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Housing as an infrastructure of care: a feminist perspective on Hamburg's social housing

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Summary

Due to their care responsibilities, single-mothers have special demands on their living space to cope with the load of care-practices such as raising children, housework, paid work, and self-care. The materiality of housing, defined in this research as the housing design and the housing environment, can be regarded as both the setting and a resource for everyday care. Conceptualising housing as an infrastructure of care, therefore, helps understanding how housing systems shape the possibilities of caregiving and receiving in a system that usually makes care an individual responsibility.

The aim of this research is to identify the housing materials that either hinder or support single-mothers' capacity to care. It demonstrates how Hamburg's social housing policy influences this to create a link between the material housing demands of single-mothers and local housing policies. In addressing this, this research tries to identify and illustrate why the incorporation of care in the housing sector is essential to ensure adequate housing for women and achieve gender equality.

To achieve this, this research follows a single case study approach, gathering substantial qualitative data in a real-life context to analyse the housing materialities experienced by single-mothers as well as the impact of local housing policies on these materialities in the given spatial context of Hamburg in Germany. Ten single-mothers took part in semi-structured interviews with open-ended questions. To comprehend the influence of the policy on their daily-care, the policy documents were analysed based on the operationalisation and semi-structured interviews with the municipality as well as experts on housing and gender were conducted.

The research found that even though the local housing policy in Hamburg considers the special housing needs of single-parents, not all single-mothers were able to obtain housing that fits those criteria and supports their capacity to care. Furthermore, due to a lack of social housing distributed over the city, many mothers in this research experienced displacement to move into social housing, leaving them with limited social resources to help them to care. This research suggests therefore aligning the policy targets with the actual implementation through consistent gender-sensitive data collection and a clearer and more transparent definition of the already existing gender-sensitive regulations. Lastly, to avoid displacement or housing conditions hindering the capacity to care, more affordable and social housing needs to exist throughout the whole city.

Keywords

Social housing, single-mothers, capacity to care, infrastructures of everyday-life, feminism

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Foreword

"The problem of a feminist critique of society is that we are dealing here with two structures - capitalism and patriarchy - that are intertwined, but neither historically nor structurally completely fall into one" (Kow & Pflücke, 2018, p. 138)

I'd like to preface this thesis by stating that, as the title suggests, it is clearly a feminist thesis and has been investigated as such. Following material feminist argumentation, I am convinced that social injustice cannot be explained solely by patriarchy or capitalism but must be considered and critiqued in unison. Although the individual realities of the single mothers in this research vary, I am convinced that the state and economic patriarchal-capitalist frameworks play a key role in shaping these realities. The focus on housing provided by the master's track specialisation *Urban Housing, Equity and Social Justice* offers an ideal starting point in researching how patriarchy and capitalism shape individual lives, in case of this research: individual care-practices.

I would also like to point out that although this thesis only talks about men and women, and mothers, in particular, it is based on the understanding that gender roles are socially constructed and that a wider range of genders exists outside this binary. As explained in chapter 2, while much of the work relates to this dualism, its effects affect all people in society. Nevertheless, it is important to note that although this thesis understands all those who self-identify as women to be women, it must work with statistics and previous research that does not work with such complexity. In addition to direct criticism in this thesis of the gender data gap or the disregard of gender in research, I would like to criticise the lack of research that explicitly includes the experiences of trans folks or those who don't identify themself within this binary.

Abbreviations

| | English Translation | Official Title |
|-----|--|--|
| IFB | Investment and Development Bank Hamburg | Investitions- und Förderbank Hamburg |
| BSW | Authority of Urban Development and Housing | Behörde für Stadtenwicklung und Wohnen Hamburg |
| FHH | Free and Hanseatic City of Hamburg | Freie und Hansestadt Hamburg |

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| Landesbetrieb Geoinformation und Vermessung. (2021) Metaver.de - Geodatenportal. https://metaver.de/freitextsuche?rstart=30¤tSelectorPage=1&f=type:map;provider:hh; |
| Statistikamt Nord (2020). Hamburger Stadtteil-Profile: Berichtsjahr 2020. https://www.statistik-nord.de/zahlen-fakten/regionalstatistik-datenbanken-und-karten/hamburger-stadtteil-profile-staedtestatistik-fuer-hamburg |

1. Introduction & Problem Statement

The current housing crisis is a pressing issue in cities around the globe. Accessing adequate housing is becoming increasingly difficult for many (Ayala et al., 2019). The home is a focal point of daily life and daily care, a place from which we form relationships with individuals and society (Latocha, 2022; Reichle & Kuschinski, 2020). In contrast to broader definitions of care that include all tasks that support the maintenance of life and the world (Tronto, 1993), care-work in the context of this research includes personal care, housework, and childcare which are mostly performed by women (Reichle & Kuschinski, 2020). Due to the gendered division of labour, meaning the division between productive and reproductive work, women face housing requirements that are strongly driven by their responsibility to care for their household. This is especially significant for single-mothers, as they are more likely to "... be provider, shelterer, