social participation variables and offer a comprehensive perspective on the social engagement of residents in their community. Responses to these items are scored on a scale from one to ten, with one indicating a negative assessment and ten indicating a positive assessment. Social cohesion is calculated by averaging the scores provided by respondents aged 15 and older across the four statements, making it a neighbourhood-level variable. Only areas with a minimum of 50 respondents are included in the reported results.

#### 3.3.2 Independent variable

Residential mobility is the relatively local-scale relocation of individuals and households from one residence to another (Coulter & Thomas, 2020). Residential neighbourhood mobility can be measured using the turnover ratio of residents who have moved in and out of the district or neighbourhood within a specific time frame. This turnover ratio can categorise a district or neighbourhood with specific residential mobility. A district or neighbourhood is categorised as having a high concentration of residential mobility when the ratio of recent movers to the total population is greater than the median ratio for the larger region or city. High residential mobility concentration may indicate a neighbourhood with a more transient population, potentially leading to lower social engagement and cohesion levels. On the other hand, a low concentration of residential mobility may indicate a more stable neighbourhood with more robust social ties and a greater sense of community.

The variables were created after data was added from the BBGA. WiA contains codes at the district level. Adding data to these codes could create the dynamics per district into different variables. Each respondent was fed into his or her neighbourhood code. As a result, the scores given on dependent variables could be linked to each district. The independent variable is created by using data from the BBGA. This was the relocation dynamics of the neighbourhood based on the var mutation rate total in 2020. Whereby the mutation rate total is the sum of the number of moves (including moves to and from abroad) divided by the average population of a year (municipality Amsterdam. n.d.z). This mutation rate is linked to each respondent based on which neighbourhood he or she lives. In this way, it can be determined which influence of residential mobility in the neighbourhood influences the degree of social engagement. The variable of residential mobility is treated as a continuous/ratio variable.

#### **3.3.3 Moderator variable**

Family Presence is the degree to which families with children concentrate within a district or neighbourhood as a proportion of the total population. Family Presence and the concentration in which they are located can be measured using a ratio of the number of families with children to the total population of the district or neighbourhood. This ratio can then categorise the district or neighbourhood as having a high or low concentration of families with children. A district or neighbourhood is categorised as having a high concentration of families with children when the ratio of families with children to the total population exceeds the median ratio for the larger region or city. A district or neighbourhood is categorised as having a low concentration of families with children when the ratio of families with children to the total population is less than the median ratio for the larger region or city. Interpretation of the strata is as follows, high concentration of families with children may indicate a family-friendly neighbourhood with more potential for mutual exchange of assistance and advice and increased social engagement among families. Conversely, a low concentration of families with children may indicate a less family-friendly neighbourhood with potential implications for social isolation and limited social support for families with children. Furthermore, the same principle applied to the independent variable also applies to the moderator variable. This is done to measure the presence of families and households at the neighbourhood level. The following selection (based on the data from BBGA, 2020) is made to classify respondents based on the share of families in their neighbourhood. The urban average was 23.1% in 2020. With the addition of the BBGA data, the moderator variable was made into a ratio scale. Whereby a higher score meant a higher percentage of family presence within the neighbourhood.

#### **3.3.4** Control variables

It is essential to control for sociodemographic characteristics like the neighbourhood's socialeconomic status and the percentage of people with high education. They are likely to affect both aspects of residential mobility and social engagement. For sociodemographic characteristics, variables have been supplemented with data from the BBGA. This was done to be able to measure at the neighbourhood level. Adding BBGA data can justify neighbourhood dynamics into a neighbourhoodlevel variable. The neighbourhood's SES variable is made within a dummy variable of 2 categories. The urban average was 6 in 2020. Neighbourhoods below this average will be categorised as low and assigned a score of 0. Neighbourhoods higher than this average will be categorised as high and assigned a score of 1. BBGA data has also been added from the year 2020 for the neighbourhood's educational level. The concept of the presence of educated parents was measured as follows; Proportion of secondary school students living in the area where the highest educated parent is highly educated (HBO or WO). Whereby the new variable was treated as a ratio variable. The average level of education per neighbourhood could only be determined based on the presence of highly educated parents. This variable is close to the moderator variable, the only difference being that with the supplemented data from BBGA, it does not make any statement about the number of parents in the area. Therefore, this variable differs from that of the moderator.

The control variables originate from various scientific literature sources. Researchers like Putnam (2006) and Wilson (1998) have heavily studied neighbourhood characteristics of a neighbourhood's socio-economic status. Their findings showed a significant difference in civic involvement between families in lower socio-economic and diverse urban neighbourhoods and those in more affluent areas. Their findings suggest that people in economically disadvantaged neighbourhoods tend to participate less in community organisations, volunteering, and decisionmaking processes than those in wealthier communities. This relationship is driven by a sense of security and optimism that comes with higher income and economic resources. Individuals with higher incomes may feel more empowered to participate in activities because they are less likely to be worried about basic economic needs, such as housing and food (Putnam, 2000). Lower-income households may need more resources to contribute to charitable causes or participate in civic activities. Therefore they tend to be more socially isolated due to financial constraints or face constraints on their available time because they may lack accessible support. In the end, this will limit their social engagement (Radcliff, 2006; Hooghe & Stolle, 2003; Roy et al., 2004; Foster-Bey, 2008). However, it is essential to note that the relationship between SES status and engagement is complex and multifaceted. For example, higher SES families may have more resources available but also experience greater work demands and stress, which can impact family dynamics and well-being (Dee,2003). Smith (1996) stated that the poor and working class are often too easily defined as "uncivil".

Education can also significantly influence the outcome of individuals' tendency to participate

(Casciano, 2007). A significant body of studies over the last 50 years has demonstrated that higher levels of individual schooling are strongly associated with social behaviours and knowledge (Dee, 2003; Lenzi et al., 2014). Schooling may indoctrinate a norm of encouraging involvement in the community because these individuals have a greater awareness of social issues and their impact on society, motivating them to get involved in addressing these issues (Campbell, 2006). The education level of individuals significantly predicts social engagement, with highly educated individuals more likely to engage in social bonds than lower-educated individuals (Marsh & Kaase, 1979; Putnam, 2000; Egerton, 2002). Highly educated individuals often have greater access to resources, including time, money, and education, enabling them to take on leadership roles within their communities and provide financial support for local causes (Egerton, 2002).

#### **3.4 Statistical analysis techniques**

The different statistical models aimed to investigate how the presence of family households moderates the relationship between residential mobility and social engagement. To examine the influence of residential mobility on social engagement moderated by the presence of family households, different linear regression analyses will be used within the statistical program of SPSS. It would allow us to assess the impact of residential mobility on social engagement while controlling for the effects of family households and the degree of highly educated parents in the neighbourhood, while secondly testing for whether the effects of residential mobility on social engagement differ depending on the presence of family households in a neighbourhood. It highlights the need to consider the presence of family households in efforts to promote social engagement and community cohesion in neighbourhoods with high residential mobility. Four models will be examined; one linear regression and three multiple linear regressions will be performed using IBM SPSS software version 27. The first regression model addressed the effect of residential mobility on social engagement. The second model addressed the effect of residential mobility on social engagement and included education level and SES of the neighbourhood as control variables. The third model will extra include the moderator variable without the interaction effect. Whereby the last model will test for the interaction effect between residential mobility and the presence of family households.

#### **3.5 Missings**

Prior to analysing the current data, it is noteworthy that the initial sample size, denoted by N, was 418,506 (weighted average). However, due to the presence of missing data, the number of valid respondents varied across different variables. On the Neighbourhood level, respondents were excluded in cases where no data was available on BBGA. It is important to note that this exclusion criterion differs per variable. This was primarily due to the fact that the reporter numbers were only included in areas with at least 50 respondents. Additionally, the business park Sloterdijk was removed from all variables, as companies predominantly occupy it and have a low presence of citizens. Furthermore, specific neighbourhoods, namely H-buurt, Ganzenhoef, Geerdinkhof/Kantershof, Bijlmermuseum, K-

buurt, Holendrecht, Nellestein, Reigersbos, and Gein were not included within the dataset of WiA. Following the exclusions mentioned above, the final dataset comprised 318,394 valid respondents.

#### **3.6 Assumptions control**

Assumptions are tested to ensure the reliability of the regression analysis for concluding: Collinearity Tolerance was examined, and none of the variables is below 1. Additionally, no VIF values less than one or greater than three were found, indicating the absence of strong multicollinearity. Outliers in the data were evaluated using graphs and visualised statistics, but no outliers were detected. The normal distribution of the variables was checked. All variables in this study follow a normal distribution. Homoscedasticity was assessed for all variables and was present in all cases, and lastly, the outliers were checked and retained in this study to preserve statistical power.

# 4. Results

#### Table 1. Descriptive statistics.

	Ν	Min	Max	Mean	SD.
Social engagement	318.394	4.30	7.50	5.7	.59
Residential Mobility 2020	318.394	6	91.10	20.9	9.5
Presence of family households 2020	318.394	1.60	51.30	22.87	9.4
Socio-economic status of the neighbourhood (1 = High-SES)	318.394	0	1	.59	.49
Educated parents in the neighbourhood 2020	318.394	21	90	58.7	19.1
Valid N	318.394				

Table 1 presents the descriptive statistics of all variables included in the regression on social engagement. The final sample consisted of 318.394 (weighted average) respondents from different neighbourhoods in Amsterdam. The variable social engagement scores ranged from 4.3 to 7.5. The minimum value (Min) of 4.3 suggests that at least one neighbourhood is to be reported as having the lowest score for social engagement. In contrast, the maximum value (Max) of 7.5 indicates that at least one neighbourhood is to be reported as having the highest score for the rates of engagement. This was the neighbourhood of Waterland, located in the northern part of the city. Upon calculation, the mean was marked at 5.7 for all the social engagement scores in neighbourhoods. This is a low average score for the observed degree of social engagement in neighbourhoods of Amsterdam.

This value serves as a benchmark for understanding Amsterdam's typical social engagement experience. The standard deviation, which measures the data's variability or spreading around the mean score, was estimated to be .59. This value demonstrates that, on average, neighbourhood scores

deviate by approximately .59 units from the mean. The standard deviation highlights the diversity of social engagement levels within the dataset, indicating that there are neighbourhoods with both high and low levels of engagement. For the variable of residential mobility, the minimum value of residential mobility was 6.00, while the maximum value was 91.10. The mean mutation rate for the observed neighbourhoods was 20.9. This number indicates the sum of the number of moves (including moves to and from abroad) divided by the average population of a year in Amsterdam. The standard deviation was 9.564, indicating considerable diversity in residential mobility experiences among different neighbourhoods in Amsterdam in the studied population.

The presence of families is a ratio variable of the percentage of family households within the neighbourhood. The mean value for the presence of family households is 22.87. Most respondents live in an average concentration of family households within their neighbourhood. The standard deviation for the presence of family households is 9.4, which is a significant deviation between the different neighbourhoods. After being categorised into the dummy variable, the mean value for the socio-economic status of the neighbourhood is 0.59 (SD= .49). It indicates that, on average, most observations fall into the category of high SES, implying that the neighbourhoods in the dataset exhibit a higher socio-economic status. For the educational level of the neighbourhood, the mean is 58.7 (SD = 19.1). The minimum value(Min) of 21 suggests that at least one neighbourhood reported the lowest level of educated parents. In contrast, the maximum value (Max) of 90 indicates that at least one neighbourhood reported the highest level of educated parents. The SD value demonstrates that, on average, neighbourhood scores deviate by approximately 19.1 units from the mean.

#### 4.1 Statistical results of residential mobility and the family's presences

Table 2 illustrates the first regression and, therefore, the first hypothesis: the influence of residential mobility on social engagement. Model 0 shows the direct main effect between residential mobility and social engagement. This model demonstrates a significant effect of residential mobility on social engagement within the neighbourhood (B = -.024, p > .001). Model 1 tests the same primary effect but with the addition of the control variables. When adding the control variables, the socio-economic status of the neighbourhood, and the presence of educated parents, the second model remains significant (R2 = .257, F(57904) p < .001). The direct effect remains negative and significant (B = -,035, p < .001). The explained variance increases from 15.4% to .257% (R2 = .154) and (R2 = .257). The effect size was medium within model 2, with a Cohen's f2 of 0.184. The control variable, the socio-economic status of the neighbourhood, contributes to an indirect positive and significant effect (B = .427, p < .001). It suggests that high-SES neighbourhoods. The standard error of the estimate of SES of the neighbourhoods is the average distance that the observed values fall from the regression line. Estimated to be .002, this suggests that SES Neighbourhoods can accurately predict the results of the dependent variable level. The presence of educated parents in the neighbourhood also

contributes to an indirect positive and significant effect (B = .001, p < .001). This indicates that neighbourhoods with a high level of educated individuals have a better degree of social engagement than neighbourhoods with lower levels of educated parents. The results of model 1 indicated that the first hypothesis that neighbourhoods with higher levels of residential mobility would have lower levels of social participation than neighbourhoods with lower levels of residential mobility; therefore, the first hypothesis could be adopted.

MODEL	0	MODEL	1
В	SE	В	SE
6.235**	.002	6.131**	.003
024**	.000	035**	.000
		.427**	.002
		.001**	.000
.154		.257	· ·
57904 (1)		36693 (3)	
	MODEL B 6.235** 024** .154 57904 (1)	MODEL 0    B  SE    6.235**  .002   024**  .000	MODEL 0  MODEL    B  SE  B    6.235**  .002  6.131**   024**  .000 035**    .024**  .000 035**    .001**  .001**    .154  .257    57904 (1)  36693 (3)

Table 2. Regression analyses for variables predicting socialengagement

\* : P .05 > \*\*: P > .001

Table 3 illustrates the outcome of Hypothesis 2. Which was defined as states; the presence of family households moderates the relationship between residential mobility and social engagement in neighbourhoods. Model 2 includes two variables, residential mobility and the presence of family households, without including the interaction effect between the two variables. This model demonstrates a negative and significant variable of residential mobility (B = -.027, p < .001) and indicates that the coefficient predicted value of social engagement decreases by 0.024 units. For the moderator variable, the presence of family households (B = .015, p < .001): The coefficient value

suggests that, on average, the presence of family households is associated with an increase of 0.015 units in the predicted value of social engagement. These results still imply that a higher concentration of families within the neighbourhood shows higher social engagement scores and that our moderator variable has a positive, significant effect on social engagement. Educated parents in the neighbourhood significantly affect the degree of social engagement (B =.001 p <.001). This indicates that higher-educated households in the neighbourhood will have more community engagement than lower concentrations of educated households. Furthermore, the socio-economic status of the neighbourhood was also a significant predictor (B =.443 p < .001). The overall regression model was significant ( (R2 =.288, F (32665) p < .001). The effect size was large within model 2, with a Cohen's f2 of 0.404. The standard error of the estimate of the chosen variables is relatively low, which indicates that the variables accurately predict the results of the dependent variable.

Model 3 addresses the effect of residential mobility on social engagement and tests whether the presence of family households moderates this effect. The model is significant, and it explains a big proportion of 33.9% of the variance in social trust (R2 = .339, F (32665) p < .001). The effect size was large within model 3, with a Cohen's f2 of 0.512. First, the results show that the presence of family households affects social engagement (B = .046 p < .001). This is in line with the results of the other models within the statistical overview. Education and socio-economic status still significantly positively affect social engagement. Model 3 includes the interaction effect of the presence of family households and residential mobility. There is a negative coefficient (B = -.002 p < .001) for the interaction effect, indicating that the level of family households in the neighbourhood influences the effect of residential mobility on social participation. Specifically, the negative effect of residential mobility on social participation is weaker in neighbourhoods with a higher proportion of family households. However, only a tiny effect is measured. Finally, model 3 shows us that the second hypothesis, the presence of family households, moderates the relationship between residential mobility and social participation in neighbourhoods. The negative effect of residential mobility on social participation is weaker in neighbourhoods with a higher proportion of family households, which can be adopted by compelling the data from WiA(2021).

The following conclusions could be drawn based on the provided data and regression models. The first hypothesis is that neighbourhoods with higher levels of residential mobility have lower levels of social participation than neighbourhoods with lower levels of residential mobility. This hypothesis is supported by residential mobility's negative and significant direct effect on social engagement. Furthermore, the control variables of the neighbourhood's socio-economic status and the educational level of the households contribute positively and significantly to social engagement. Higher socioeconomic status and the presence of higher educated parents are associated with higher levels of social engagement within models zero and one. The overall explained variance in social engagement is relatively big in all models, suggesting that included variables explain to a large extent the concept of social engagement. The second hypothesis, family households' presence moderates the relationship between residential mobility and neighbourhood social participation. The interaction effect in Model 3 indicates that the negative effect of residential mobility on social participation is weaker in neighbourhoods with a higher proportion of family households; for this, the second hypothesis can be assumed.

	MODEL 2		MODEL 3	
Variables	В	SE	В	SE
Constant	5,542	.006	5.301**	.006
Residential Mobility 2020	027**	.000	.006**	.000
Presence of family households 2020	.015**	.000	.046**	.000
Residential mobility x Presence of family households			002**	.000
Control variables				
Socio-economic status of the neighbourhood ( $0 = low SES$ )	.443**	.002	.460**	.002
Educated parents in the neighbourhood 2020	.002**	.000	.001**	.000
R <sup>2</sup>	.288		.339	
F	32665 (4)		32665 (5)	
*: P .05 > **: P > .001				

Table 2. Regression analyses for variables predicting socialengagement

# **5.** Cultivating social engagement in neighbourhoods: Understanding the Influence of residential mobility and the moderating role of family households

#### **5.1 Conclusion**

This paper examined the effect of residential mobility on social engagement and whether the presence of family households will act as a moderator in this relationship. Hypotheses were derived from different theories delivered by scholars in the fields of sociology and social geography. This resulted in expectations of a relationship between residential mobility, social engagement and a moderating effect of family households in urban neighbourhoods. Data were used from cross-sectional data from the WiA and BBGA of the municipality of Amsterdam from 2020 to test the hypotheses.

This study aimed to predict how residential mobility could harm social engagement in the neighbourhood. Frequent moves within a neighbourhood disrupt social networks, making establishing and maintaining meaningful connections harder. Each relocation requires rebuilding social ties, which can be time-consuming and challenging. The lack of stability can lead to feelings of isolation and disconnection from the community (Song & Lim, 2021). However, the fundamentals revolve around the fact that when families are present in neighbourhoods, the degree of social participation should be higher, even if there is a high degree of residential mobility. This is because neighbourhoods with a higher concentration of families tend to have a stronger sense of community and higher levels of social engagement. A family-oriented community often fosters a sense of belonging, social cohesion, and connectedness among residents (Bouw & Karsten, 2004; Doff & van der Sluis, 2017). The research was guided by two main questions that aimed to investigate the levels of social engagement in Amsterdam's neighbourhoods with varying levels of residential mobility. Specifically, the study sought to compare the social involvement in neighbourhoods with high and low residential mobility, examining its impact on community engagement and perceptions of the social climate. Additionally, the study sought to assess the extent to which family households moderate the relationship between residential mobility and social engagement in neighbourhoods. This inquiry was designed to measure the degree to which family households act as moderators in the relationship between residential mobility and neighbourhood social involvement.

Based on data from the WiA, the following results could be presented: Residential mobility at the neighbourhood level, or the frequency at which individuals move from one location to another within the neighbourhood, negatively affects the extent to which people rate their neighbourhood on social engagement (Song & Lim, 2021; Magre et al., 2016). The theory section has highlighted that the length of residence is a critical factor for community attachment (Kasarda & Janowitz, 1974; Theodore, 2004). These claims will not be refuted when examining the statistical results. Neighbourhoods in Amsterdam with high residential mobility have lower engagement rates than neighbourhoods with a lower degree of residential mobility. Frequent moves disrupt social networks, making it difficult for individuals to establish and maintain meaningful community connections. This can lead to feelings of isolation and disconnection from the community fabric. The length of residence in the community often predicts engagement with the community. Living longer in a community increases opportunities for socioeconomic transactions, eventually strengthening individuals' emotional bonds with the community (Kasarda & Janowitz, 1974). However, an interesting and significant finding emerged regarding the moderating role of family households. Neighbourhoods with a higher concentration of families exhibited higher levels of social engagement, even in the presence of high residential mobility. The presence of family households effectively moderates the relationship between residential mobility and social engagement in neighbourhoods. In particular, the negative impact of residential mobility on social engagement is attenuated in neighbourhoods with a higher proportion of family households. Families living close could develop strong connections through their

children, leading to supportive communities where they exchange assistance and advice, and families maintain social networks (Bouw & Karsten, 2004; Karsten, 2007). It is safe to say that the family can still be seen as the pillar of this urban cohesion (Fonseca et al., 2019). The statistical analysis showed that with a high presence of families in neighbourhoods, people indicated more contact with individuals within their neighbourhood. Therefore, family-oriented communities fostered residents' sense of belonging, social cohesion, and connectedness. New attention must be given to the positive influence these families could have on the neighbourhood and the city of Amsterdam. Incidentally, we see from the control variables that the parent's educational level is also essential; when more parents with a higher degree of education, these neighbourhoods show more contact with each other. This is because education significantly predicts social engagement, with highly educated individuals more likely to engage in social bonds than lower-educated individuals (Marsh & Kaase, 1979; Putnam, 2000; Egerton, 2002).

This study has shed light on the complex dynamics surrounding residential mobility, family households, and neighbourhood social engagement in Amsterdam. The findings confirm that residential mobility has a negative impact on social engagement within neighbourhoods. Frequent moves disrupt social networks and hinder establishing and maintaining meaningful community connections, leading to feelings of isolation and disconnection. The presence of families within the neighbourhood does adversely affect this mechanism. Neighbourhoods with a higher concentration of families exhibit higher levels of social participation, indicating a stronger sense of community, social cohesion, and connectedness among residents. Moving forward, urban planning and community development initiatives should still recognise and harness families' positive influence in promoting stability, social connections, and a sense of belonging in neighbourhoods.

#### 5.2 Discussion

This thesis started with the intended purpose of shedding light on the factors that shape social engagement and provide valuable insights for urban planning and community development efforts. The hypothesis has arisen from the theory, which has been substantiated by utilising the static analysis. Family households play a vital role in community building within Amsterdam. A clear answer has emerged with four significant multiple regression analyses conducted without crossing any statistical assumptions. Moreover, with the size of the population, the large degree of explained variance and the small degree of the standard deviation of the different variables, it is possible to speak with great certainty about the statements made within the conclusion. In response to the results of static models, renewed attention should be paid to the positive effect on families in the city. However, some limitations within the study must be addressed.

The data from the municipality of Amsterdam was solely based on the experiences and ratings of respondents given to their neighbourhood. The respondent's level of engagement could not be measured. Therefore everything had to be tested at the neighbourhood level instead of being able to test individual behaviour. This could be a concern because there are still doubts about the proximity of households with different socio-economic backgrounds and how they will automatically lead to social interaction. Living in a diverse neighbourhood does not automatically lead to more various networks (Blokland & Van Eijk, 2010). The family households could not be made into an independent variable. Their impact had to be made visible in some other way. At the district level, statements can undoubtedly be made, but what has already emerged is that the degree of social participation is a very complex concept. Now we can assume that there is indeed a higher degree of participation in neighbourhoods where the presence of families is high. However, testing whether families showed more participation behaviour than other households was not possible. Furthermore, respondents are now clustered in neighbourhoods, and by performing a multiple linear regression over all residents, the assumption of independence of observations has been violated. Residents within a particular neighbourhood have more in common with each other than residents in other neighbourhoods. Therefore this thesis cannot estimate the extent to which the violation of this assumption influences the analysis results. It may be all right, and the results give a good picture of the actual situation, but they may be distorted. However, a different method could have been used. This was a between-subject multilevel analysis. This statistical method allows for the examination of relationships and variations at different levels of nested data, capturing both individual-level and group-level effects in a single analysis. However, in the end, a multilevel analysis was deemed complex. Nevertheless, statistical power could have been higher, enabling more generalisation of the findings when using this statistical method.

#### 6. Policy recommendations

This policy advice answers question (3); What policies or programs can promote social engagement and community-building neighbourhoods with high levels of residential mobility, and how can families be preserved to contribute to the city's social structures? The answers to these questions are based on the conclusion from the statistical results.

It became clear that there is a lack of social engagement among people in neighbourhoods with a high degree of residential mobility. This is due to residents' lower degree of community attachment (Song & Lim, 2021). High residential mobility in neighbourhoods is often due to large numbers of rental housing. After all, this does not have to be wrong because renting provides more flexibility to move to a different area if necessary (Song & Lim, 2021; Gijzel, 2018; Karsten, 2019). However, it contradicts the stable environment needed to increase community attachment. Homeownership is a response to the fast dynamic rental market. Based on the idea that homeownership has various benefits for communities in neighbourhoods, whereby homeowners are known to participate more actively in community issues (McCabe, 2013). Therefore it is essential to encourage a positive relationship between people and their communities by providing people with stable housing options and reinforcing tenant's rights. Different studies support the argument that homeownership increases community attachment, as studies have shown that increasing residential stability and creating economic stakes for the resident in the neighbourhood promotes meaningful social interactions in the surrounding environment (Sampson, 1988; McCabe, 2013; Song & Lim, 2021). The fundamental assumption is that the more people can enjoy an environment sustainably under stable conditions, the more likely they are to build positive experiences and memories regarding their communities (Kasarda & Janowitz, 1974). Policies that promote homeownership are based on the idea that homeownership has various benefits for communities in neighbourhoods, whereby homeowners are known to participate more actively in community issues (McCabe, 2013). Therefore it is essential to encourage a positive relationship between people and their communities by providing people with stable housing options and reinforcing tenant's rights. Besides, community development furthermore should fundamentally focus on building an attractive environment where people would wish to stay and live (Song & Lim, 2021).

It is essential to maintain the cohesion of families and retain existing families within the urban setting. Families could play a crucial role in fostering community engagement within a locality. The presence of numerous families within Amsterdam can have a favourable impact on the neighbourhood dynamics and could lead to an overall positive city transformation. The family, therefore, should be included in future programs. Without specific attention, Amsterdam could become a city for the young, childless and wealthy, undermining their positive influence. (Siedentop et al., 2018; Barlindhaug, 2018; Karsten, 2020). The problem is concentrated by the fact that the first incentive to leave the city was to get a bigger house because the opportunities for this are small in Amsterdam (Municipality of Amsterdam, 2022). Families are often too late to buy a house for a reasonable size and price in Amsterdam. They could not make the next step in their housing career in their city due to financial reasons. These families felt forced to leave and buy a house in a less popular place for a relatively low price (Karsten, 2020; Municipality of Amsterdam, 2022). This is what is called; the further gentrifying of the city. Highly educated families with moderate to high incomes suffer from this displacement. The group of displaced families experiences a push out of the city without strong positive pulls from their new residential environment (Karsten, 2020). In order to ensure adequate availability of family homes in upcoming development processes, it behoves the municipality to prioritise this matter. One potential remedy is to expand the allocation of rental and owner-occupied housing to individuals with local connections through the utilisation of public law instruments (VNG, 2017). As well, the housing cooperatives should be able to play a role in making houses available for families. However, this often turns out to be a problematic forcefield (Meijer, 2020). Central is that the affordable housing in urban haven streets will require new attention (Karsten, 2020). Eventually, adequate housing for families will maintain the city's social structure in the longer term. Furthermore, it will also be essential to maintain and protect the current affordable housing stock. Many family homes are bought and held to rent out at a high price. To counter this, purchase measures must be

introduced. The affordable purchase stock is thus protected against speculation and remains accessible to many family households.

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# APPENDIX

# **1.1 Charts**

Chart 1; Households: % with children Neighborhoods in 2020 source; BBGAz



# Households: % with children Neighborhoods in 2023

much more than average	> 34,7%
around the urban average	17,6 - 29,0%
less than average	11,9 - 17,5%
much less than average	< 11,8%
urban average	23,3%



# Chart 2; Mutation rate total Neighborhoods in 2020 source; BBGA

# Mution rate total Neighborhoods in 2020

urban average	18,8%
much less than average	< 9,4%
less than average	9,5 - 14,1%
around the urban average	14,2 - 23,4%
more than average	23,5 - 28,1%
much more than average	> 28,1%





Chart; 4 VO: % parents highly educated Neighborhoods in 2020 source; BBGA





# SES gemiddeld (2-10) Wijken in 2020

📕 veel beter dan gemiddeld	> 6,9
📃 beter dan gemiddeld	6,5 — 6,9
rond het stedelijk gemiddelde	5,6 — 6,4
📕 slechter dan gemiddeld	5,1 — 5,5
📕 veel slechter dan gemiddeld	< 5,0
stedelijk gemiddelde	6,0

# **1.2 SYNTAX**

\* Encoding: UTF-8. GET FILE='H:\Mijn documenten\WiA2021-stan.sav'. DATASET NAME DataSet1 WINDOW=FRONT

compute SOCIALPAR=o. if (bctk15 eq 'Ao1') SOCIALPAR=6.3. if (bctk15 eq 'Ao2') SOCIALPAR=6.3. if (bctk15 eg 'Ao3') SOCIALPAR=5.5. if (bctk15 eq 'Ao4') SOCIALPAR=4.3. if (bctk15 eq 'Ao5') SOCIALPAR=5.4. if (bctk15 eq 'Ao6') SOCIALPAR=6.1. if (bctk15 eq 'Ao7') SOCIALPAR=5.5. if (bctk15 eg 'Ao8') SOCIALPAR=6. if (bctk15 eq 'Ao9') SOCIALPAR=5.2. if (bctk15 eq 'E12') SOCIALPAR=6.3. if (bctk15 eq 'E13') SOCIALPAR=0. if (bctk15 eq 'E14') SOCIALPAR=6. if (bctk15 eq 'E15') SOCIALPAR=o. if (bctk15 eq 'E16') SOCIALPAR=4.9. if (bctk15 eq 'E17') SOCIALPAR=5.4. if (bctk15 eq 'E18') SOCIALPAR=5.6. if (bctk15 eq 'E19') SOCIALPAR=0. if (bctk15 eq 'E20') SOCIALPAR=6.2. if (bctk15 eq 'E21') SOCIALPAR=5.8. if (bctk15 eq 'E22') SOCIALPAR=5.4. if (bctk15 eq 'E36') SOCIALPAR=5.4. if (bctk15 eq 'E37') SOCIALPAR=5.5. if (bctk15 eq 'E38') SOCIALPAR=5.7. if (bctk15 eq 'E39') SOCIALPAR=5.6. if (bctk15 eq 'E40') SOCIALPAR=5.9. if (bctk15 eq 'E41') SOCIALPAR=5.9. if (bctk15 eq 'E42') SOCIALPAR=5.6. if (bctk15 eq 'E43') SOCIALPAR=5.7. if (bctk15 eq 'E75') SOCIALPAR=6.4. if (bctk15 eq 'F11') SOCIALPAR=0. if (bctk15 eq 'F76') SOCIALPAR=0. if (bctk15 eq 'F77') SOCIALPAR=0. if (bctk15 eq 'F78') SOCIALPAR=0. if (bctk15 eq 'F79') SOCIALPAR=5. if (bctk15 eq 'F8o') SOCIALPAR=o. if (bctk15 eq 'F81') SOCIALPAR=o. if (bctk15 eg 'F82') SOCIALPAR=5.6. if (bctk15 eq 'F83') SOCIALPAR=5.3. if (bctk15 eq 'F84') SOCIALPAR=4.8. if (bctk15 eq 'F85') SOCIALPAR=4.8. if (bctk15 eq 'F86') SOCIALPAR=6. if (bctk15 eq 'F87') SOCIALPAR=4.8. if (bctk15 eq 'F88') SOCIALPAR=5.1. if (bctk15 eq 'F89') SOCIALPAR=4.5. if (bctk15 eq 'K23') SOCIALPAR=5.9.

if (bctk15 eq 'K24') SOCIALPAR=5.9. if (bctk15 eq 'K25') SOCIALPAR=6. if (bctk15 eq 'K26') SOCIALPAR=5.9. if (bctk15 eq 'K44') SOCIALPAR=6. if (bctk15 eq 'K45') SOCIALPAR=5.2. if (bctk15 eq 'K46') SOCIALPAR=5.7. if (bctk15 eq 'K47') SOCIALPAR=5.2. if (bctk15 eq 'K48') SOCIALPAR=5.6. if (bctk15 eq 'K49') SOCIALPAR=5.8. if (bctk15 eg 'K52') SOCIALPAR=6.3. if (bctk15 eq 'K53') SOCIALPAR=5.9. if (bctk15 eq 'K54') SOCIALPAR=5.6. if (bctk15 eq 'K59') SOCIALPAR=0. if (bctk15 eq 'K90') SOCIALPAR=5.2. if (bctk15 eq 'K91') SOCIALPAR=5.6. if (bctk15 eq 'M27') SOCIALPAR=5.3. if (bctk15 eq 'M28') SOCIALPAR=6.2. if (bctk15 eq 'M29') SOCIALPAR=5.9. if (bctk15 eq 'M30') SOCIALPAR=5.6. if (bctk15 eq 'M31') SOCIALPAR=5.8. if (bctk15 eq 'M32') SOCIALPAR=5.5. if (bctk15 eq 'M33') SOCIALPAR=5.8. if (bctk15 eq 'M34') SOCIALPAR=5.3. if (bctk15 eq 'M35') SOCIALPAR=5.6. if (bctk15 eq 'M51') SOCIALPAR=6.1. if (bctk15 eq 'M55') SOCIALPAR=0. if (bctk15 eq 'M56') SOCIALPAR=6.2. if (bctk15 eq 'M57') SOCIALPAR=6.1. if (bctk15 eq 'M58') SOCIALPAR=6.9. if (bctk15 eq 'N6o') SOCIALPAR=6.3. if (bctk15 eq 'N61') SOCIALPAR=5.4. if (bctk15 eq 'N62') SOCIALPAR=0. if (bctk15 eq 'N63') SOCIALPAR=5.8. if (bctk15 eq 'N64') SOCIALPAR=6.2. if (bctk15 eq 'N65') SOCIALPAR=0. if (bctk15 eq 'N66') SOCIALPAR=5. if (bctk15 eq 'N67') SOCIALPAR=0. if (bctk15 eq 'N68') SOCIALPAR=6.3. if (bctk15 eq 'N69') SOCIALPAR=5.1. if (bctk15 eq 'N70') SOCIALPAR=5.6. if (bctk15 eq 'N71') SOCIALPAR=5.8. if (bctk15 eq 'N73') SOCIALPAR=5.6. if (bctk15 eq 'N74') SOCIALPAR=0. if (bctk15 eq 'T92') SOCIALPAR=6.1. if (bctk15 eq 'T93') SOCIALPAR=0. if (bctk15 eq 'T94') SOCIALPAR=7.5. if (bctk15 eq 'T95') SOCIALPAR=6.9. if (bctk15 eq 'T96') SOCIALPAR=o. if (bctk15 eq 'T97') SOCIALPAR=4.8. if (bctk15 eg 'T98') SOCIALPAR=0. recode SOCIALPAR (o=sysmis). EXECUTE.

compute vdyn20=0.

if (bctk15 eq 'A01') vdyn20=17.7. if (bctk15 eq 'Ao2') vdyn20=21.. if (bctk15 eq 'Ao3') vdyn20=27.. if (bctk15 eq 'A04') vdyn20=37.9. if (bctk15 eq 'Ao5') vdyn20=32.. if (bctk15 eq 'Ao6') vdyn20=22.8. if (bctk15 eq 'A07') vdyn20=37.4. if (bctk15 eq 'Ao8') vdyn20=27.9. if (bctk15 eq 'A09') vdyn20=29.7. if (bctk15 eg 'E12') vdyn20=17.4. if (bctk15 eq 'E13') vdyn20=40.3. if (bctk15 eg 'E14') vdyn20=16.5. if (bctk15 eq 'E15') vdyn20=25.2. if (bctk15 eq 'E16') vdyn20=20.3. if (bctk15 eq 'E17') vdyn20=18.. if (bctk15 eq 'E18') vdyn20=20.9. if (bctk15 eq 'E19') vdyn20=12.2. if (bctk15 eq 'E20') vdyn20=16.7. if (bctk15 eq 'E21') vdyn20=19.7. if (bctk15 eq 'E22') vdyn20=33.3. if (bctk15 eq 'E36') vdyn20=21.8. if (bctk15 eg 'E37') vdyn20=18.9. if (bctk15 eg 'E38') vdyn20=16.7. if (bctk15 eq 'E39') vdyn20=24.7. if (bctk15 eq 'E40') vdyn20=22.5. if (bctk15 eq 'E41') vdyn20=20.5. if (bctk15 eq 'E42') vdyn20=17.5. if (bctk15 eq 'E43') vdyn20=23.1. if (bctk15 eq 'E75') vdyn20=21.6. if (bctk15 eq 'F11') vdyn20=23.2. if (bctk15 eq 'F76') vdyn20=88.2. if (bctk15 eq 'F77') vdyn2o=.. if (bctk15 eg 'F78') vdyn2o=.. if (bctk15 eq 'F79') vdyn20=14.4. if (bctk15 eq 'F8o') vdyn2o=.. if (bctk15 eq 'F81') vdyn20=42.9. if (bctk15 eq 'F82') vdyn20=11.. if (bctk15 eq 'F83') vdyn20=17.2. if (bctk15 eq 'F84') vdyn20=15.2. if (bctk15 eq 'F85') vdyn20=15.6. if (bctk15 eq 'F86') vdyn20=14.9. if (bctk15 eg 'F87') vdyn20=21.. if (bctk15 eq 'F88') vdyn20=19.3. if (bctk15 eq 'F89') vdyn20=28.2. if (bctk15 eq 'K23') vdyn20=11.7. if (bctk15 eq 'K24') vdyn20=22.3. if (bctk15 eq 'K25') vdyn20=25.5. if (bctk15 eq 'K26') vdyn20=19.1. if (bctk15 eq 'K44') vdyn20=19.6. if (bctk15 eq 'K45') vdyn20=26.3. if (bctk15 eg 'K46') vdyn20=22.4. if (bctk15 eq 'K47') vdyn20=13.6. if (bctk15 eq 'K48') vdyn20=17.7. if (bctk15 eq 'K49') vdyn20=18.7.

if (bctk15 eq 'K52') vdyn20=19.9. if (bctk15 eq 'K53') vdyn20=19.2. if (bctk15 eq 'K54') vdyn20=19.6. if (bctk15 eq 'K59') vdyn20=15.4. if (bctk15 eq 'K90') vdyn20=68.7. if (bctk15 eq 'K91') vdyn20=22.5. if (bctk15 eq 'M27') vdyn20=20.3. if (bctk15 eq 'M28') vdyn20=13.5. if (bctk15 eq 'M29') vdyn20=26.7. if (bctk15 eq 'M30') vdyn20=17.1. if (bctk15 eq 'M31') vdyn20=15.3. if (bctk15 eg 'M32') vdyn20=17.8. if (bctk15 eq 'M33') vdyn20=18.1. if (bctk15 eq 'M34') vdyn20=13.7. if (bctk15 eq 'M35') vdyn20=30.6. if (bctk15 eq 'M51') vdyn20=13.6. if (bctk15 eq 'M55') vdyn20=50.. if (bctk15 eq 'M56') vdyn20=11.5. if (bctk15 eq 'M57') vdyn20=27.8. if (bctk15 eq 'M58') vdyn20=19.7. if (bctk15 eq 'N6o') vdyn20=10.6. if (bctk15 eg 'N61') vdyn20=32.6. if (bctk15 eq 'N62') vdyn20=9.. if (bctk15 eq 'N63') vdyn20=33.3. if (bctk15 eq 'N64') vdyn20=9.. if (bctk15 eq 'N65') vdyn20=8.. if (bctk15 eq 'N66') vdyn20=12.6. if (bctk15 eg 'N67') vdyn20=8.. if (bctk15 eq 'N68') vdyn20=15.8. if (bctk15 eg 'N69') vdyn20=15.. if (bctk15 eq 'N70') vdyn20=14.. if (bctk15 eq 'N71') vdyn20=12.5. if (bctk15 eg 'N73') vdyn20=12.. if (bctk15 eq 'N74') vdyn20=8.. if (bctk15 eq 'T92') vdyn20=6.. if (bctk15 eq 'T93') vdyn20=46.3. if (bctk15 eq 'T94') vdyn20=8.. if (bctk15 eq 'T95') vdyn20=6.. if (bctk15 eq 'T96') vdyn20=91.1. if (bctk15 eq 'T97') vdyn20=17.5. if (bctk15 eq 'T98') vdyn20=.. recode vdyn20 (o=sysmis). EXECUTE.

compute DUMMYGEZIN=0. execute. if (bctk15 eq 'Ao1')DUMMYGEZIN=17. if (bctk15 eq 'Ao2')DUMMYGEZIN=13. if (bctk15 eq 'Ao3')DUMMYGEZIN=13. if (bctk15 eq 'Ao4')DUMMYGEZIN=6.9. if (bctk15 eq 'Ao5')DUMMYGEZIN=7.9. if (bctk15 eq 'Ao6')DUMMYGEZIN=13.2. if (bctk15 eq 'Ao7')DUMMYGEZIN=14.5. if (bctk15 eq 'Ao9')DUMMYGEZIN=12.9. if (bctk15 eq 'E12')DUMMYGEZIN=19.1. if (bctk15 eq 'E13')DUMMYGEZIN=16.8. if (bctk15 eq 'E14')DUMMYGEZIN=21.2. if (bctk15 eg 'E15')DUMMYGEZIN=28.9. if (bctk15 eq 'E16')DUMMYGEZIN=25.9. if (bctk15 eq 'E17')DUMMYGEZIN=23.7. if (bctk15 eq 'E18')DUMMYGEZIN=19.8. if (bctk15 eg 'E19')DUMMYGEZIN=28.5. if (bctk15 eg 'E20')DUMMYGEZIN=18.8. if (bctk15 eq 'E21')DUMMYGEZIN=15.5. if (bctk15 eq 'E22')DUMMYGEZIN=17.2. if (bctk15 eq 'E36')DUMMYGEZIN=18.3. if (bctk15 eq 'E37')DUMMYGEZIN=19.4. if (bctk15 eq 'E38')DUMMYGEZIN=27.3. if (bctk15 eg 'E39')DUMMYGEZIN=15.8. if (bctk15 eq 'E40')DUMMYGEZIN=15.7. if (bctk15 eq 'E41')DUMMYGEZIN=21.6. if (bctk15 eq 'E42')DUMMYGEZIN=15.6. if (bctk15 eq 'E43')DUMMYGEZIN=17. if (bctk15 eq 'E75')DUMMYGEZIN=18.2. if (bctk15 eg 'F11')DUMMYGEZIN=22. if (bctk15 eg 'F76')DUMMYGEZIN=1.6. if (bctk15 eq 'F77')DUMMYGEZIN=40.4. if (bctk15 eq 'F78')DUMMYGEZIN=37.4. if (bctk15 eq 'F79')DUMMYGEZIN=32.8. if (bctk15 eq 'F8o')DUMMYGEZIN=24.7. if (bctk15 eg 'F81')DUMMYGEZIN=26.1. if (bctk15 eq 'F82')DUMMYGEZIN=44.8. if (bctk15 eg 'F83')DUMMYGEZIN=30.7. if (bctk15 eq 'F84')DUMMYGEZIN=36.5. if (bctk15 eq 'F85')DUMMYGEZIN=26.9. if (bctk15 eg 'F86')DUMMYGEZIN=35.3. if (bctk15 eq 'F87')DUMMYGEZIN=25.6. if (bctk15 eg 'F88')DUMMYGEZIN=25.9. if (bctk15 eq 'F89')DUMMYGEZIN=14.8. if (bctk15 eq 'K23')DUMMYGEZIN=38. if (bctk15 eq 'K24')DUMMYGEZIN=19.4. if (bctk15 eq 'K25')DUMMYGEZIN=15.9. if (bctk15 eg 'K26')DUMMYGEZIN=32.4. if (bctk15 eq 'K44')DUMMYGEZIN=23.6. if (bctk15 eq 'K45')DUMMYGEZIN=13.2. if (bctk15 eq 'K46')DUMMYGEZIN=15.2. if (bctk15 eq 'K47')DUMMYGEZIN=22.3. if (bctk15 eq 'K48')DUMMYGEZIN=23.9. if (bctk15 eq 'K49')DUMMYGEZIN=35. if (bctk15 eq 'K52')DUMMYGEZIN=24. if (bctk15 eq 'K53')DUMMYGEZIN=18. if (bctk15 eq 'K54')DUMMYGEZIN=18. if (bctk15 eg 'K59')DUMMYGEZIN=29. if (bctk15 eg 'K90')DUMMYGEZIN=13.3. if (bctk15 eq 'K91')DUMMYGEZIN=21.6. if (bctk15 eq 'M27')DUMMYGEZIN=19.5. if (bctk15 eq 'M28')DUMMYGEZIN=29.3. if (bctk15 eq 'M29')DUMMYGEZIN=17.8. if (bctk15 eq 'M30')DUMMYGEZIN=19.5. if (bctk15 eq 'M31')DUMMYGEZIN=24.6. if (bctk15 eq 'M32')DUMMYGEZIN=20.2. if (bctk15 eg 'M33')DUMMYGEZIN=22.5. if (bctk15 eq 'M34')DUMMYGEZIN=25.8. if (bctk15 eq 'M35')DUMMYGEZIN=17.4. if (bctk15 eq 'M51')DUMMYGEZIN=46.8. if (bctk15 eq 'M55')DUMMYGEZIN=o. if (bctk15 eq 'M56')DUMMYGEZIN=51.3. if (bctk15 eg 'M57')DUMMYGEZIN=19.5. if (bctk15 eq 'M58')DUMMYGEZIN=25.8. if (bctk15 eq 'N6o')DUMMYGEZIN=21.7. if (bctk15 eq 'N61')DUMMYGEZIN=8.8. if (bctk15 eq 'N62')DUMMYGEZIN=38.1. if (bctk15 eq 'N63')DUMMYGEZIN=15.6. if (bctk15 eq 'N64')DUMMYGEZIN=35.8. if (bctk15 eq 'N65')DUMMYGEZIN=46.2. if (bctk15 eq 'N66')DUMMYGEZIN=35.7. if (bctk15 eq 'N67')DUMMYGEZIN=46.6. if (bctk15 eg 'N68')DUMMYGEZIN=33.1. if (bctk15 eg 'N69')DUMMYGEZIN=24.1. if (bctk15 eg 'N70')DUMMYGEZIN=38.3. if (bctk15 eq 'N71')DUMMYGEZIN=30.8. if (bctk15 eq 'N73')DUMMYGEZIN=27.5. if (bctk15 eq 'N74')DUMMYGEZIN=34.4. if (bctk15 eq 'T92')DUMMYGEZIN=31.1. if (bctk15 eg 'T93')DUMMYGEZIN=6.3. if (bctk15 eq 'T94')DUMMYGEZIN=38.7. if (bctk15 eg 'T95')DUMMYGEZIN=42.9. if (bctk15 eq 'T96')DUMMYGEZIN=2.2. if (bctk15 eq 'T97')DUMMYGEZIN=24.7. if (bctk15 eg 'T98')DUMMYGEZIN=23.1. recode DUMMYGEZIN (o=sysmis). EXECUTE.

compute DUMMYSES=o. EXECUTE.

iif (bctk15 eq 'Ao1')DUMMYSES=1. if (bctk15 eg 'Ao2')DUMMYSES=1. if (bctk15 eq 'Ao3')DUMMYSES=1. if (bctk15 eg 'A04')DUMMYSES=1. if (bctk15 eq 'Ao5')DUMMYSES=1. if (bctk15 eq 'Ao6')DUMMYSES=1. if (bctk15 eq 'Ao7')DUMMYSES=1. if (bctk15 eq 'Ao8')DUMMYSES=1. if (bctk15 eq 'Ao9')DUMMYSES=1. if (bctk15 eq 'E12')DUMMYSES=1. if (bctk15 eq 'E13')DUMMYSES=1. if (bctk15 eq 'E14')DUMMYSES=0. if (bctk15 eg 'E15')DUMMYSES=1. if (bctk15 eq 'E16')DUMMYSES=o. if (bctk15 eq 'E17')DUMMYSES=o.. if (bctk15 eq 'E18')DUMMYSES=1.

if (bctk15 eq 'E19')DUMMYSES=1. if (bctk15 eq 'E20')DUMMYSES=1. if (bctk15 eq 'E21')DUMMYSES=1. if (bctk15 eq 'E22')DUMMYSES=0. if (bctk15 eg 'E36')DUMMYSES=1. if (bctk15 eq 'E37')DUMMYSES=0. if (bctk15 eq 'E38')DUMMYSES=0. if (bctk15 eq 'E39')DUMMYSES=1. if (bctk15 eg 'E40')DUMMYSES=1. if (bctk15 eq 'E41')DUMMYSES=1. if (bctk15 eq 'E42')DUMMYSES=0. if (bctk15 eq 'E43')DUMMYSES=1. if (bctk15 eq 'E75')DUMMYSES=1. if (bctk15 eq 'F11')DUMMYSES=3. if (bctk15 eq 'F76')DUMMYSES=0. if (bctk15 eg 'F77')DUMMYSES=3. if (bctk15 eq 'F78')DUMMYSES=3. if (bctk15 eq 'F79')DUMMYSES=0. if (bctk15 eq 'F8o')DUMMYSES=3. if (bctk15 eq 'F81')DUMMYSES=0. if (bctk15 eg 'F82')DUMMYSES=1. if (bctk15 eq 'F83')DUMMYSES=0. if (bctk15 eg 'F84')DUMMYSES=0. if (bctk15 eq 'F85')DUMMYSES=0. if (bctk15 eq 'F86')DUMMYSES=0. if (bctk15 eq 'F87')DUMMYSES=0. if (bctk15 eq 'F88')DUMMYSES=o. if (bctk15 eg 'F89')DUMMYSES=1. if (bctk15 eq 'K23')DUMMYSES=1. if (bctk15 eg 'K24')DUMMYSES=1. if (bctk15 eq 'K25')DUMMYSES=1. if (bctk15 eq 'K26')DUMMYSES=1. if (bctk15 eq 'K44')DUMMYSES=1. if (bctk15 eq 'K45')DUMMYSES=1. if (bctk15 eg 'K46')DUMMYSES=1. if (bctk15 eq 'K47')DUMMYSES=0. if (bctk15 eq 'K48')DUMMYSES=1. if (bctk15 eq 'K49')DUMMYSES=1. if (bctk15 eq 'K52')DUMMYSES=1. if (bctk15 eq 'K53')DUMMYSES=1. if (bctk15 eq 'K54')DUMMYSES=1. if (bctk15 eg 'K59')DUMMYSES=1. if (bctk15 eq 'K90')DUMMYSES=1. if (bctk15 eq 'K91')DUMMYSES=1. if (bctk15 eq 'M27')DUMMYSES=0. if (bctk15 eq 'M28')DUMMYSES=1. if (bctk15 eq 'M29')DUMMYSES=1. if (bctk15 eq 'M30')DUMMYSES=0. if (bctk15 eq 'M31')DUMMYSES=0. if (bctk15 eq 'M32')DUMMYSES=0. if (bctk15 eg 'M33')DUMMYSES=0. if (bctk15 eq 'M34')DUMMYSES=0. if (bctk15 eg 'M35')DUMMYSES=1. if (bctk15 eq 'M51')DUMMYSES=1.

if (bctk15 eq 'M55')DUMMYSES=3. if (bctk15 eq 'M56')DUMMYSES=1. if (bctk15 eq 'M57')DUMMYSES=0. if (bctk15 eq 'M58')DUMMYSES=1. if (bctk15 eg 'N60')DUMMYSES=0. if (bctk15 eq 'N61')DUMMYSES=1. if (bctk15 eq 'N62')DUMMYSES=3. if (bctk15 eq 'N63')DUMMYSES=1. if (bctk15 eq 'N64')DUMMYSES=0. if (bctk15 eq 'N65')DUMMYSES=1. if (bctk15 eg 'N66')DUMMYSES=0. if (bctk15 eg 'N67')DUMMYSES=1. if (bctk15 eq 'N68')DUMMYSES=1. if (bctk15 eq 'N69')DUMMYSES=0. if (bctk15 eq 'N70')DUMMYSES=0. if (bctk15 eq 'N71')DUMMYSES=0. if (bctk15 eq 'N73')DUMMYSES=0. if (bctk15 eq 'N74')DUMMYSES=0. if (bctk15 eq 'T92')DUMMYSES=0. if (bctk15 eq 'T93')DUMMYSES=0. if (bctk15 eq 'T94')DUMMYSES=o. if (bctk15 eq 'T95')DUMMYSES=1. if (bctk15 eq 'T97')DUMMYSES=3. if (bctk15 eq 'T98')DUMMYSES=0. recode DUMMYSES (3=sysmis). EXECUTE.

RECODE DUMMYSES (o = o) (1 = 1) (ELSE = SYSMIS) INTO DUMMYSES\_new. VALUE LABELS DUMMYSES\_new o "laag\_aandeel" 1 "Hoog\_aandeel". EXECUTE.

compute opleidingniveau=o. EXECUTE. if (bctk15 eq 'Ao1') opleidingniveau=70. if (bctk15 eq 'Ao2') opleidingniveau=78.

if (bctk15 eq 'Ao2') opleidingniveau=78. if (bctk15 eq 'Ao3') opleidingniveau=87. if (bctk15 eq 'Ao4') opleidingniveau=69. if (bctk15 eq 'Ao5') opleidingniveau=65. if (bctk15 eq 'Ao6') opleidingniveau=79. if (bctk15 eq 'Ao7') opleidingniveau=86. if (bctk15 eq 'Ao8') opleidingniveau=86. if (bctk15 eg 'Ao9') opleidingniveau=85. if (bctk15 eq 'E12') opleidingniveau=68. if (bctk15 eq 'E13') opleidingniveau=o. if (bctk15 eq 'E14') opleidingniveau=o. if (bctk15 eq 'E15') opleidingniveau=o. if (bctk15 eq 'E16') opleidingniveau=53. if (bctk15 eq 'E17') opleidingniveau=85. if (bctk15 eq 'E18') opleidingniveau=24. if (bctk15 eg 'E19') opleidingniveau=34. if (bctk15 eg 'E20') opleidingniveau=37. if (bctk15 eq 'E21') opleidingniveau=74. if (bctk15 eq 'E22') opleidingniveau=59. if (bctk15 eq 'E36') opleidingniveau=64.

if (bctk15 eq 'E37') opleidingniveau=34. if (bctk15 eq 'E38') opleidingniveau=61. if (bctk15 eq 'E39') opleidingniveau=40. if (bctk15 eq 'E4o') opleidingniveau=42. if (bctk15 eq 'E41') opleidingniveau=58. if (bctk15 eq 'E42') opleidingniveau=77. if (bctk15 eq 'E43') opleidingniveau=64. if (bctk15 eq 'E75') opleidingniveau=44. if (bctk15 eq 'F11') opleidingniveau=75. if (bctk15 eg 'F76') opleidingniveau=90. if (bctk15 eq 'F77') opleidingniveau=87. if (bctk15 eq 'F78') opleidingniveau=o. if (bctk15 eq 'F79') opleidingniveau=o. if (bctk15 eq 'F8o') opleidingniveau=o. if (bctk15 eq 'F81') opleidingniveau=27. if (bctk15 eq 'F82') opleidingniveau=o. if (bctk15 eq 'F83') opleidingniveau=51. if (bctk15 eq 'F84') opleidingniveau=56. if (bctk15 eq 'F85') opleidingniveau=31. if (bctk15 eq 'F86') opleidingniveau=27. if (bctk15 eq 'F87') opleidingniveau=30. if (bctk15 eq 'F88') opleidingniveau=49. if (bctk15 eg 'F89') opleidingniveau=21. if (bctk15 eq 'K23') opleidingniveau=29. if (bctk15 eq 'K24') opleidingniveau=37. if (bctk15 eq 'K25') opleidingniveau=61. if (bctk15 eq 'K26') opleidingniveau=74. if (bctk15 eq 'K44') opleidingniveau=57. if (bctk15 eq 'K45') opleidingniveau=88. if (bctk15 eg 'K46') opleidingniveau=88. if (bctk15 eq 'K47') opleidingniveau=67. if (bctk15 eq 'K48') opleidingniveau=66. if (bctk15 eq 'K49') opleidingniveau=42. if (bctk15 eq 'K52') opleidingniveau=60. if (bctk15 eq 'K53') opleidingniveau=90. if (bctk15 eq 'K54') opleidingniveau=81. if (bctk15 eq 'K59') opleidingniveau=51. if (bctk15 eq 'K90') opleidingniveau=64. if (bctk15 eq 'K91') opleidingniveau=90. if (bctk15 eg 'M27') opleidingniveau=66. if (bctk15 eq 'M28') opleidingniveau=68. if (bctk15 eg 'M29') opleidingniveau=61. if (bctk15 eq 'M30') opleidingniveau=74. if (bctk15 eq 'M31') opleidingniveau=71. if (bctk15 eq 'M32') opleidingniveau=48. if (bctk15 eq 'M33') opleidingniveau=40. if (bctk15 eq 'M34') opleidingniveau=48. if (bctk15 eq 'M35') opleidingniveau=37. if (bctk15 eq 'M51') opleidingniveau=29. if (bctk15 eg 'M55') opleidingniveau=61. if (bctk15 eg 'M56') opleidingniveau=70. if (bctk15 eq 'M57') opleidingniveau=o. if (bctk15 eg 'M58') opleidingniveau=65. if (bctk15 eq 'N6o') opleidingniveau=68.

if (bctk15 eq 'N61') opleidingniveau=85. if (bctk15 eq 'N62') opleidingniveau=o. if (bctk15 eq 'N63') opleidingniveau=60. if (bctk15 eq 'N64') opleidingniveau=85. if (bctk15 eq 'N65') opleidingniveau=78. if (bctk15 eq 'N66') opleidingniveau=40. if (bctk15 eq 'N67') opleidingniveau=58. if (bctk15 eq 'N68') opleidingniveau=31. if (bctk15 eq 'N69') opleidingniveau=90. if (bctk15 eg 'N70') opleidingniveau=74. if (bctk15 eq 'N71') opleidingniveau=24. if (bctk15 eg 'N73') opleidingniveau=26. if (bctk15 eq 'N74') opleidingniveau=33. if (bctk15 eq 'T92') opleidingniveau=31. if (bctk15 eq 'T93') opleidingniveau=o. if (bctk15 eq 'T94') opleidingniveau=52. if (bctk15 eq 'T95') opleidingniveau=o. if (bctk15 eq 'T96') opleidingniveau=89. if (bctk15 eq 'T97') opleidingniveau=66. if (bctk15 eq 'T98') opleidingniveau=o. recode opleidingniveau (o=sysmis). EXECUTE.

COMPUTE vdynxgezinnen = vdyn20 \* DUMMYGEZIN. EXECUTE.

REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SOCIALPAR /METHOD=ENTER vdyn20 /METHOD=ENTER vdyn20, DUMMYSES, opleidingniveau /METHOD=ENTER vdyn20, DUMMYGEZIN, DUMMYSES, opleidingniveau /METHOD=ENTER vdyn20, DUMMYGEZIN, vdynxgezinnen, DUMMYSES, opleidingniveau /METHOD=ENTER vdyn20, DUMMYGEZIN, vdynxgezinnen, DUMMYSES, opleidingniveau /SCATTERPLOT=(\*ZRESID ,\*ZPRED) /RESIDUALS HISTOGRAM(ZRESID) /SAVE MAHAL COOK ZRESID.

DESCRIPTIVES SOCIALPAR vdyn20 DUMMYGEZIN DUMMYSES opleidingniveau.

model o

REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SOCIALPAR /METHOD=ENTER vdyn20 Model 1

REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SOCIALPAR /METHOD=ENTER vdyn20, DUMMYSES, opleidingniveau

Model 2

REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SOCIALPAR /METHOD=ENTER vdyn20, DUMMYGEZIN, DUMMYSES, opleidingniveau

Model 3

REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT SOCIALPAR /METHOD=ENTER vdyn20, DUMMYGEZIN, vdynxgezinnen, DUMMYSES, opleidingniveau

### 1.3 Data per district

#### % Mutation rate neighbourhoods 2020

Centrum	AA Haarlemmerbuurt	AA	17,7
Centrum	AB Jordaan	AB	21
Centrum	AC Grachtengordel-West	AC	27
Centrum	AD Burgwallen-Nieuwe Zijde	AD	37,9
Centrum	AE Burgwallen-Oude Zijde	AE	32
Centrum	AF Nieuwmarkt/Lastage	AF	22,8
Centrum	AG Grachtengordel-Zuid	AG	37,4
Centrum	AH De Weteringschans	AH	27,9
Centrum	AJ Weesperbuurt/Plantage	AJ	29,7
Centrum	AK Oostelijke Eilanden/Kadijken	АК	17,4

West	EA Sloterdijk-West	EA	40,3
West	EB Spaarndammerbuurt/Zeeheldenbuurt	EB	16,5
West	EC Houthavens	EC	25,2
West	ED De Kolenkit	ED	20,3
West	EE Landlust	EE	18
West	EF Erasmuspark	EF	20,9
West	EG Centrale Markt	EG	12,2
West	EH Staatsliedenbuurt	EH	16,7
West	EJ Frederik Hendrikbuurt	EJ	19,7
West	EK Van Galenbuurt	EK	33,3
West	EL Geuzenbuurt	EL	21,8
West	EM Hoofdweg e.o.	EM	18,9
West	EN ChassÃf©buurt	EN	16,7
West	EP Bellamybuurt	EP	24,7
West	EQ Da Costabuurt	EQ	22,5
West	ER Westindische Buurt	ER	20,5
West	ES Van Lennepbuurt	ES	17,5
West	ET Overtoomse Sluis	ET	23,1
West	EU Helmersbuurt	EU	21,6
West	EV Vondelparkbuurt	EV	23,2
Nieuw-West	FA Sloterdijk Nieuw-West	FA	88,2
Nieuw-West	FB Geuzenveld	FB	0
Nieuw-West	FC Slotermeer-West	FC	0
Nieuw-West	FD Slotermeer-Noordoost	FD	14,4
Nieuw-West	FE Slotermeer-Zuidoost	FE	0
Nieuw-West	FF Lutkemeer/Ookmeer	FF	42,9
Nieuw-West	FG De Aker	FG	11
Nieuw-West	FH De Punt	FH	17,2
Nieuw-West	FJ Osdorp-Midden	FJ	15,2
Nieuw-West	FK Osdorp-Oost	FK	15,6
Nieuw-West	FL Slotervaart-Noord	FL	14,9

Nieuw-West	FM Overtoomse Veld	FM	21
Nieuw-West	FN Slotervaart-Zuid	FN	19,3
Nieuw-West	FP Westlandgracht	FP	28,2
Nieuw-West	FQ Sloten/Nieuw-Sloten	FQ	11,7
Zuid	KA Hoofddorppleinbuurt	КА	22,3
Zuid	KB Schinkelbuurt	КВ	25,5
Zuid	KC Willemspark	КС	19,1
Zuid	KD Museumkwartier	KD	19,6
Zuid	KE Oude Pijp	KE	26,3
Zuid	KF Nieuwe Pijp	KF	22,4
Zuid	KG Zuid Pijp	KG	13,6
Zuid	KH Stadionbuurt	КН	17,7
Zuid	KJ Apollobuurt	КJ	18,7
Zuid	KK Scheldebuurt	КК	19,9
Zuid	KL IJselbuurt	KL	19,2
Zuid	KM Rijnbuurt	КМ	19,6
Zuid	KN Prinses Irenebuurt e.o.	KN	15,4
Zuid	KP Zuidas	КР	68,7
Zuid	KQ Buitenveldert-West	KQ	22,5
Zuid	KR Buitenveldert-Oost	KR	20,3
Oost	MA Oostelijk Havengebied	MA	13,5
Oost	MB Weesperzijde	МВ	26,7
Oost	MC Oosterparkbuurt	МС	17,1
Oost	MD Transvaalbuurt	MD	15,3
Oost	ME Dapperbuurt	ME	17,8
Oost	MF Indische Buurt-West	MF	18,1
Oost	MG Indische Buurt-Oost	MG	13,7
Oost	MH Zeeburgereiland/Bovendiep	МН	30,6
Oost	MJ IJburg-West	MJ	13,6
Oost	MK IJburg-Oost	МК	50
Oost	ML IJburg-Zuid	ML	11,5

Oost	MM Frankendael	ММ	27,8
Oost	MN Middenmeer	MN	19,7
Oost	MP Betondorp	MP	10,6
Oost	MQ Omval/Overamstel	MQ	32,6
Noord	NA Oostzanerwerf	NA	9,7
Noord	NB Noordelijke IJ-oevers-West	NB	33,3
Noord	NC Tuindorp Oostzaan	NC	9,6
Noord	ND Kadoelen	ND	8,3
Noord	NE Banne Buiksloot	NE	12,6
Noord	NF Nieuwendammerdijk/Buiksloterdijk	NF	8,3
Noord	NG Elzenhagen	NG	15,8
Noord	NH Buikslotermeer	NH	15
Noord	NJ Waterlandpleinbuurt	NJ	14
Noord	NK Volewijck	NK	12,5
Noord	NL IJplein/Vogelbuurt	NL	12
Noord	NM Tuindorp Buiksloot	NM	8,5
Noord	NN Tuindorp Nieuwendam	NN	6,9
Noord	NP Noordelijke IJ-oevers-Oost	NP	46,3
Noord	NQ Waterland	NQ	8
Weesp	SA Driemond	SA	6
Zuidoost	TA Amstel III/Bullewijk	ТА	91,1
Zuidoost	TB Venserpolder	ТВ	17,5
Zuidoost	TC Amsterdamse Poort e.o.	ТС	0

# % Presence of family households per district.

Centrum	AA Haarlemmerbuurt	AA	17
Centrum	AB Jordaan	AB	13
Centrum	AC Grachtengordel-West	AC	13
Centrum	AD Burgwallen-Nieuwe Zijde	AD	6,9
Centrum	AE Burgwallen-Oude Zijde	AE	7,9

Centrum	AF Nieuwmarkt/Lastage	AF	13,2
Centrum	AG Grachtengordel-Zuid	AG	14
Centrum	AH De Weteringschans	АН	14,5
Centrum	AJ Weesperbuurt/Plantage	AJ	12,9
Centrum	AK Oostelijke Eilanden/Kadijken	АК	19,1
West	EA Sloterdijk-West	EA	16,8
West	EB Spaarndammerbuurt/Zeeheldenbuurt	EB	21,2
West	EC Houthavens	EC	28,9
West	ED De Kolenkit	ED	25,9
West	EE Landlust	EE	23,7
West	EF Erasmuspark	EF	19,8
West	EG Centrale Markt	EG	28,5
West	EH Staatsliedenbuurt	EH	18,8
West	EJ Frederik Hendrikbuurt	EJ	15,5
West	EK Van Galenbuurt	EK	17,2
West	EL Geuzenbuurt	EL	18,3
West	EM Hoofdweg e.o.	EM	19,4
West	EN ChassÃf©buurt	EN	27,3
West	EP Bellamybuurt	EP	15,8
West	EQ Da Costabuurt	EQ	15,7
West	ER Westindische Buurt	ER	21,6
West	ES Van Lennepbuurt	ES	15,6
West	ET Overtoomse Sluis	ET	17
West	EU Helmersbuurt	EU	18,2
West	EV Vondelparkbuurt	EV	22
Nieuw-West	FA Sloterdijk Nieuw-West	FA	1,6
Nieuw-West	FB Geuzenveld	FB	40,4
Nieuw-West	FC Slotermeer-West	FC	37,4
Nieuw-West	FD Slotermeer-Noordoost	FD	32,8
Nieuw-West	FE Slotermeer-Zuidoost	FE	24,7
Nieuw-West	FF Lutkemeer/Ookmeer	FF	26,1

Nieuw-West	FG De Aker	FG	44,8
Nieuw-West	FH De Punt	FH	30,7
Nieuw-West	FJ Osdorp-Midden	FJ	36,5
Nieuw-West	FK Osdorp-Oost	FK	26,9
Nieuw-West	FL Slotervaart-Noord	FL	35,3
Nieuw-West	FM Overtoomse Veld	FM	25,6
Nieuw-West	FN Slotervaart-Zuid	FN	25,9
Nieuw-West	FP Westlandgracht	FP	14,8
Nieuw-West	FQ Sloten/Nieuw-Sloten	FQ	38
Zuid	KA Hoofddorppleinbuurt	КА	19,4
Zuid	KB Schinkelbuurt	КВ	15,9
Zuid	KC Willemspark	КС	32,4
Zuid	KD Museumkwartier	KD	23,6
Zuid	KE Oude Pijp	KE	13,2
Zuid	KF Nieuwe Pijp	KF	15,2
Zuid	KG Zuid Pijp	KG	22,3
Zuid	KH Stadionbuurt	КН	23,9
Zuid	KJ Apollobuurt	KJ	35
Zuid	KK Scheldebuurt	КК	24
Zuid	KL IJselbuurt	KL	18
Zuid	KM Rijnbuurt	KM	18
Zuid	KN Prinses Irenebuurt e.o.	KN	29
Zuid	KP Zuidas	КР	13,3
Zuid	KQ Buitenveldert-West	KQ	21,6
Zuid	KR Buitenveldert-Oost	KR	19,5
Oost	MA Oostelijk Havengebied	MA	29,3
Oost	MB Weesperzijde	МВ	17,8
Oost	MC Oosterparkbuurt	MC	19,5
Oost	MD Transvaalbuurt	MD	24,6
Oost	ME Dapperbuurt	ME	20,2
Oost	MF Indische Buurt-West	MF	22,5

Oost	MG Indische Buurt-Oost	MG	25,8
Oost	MH Zeeburgereiland/Bovendiep	МН	17,4
Oost	MJ IJburg-West	MJ	46,8
Oost	MK IJburg-Oost	МК	0
Oost	ML IJburg-Zuid	ML	51,3
Oost	MM Frankendael	MM	19,5
Oost	MN Middenmeer	MN	25,8
Oost	MP Betondorp	MP	21,7
Oost	MQ Omval/Overamstel	MQ	8,8
Noord	NA Oostzanerwerf	NA	38,1
Noord	NB Noordelijke IJ-oevers-West	NB	15,6
Noord	NC Tuindorp Oostzaan	NC	35,8
Noord	ND Kadoelen	ND	46,2
Noord	NE Banne Buiksloot	NE	35,7
Noord	NF Nieuwendammerdijk/Buiksloterdijk	NF	46,6
Noord	NG Elzenhagen	NG	33,1
Noord	NH Buikslotermeer	NH	24,1
Noord	NJ Waterlandpleinbuurt	NJ	38,3
Noord	NK Volewijck	NK	30,8
Noord	NL IJplein/Vogelbuurt	NL	27,5
Noord	NM Tuindorp Buiksloot	NM	34,4
Noord	NN Tuindorp Nieuwendam	NN	31,1
Noord	NP Noordelijke IJ-oevers-Oost	NP	6,3
Noord	NQ Waterland	NQ	38,7
Weesp	SA Driemond	SA	42,9
Zuidoost	TA Amstel III/Bullewijk	ТА	2,2
Zuidoost	TB Venserpolder	ТВ	24,7
Zuidoost	TC Amsterdamse Poort e.o.	тс	23,1

Centrum	AA Haarlemmerbuurt	AA	7
Centrum	AB Jordaan	AB	7
Centrum	AC Grachtengordel-West	AC	7
Centrum	AD Burgwallen-Nieuwe Zijde	AD	7
Centrum	AE Burgwallen-Oude Zijde	AE	7
Centrum	AF Nieuwmarkt/Lastage	AF	7
Centrum	AG Grachtengordel-Zuid	AG	7
Centrum	AH De Weteringschans	АН	7
Centrum	AJ Weesperbuurt/Plantage	AJ	7
Centrum	AK Oostelijke Eilanden/Kadijken	АК	7
West	EA Sloterdijk-West	EA	7
West	EB Spaarndammerbuurt/Zeeheldenbuurt	EB	6
West	EC Houthavens	EC	8
West	ED De Kolenkit	ED	6
West	EE Landlust	EE	6
West	EF Erasmuspark	EF	7
West	EG Centrale Markt	EG	7
West	EH Staatsliedenbuurt	EH	7
West	EJ Frederik Hendrikbuurt	EJ	7
West	EK Van Galenbuurt	EK	5
West	EL Geuzenbuurt	EL	7
West	EM Hoofdweg e.o.	EM	6
West	EN ChassÃf©buurt	EN	6
West	EP Bellamybuurt	EP	7
West	EQ Da Costabuurt	EQ	7
West	ER Westindische Buurt	ER	7
West	ES Van Lennepbuurt	ES	6
West	ET Overtoomse Sluis	ET	7
West	EU Helmersbuurt	EU	7

# Average score social economic status per neighbourhood 2020

West	EV Vondelparkbuurt	EV	7
Nieuw-West	FA Sloterdijk Nieuw-West	FA	6
Nieuw-West	FB Geuzenveld	FB	0
Nieuw-West	FC Slotermeer-West	FC	0
Nieuw-West	FD Slotermeer-Noordoost	FD	5
Nieuw-West	FE Slotermeer-Zuidoost	FE	0
Nieuw-West	FF Lutkemeer/Ookmeer	FF	5
Nieuw-West	FG De Aker	FG	7
Nieuw-West	FH De Punt	FH	5
Nieuw-West	FJ Osdorp-Midden	FJ	5
Nieuw-West	FK Osdorp-Oost	FK	5
Nieuw-West	FL Slotervaart-Noord	FL	6
Nieuw-West	FM Overtoomse Veld	FM	6
Nieuw-West	FN Slotervaart-Zuid	FN	6
Nieuw-West	FP Westlandgracht	FP	7
Nieuw-West	FQ Sloten/Nieuw-Sloten	FQ	7
Zuid	KA Hoofddorppleinbuurt	КА	7
Zuid	KB Schinkelbuurt	КВ	7
Zuid	KC Willemspark	КС	8
Zuid	KD Museumkwartier	KD	8
Zuid	KE Oude Pijp	KE	7
Zuid	KF Nieuwe Pijp	KF	7
Zuid	KG Zuid Pijp	KG	6
Zuid	KH Stadionbuurt	КН	7
Zuid	KJ Apollobuurt	КЈ	8
Zuid	KK Scheldebuurt	КК	8
Zuid	KL IJselbuurt	KL	7
Zuid	KM Rijnbuurt	КМ	7
Zuid	KN Prinses Irenebuurt e.o.	KN	8
Zuid	KP Zuidas	КР	8
Zuid	KQ Buitenveldert-West	KQ	7

Zuid	KR Buitenveldert-Oost	KR	6
Oost	MA Oostelijk Havengebied	MA	7
Oost	MB Weesperzijde	MB	7
Oost	MC Oosterparkbuurt	MC	6
Oost	MD Transvaalbuurt	MD	6
Oost	ME Dapperbuurt	ME	6
Oost	MF Indische Buurt-West	MF	6
Oost	MG Indische Buurt-Oost	MG	6
Oost	MH Zeeburgereiland/Bovendiep	МН	7
Oost	MJ IJburg-West	MJ	7
Oost	MK IJburg-Oost	МК	0
Oost	ML IJburg-Zuid	ML	7
Oost	MM Frankendael	MM	6
Oost	MN Middenmeer	MN	8
Oost	MP Betondorp	MP	5
Oost	MQ Omval/Overamstel	MQ	8
Noord	NA Oostzanerwerf	NA	0
Noord	NB Noordelijke IJ-oevers-West	NB	8
Noord	NC Tuindorp Oostzaan	NC	6
Noord	ND Kadoelen	ND	7
Noord	NE Banne Buiksloot	NE	5
Noord	NF Nieuwendammerdijk/Buiksloterdijk	NF	8
Noord	NG Elzenhagen	NG	7
Noord	NH Buikslotermeer	NH	5
Noord	NJ Waterlandpleinbuurt	NJ	5
Noord	NK Volewijck	NK	5
Noord	NL IJplein/Vogelbuurt	NL	5
Noord	NM Tuindorp Buiksloot	NM	5
Noord	NN Tuindorp Nieuwendam	NN	6
Noord	NP Noordelijke IJ-oevers-Oost	NP	6
Noord	NQ Waterland	NQ	7

Weesp	SA Driemond	SA	7
Zuidoost	TA Amstel III/Bullewijk	ТА	0
Zuidoost	TB Venserpolder	ТВ	7
Zuidoost	TC Amsterdamse Poort e.o.	ТС	5

### Average score social economic status per neighbourhood 2020

Centrum	AA Haarlemmerbuurt	AA	7
Centrum	AB Jordaan	AB	7
Centrum	AC Grachtengordel-West	AC	7
Centrum	AD Burgwallen-Nieuwe Zijde	AD	7
Centrum	AE Burgwallen-Oude Zijde	AE	7
Centrum	AF Nieuwmarkt/Lastage	AF	7
Centrum	AG Grachtengordel-Zuid	AG	7
Centrum	AH De Weteringschans	AH	7
Centrum	AJ Weesperbuurt/Plantage	AJ	7
Centrum	AK Oostelijke Eilanden/Kadijken	АК	7
West	EA Sloterdijk-West	EA	7
West	EB Spaarndammerbuurt/Zeeheldenbuurt	EB	6
West	EC Houthavens	EC	8
West	ED De Kolenkit	ED	6
West	EE Landlust	EE	6
West	EF Erasmuspark	EF	7
West	EG Centrale Markt	EG	7
West	EH Staatsliedenbuurt	EH	7
West	EJ Frederik Hendrikbuurt	EJ	7
West	EK Van Galenbuurt	EK	5
West	EL Geuzenbuurt	EL	7
West	EM Hoofdweg e.o.	EM	6
West	EN ChassÃf©buurt	EN	6
West	EP Bellamybuurt	EP	7

West	EQ Da Costabuurt	EQ	7
West	ER Westindische Buurt	ER	7
West	ES Van Lennepbuurt	ES	6
West	ET Overtoomse Sluis	ET	7
West	EU Helmersbuurt	EU	7
West	EV Vondelparkbuurt	EV	7
Nieuw-West	FA Sloterdijk Nieuw-West	FA	6
Nieuw-West	FB Geuzenveld	FB	0
Nieuw-West	FC Slotermeer-West	FC	0
Nieuw-West	FD Slotermeer-Noordoost	FD	5
Nieuw-West	FE Slotermeer-Zuidoost	FE	0
Nieuw-West	FF Lutkemeer/Ookmeer	FF	5
Nieuw-West	FG De Aker	FG	7
Nieuw-West	FH De Punt	FH	5
Nieuw-West	FJ Osdorp-Midden	FJ	5
Nieuw-West	FK Osdorp-Oost	FK	5
Nieuw-West	FL Slotervaart-Noord	FL	6
Nieuw-West	FM Overtoomse Veld	FM	6
Nieuw-West	FN Slotervaart-Zuid	FN	6
Nieuw-West	FP Westlandgracht	FP	7
Nieuw-West	FQ Sloten/Nieuw-Sloten	FQ	7
Zuid	KA Hoofddorppleinbuurt	КА	7
Zuid	KB Schinkelbuurt	КВ	7
Zuid	KC Willemspark	КС	8
Zuid	KD Museumkwartier	KD	8
Zuid	KE Oude Pijp	KE	7
Zuid	KF Nieuwe Pijp	KF	7
Zuid	KG Zuid Pijp	KG	6
Zuid	KH Stadionbuurt	КН	7
Zuid	KJ Apollobuurt	КJ	8
Zuid	KK Scheldebuurt	КК	8

Zuid	KL IJselbuurt	KL	7
Zuid	KM Rijnbuurt	КМ	7
Zuid	KN Prinses Irenebuurt e.o.	KN	8
Zuid	KP Zuidas	КР	8
Zuid	KQ Buitenveldert-West	KQ	7
Zuid	KR Buitenveldert-Oost	KR	6
Oost	MA Oostelijk Havengebied	MA	7
Oost	MB Weesperzijde	МВ	7
Oost	MC Oosterparkbuurt	МС	6
Oost	MD Transvaalbuurt	MD	6
Oost	ME Dapperbuurt	ME	6
Oost	MF Indische Buurt-West	MF	6
Oost	MG Indische Buurt-Oost	MG	6
Oost	MH Zeeburgereiland/Bovendiep	МН	7
Oost	MJ IJburg-West	MJ	7
Oost	MK IJburg-Oost	МК	0
Oost	ML IJburg-Zuid	ML	7
Oost	MM Frankendael	ММ	6
Oost	MN Middenmeer	MN	8
Oost	MP Betondorp	MP	5
Oost	MQ Omval/Overamstel	MQ	8
Noord	NA Oostzanerwerf	NA	0
Noord	NB Noordelijke IJ-oevers-West	NB	8
Noord	NC Tuindorp Oostzaan	NC	6
Noord	ND Kadoelen	ND	7
Noord	NE Banne Buiksloot	NE	5
Noord	NF Nieuwendammerdijk/Buiksloterdijk	NF	8
Noord	NG Elzenhagen	NG	7
Noord	NH Buikslotermeer	NH	5
Noord	NJ Waterlandpleinbuurt	NJ	5
Noord	NK Volewijck	NK	5

Noord	NL IJplein/Vogelbuurt	NL	5
Noord	NM Tuindorp Buiksloot	NM	5
Noord	NN Tuindorp Nieuwendam	NN	6
Noord	NP Noordelijke IJ-oevers-Oost	NP	6
Noord	NQ Waterland	NQ	7
Weesp	SA Driemond	SA	7
Zuidoost	TA Amstel III/Bullewijk	ТА	
Zuidoost	TB Venserpolder	ТВ	7
Zuidoost	TC Amsterdamse Poort e.o.	ТС	5

# Social Cohesion by district (1-10) (LSOCCOH\_R) 2020

Centrum	AA Haarlemmerbuurt	AA	6,3
Centrum	AB Jordaan	AB	6,3
Centrum	AC Grachtengordel-West	AC	5,5
Centrum	AD Burgwallen-Nieuwe Zijde	AD	4,3
Centrum	AE Burgwallen-Oude Zijde	AE	5,4
Centrum	AF Nieuwmarkt/Lastage	AF	6,1
Centrum	AG Grachtengordel-Zuid	AG	5,5
Centrum	AH De Weteringschans	АН	6
Centrum	AJ Weesperbuurt/Plantage	AJ	5,2
Centrum	AK Oostelijke Eilanden/Kadijken	АК	6,3
West	EA Sloterdijk-West	EA	0
West	EB	EB	6
	Spaarndammerbuurt/Zeeheldenbuurt		
West	EC Houthavens	EC	
West	ED De Kolenkit	ED	4,9
West	EE Landlust	EE	5,4
West	EF Erasmuspark	EF	5,6
West	EG Centrale Markt	EG	
West	EH Staatsliedenbuurt	EH	6,2
West	EJ Frederik Hendrikbuurt	EJ	5,8

West	EK Van Galenbuurt	EK	5,4
West	EL Geuzenbuurt	EL	5,4
West	EM Hoofdweg e.o.	EM	5,5
West	EN ChassÃf©buurt	EN	5,7
West	EP Bellamybuurt	EP	5,6
West	EQ Da Costabuurt	EQ	5,9
West	ER Westindische Buurt	ER	5,9
West	ES Van Lennepbuurt	ES	5,6
West	ET Overtoomse Sluis	ET	5,7
West	EU Helmersbuurt	EU	6,4
West	EV Vondelparkbuurt	EV	0
Nieuw-West	FA Sloterdijk Nieuw-West	FA	0
Nieuw-West	FB Geuzenveld	FB	0
Nieuw-West	FC Slotermeer-West	FC	0
Nieuw-West	FD Slotermeer-Noordoost	FD	5
Nieuw-West	FE Slotermeer-Zuidoost	FE	0
Nieuw-West	FF Lutkemeer/Ookmeer	FF	0
Nieuw-West	FG De Aker	FG	5,6
Nieuw-West	FH De Punt	FH	5,3
Nieuw-West	FJ Osdorp-Midden	FJ	4,8
Nieuw-West	FK Osdorp-Oost	FK	4,8
Nieuw-West	FL Slotervaart-Noord	FL	6
Nieuw-West	FM Overtoomse Veld	FM	4,8
Nieuw-West	FN Slotervaart-Zuid	FN	5,1
Nieuw-West	FP Westlandgracht	FP	4,5
Nieuw-West	FQ Sloten/Nieuw-Sloten	FQ	5,9
Zuid	KA Hoofddorppleinbuurt	КА	5,9
Zuid	KB Schinkelbuurt	КВ	6
Zuid	KC Willemspark	КС	5,9
Zuid	KD Museumkwartier	KD	6
Zuid	KE Oude Pijp	KE	5,2

Zuid	KF Nieuwe Pijp	KF	5,7
Zuid	KG Zuid Pijp	KG	5,2
Zuid	KH Stadionbuurt	КН	5,6
Zuid	KJ Apollobuurt	KJ	5,8
Zuid	KK Scheldebuurt	КК	6,3
Zuid	KL IJselbuurt	KL	5,9
Zuid	KM Rijnbuurt	KM	5,6
Zuid	KN Prinses Irenebuurt e.o.	KN	0
Zuid	KP Zuidas	КР	5,2
Zuid	KQ Buitenveldert-West	KQ	5,6
Zuid	KR Buitenveldert-Oost	KR	5,3
Oost	MA Oostelijk Havengebied	MA	6,2
Oost	MB Weesperzijde	МВ	5,9
Oost	MC Oosterparkbuurt	MC	5,6
Oost	MD Transvaalbuurt	MD	5,8
Oost	ME Dapperbuurt	ME	5,5
Oost	MF Indische Buurt-West	MF	5,8
Oost	MG Indische Buurt-Oost	MG	5,3
Oost	MH Zeeburgereiland/Bovendiep	МН	5,6
Oost	MJ IJburg-West	MJ	6,1
Oost	MK IJburg-Oost	МК	0
Oost	ML IJburg-Zuid	ML	6,2
Oost	MM Frankendael	MM	6,1
Oost	MN Middenmeer	MN	6,9
Oost	MP Betondorp	MP	6,3
Oost	MQ Omval/Overamstel	MQ	5,4
Noord	NA Oostzanerwerf	NA	0
Noord	NB Noordelijke IJ-oevers-West	NB	5,8
Noord	NC Tuindorp Oostzaan	NC	6,2
Noord	ND Kadoelen	ND	0
Noord	NE Banne Buiksloot	NE	5

Noord	NF Nieuwendammerdijk/Buiksloterdijk	NF	0
Noord	NG Elzenhagen	NG	6,3
Noord	NH Buikslotermeer	NH	5,1
Noord	NJ Waterlandpleinbuurt	NJ	5,6
Noord	NK Volewijck	NK	5,8
Noord	NL IJplein/Vogelbuurt	NL	5,6
Noord	NM Tuindorp Buiksloot	NM	0
Noord	NN Tuindorp Nieuwendam	NN	6,1
Noord	NP Noordelijke IJ-oevers-Oost	NP	0
Noord	NQ Waterland	NQ	7,5
Weesp	SA Driemond	SA	6,9
Zuidoost	TA Amstel III/Bullewijk	ТА	0
Zuidoost	TB Venserpolder	ТВ	4,8
Zuidoost	TC Amsterdamse Poort e.o.	ТС	0

# PO % parents highly educated by district (O\_OPLPO\_P)

Centrum	AA Haarlemmerbuurt	AA	72
Centrum	AB Jordaan	AB	77
Centrum	AC Grachtengordel-West	AC	89
Centrum	AD Burgwallen-Nieuwe Zijde	AD	80
Centrum	AE Burgwallen-Oude Zijde	AE	59
Centrum	AF Nieuwmarkt/Lastage	AF	77
Centrum	AG Grachtengordel-Zuid	AG	90
Centrum	AH De Weteringschans	АН	86
Centrum	AJ Weesperbuurt/Plantage	AJ	84
Centrum	AK Oostelijke Eilanden/Kadijken	АК	71
West	EA Sloterdijk-West	EA	0
West	EB Spaarndammerbuurt/Zeeheldenbuurt	EB	55
West	EC Houthavens	EC	90
West	ED De Kolenkit	ED	35

West	EE Landlust	EE	42
West	EF Erasmuspark	EF	53
West	EG Centrale Markt	EG	72
West	EH Staatsliedenbuurt	EH	68
West	EJ Frederik Hendrikbuurt	EJ	67
West	EK Van Galenbuurt	EK	29
West	EL Geuzenbuurt	EL	67
West	EM Hoofdweg e.o.	EM	48
West	EN ChassÃf©buurt	EN	55
West	EP Bellamybuurt	EP	65
West	EQ Da Costabuurt	EQ	76
West	ER Westindische Buurt	ER	66
West	ES Van Lennepbuurt	ES	50
West	ET Overtoomse Sluis	ET	85
West	EU Helmersbuurt	EU	88
West	EV Vondelparkbuurt	EV	82
Nieuw-West	FA Sloterdijk Nieuw-West	FA	0
Nieuw-West	FB Geuzenveld	FB	0
Nieuw-West	FC Slotermeer-West	FC	0
Nieuw-West	FD Slotermeer-Noordoost	FD	33
Nieuw-West	FE Slotermeer-Zuidoost	FE	0
Nieuw-West	FF Lutkemeer/Ookmeer	FF	44
Nieuw-West	FG De Aker	FG	57
Nieuw-West	FH De Punt	FH	35
Nieuw-West	FJ Osdorp-Midden	FJ	35
Nieuw-West	FK Osdorp-Oost	FK	34
Nieuw-West	FL Slotervaart-Noord	FL	44
Nieuw-West	FM Overtoomse Veld	FM	38
Nieuw-West	FN Slotervaart-Zuid	FN	39
Nieuw-West	FP Westlandgracht	FP	50
Nieuw-West	FQ Sloten/Nieuw-Sloten	FQ	63

Zuid	KA Hoofddorppleinbuurt	КА	81
Zuid	KB Schinkelbuurt	КВ	67
Zuid	KC Willemspark	КС	85
Zuid	KD Museumkwartier	KD	89
Zuid	KE Oude Pijp	KE	74
Zuid	KF Nieuwe Pijp	KF	72
Zuid	KG Zuid Pijp	KG	48
Zuid	KH Stadionbuurt	КН	60
Zuid	KJ Apollobuurt	КЈ	89
Zuid	KK Scheldebuurt	КК	83
Zuid	KL IJselbuurt	KL	57
Zuid	KM Rijnbuurt	КМ	65
Zuid	KN Prinses Irenebuurt e.o.	KN	86
Zuid	KP Zuidas	КР	69
Zuid	KQ Buitenveldert-West	KQ	71
Zuid	KR Buitenveldert-Oost	KR	57
Oost	MA Oostelijk Havengebied	МА	78
Oost	MB Weesperzijde	МВ	76
Oost	MC Oosterparkbuurt	МС	57
Oost	MD Transvaalbuurt	MD	43
Oost	ME Dapperbuurt	ME	56
Oost	MF Indische Buurt-West	MF	43
Oost	MG Indische Buurt-Oost	MG	38
Oost	MH Zeeburgereiland/Bovendiep	МН	65
Oost	MJ IJburg-West	MJ	71
Oost	MK IJburg-Oost	МК	0
Oost	ML IJburg-Zuid	ML	70
Oost	MM Frankendael	ММ	68
Oost	MN Middenmeer	MN	88
Oost	MP Betondorp	MP	51
Oost	MQ Omval/Overamstel	MQ	86

Noord	NA Oostzanerwerf	NA	0
Noord	NB Noordelijke IJ-oevers-West	NB	89
Noord	NC Tuindorp Oostzaan	NC	52
Noord	ND Kadoelen	ND	66
Noord	NE Banne Buiksloot	NE	37
Noord	NF Nieuwendammerdijk/Buiksloterdijk	NF	90
Noord	NG Elzenhagen	NG	76
Noord	NH Buikslotermeer	NH	25
Noord	NJ Waterlandpleinbuurt	NJ	32
Noord	NK Volewijck	NK	40
Noord	NL IJplein/Vogelbuurt	NL	38
Noord	NM Tuindorp Buiksloot	NM	37
Noord	NN Tuindorp Nieuwendam	NN	59
Noord	NP Noordelijke IJ-oevers-Oost	NP	0
Noord	NQ Waterland	NQ	90
Weesp	SA Driemond	SA	56
Zuidoost	TA Amstel III/Bullewijk	ТА	0
Zuidoost	TB Venserpolder	ТВ	0
Zuidoost	TC Amsterdamse Poort e.o.	ТС	0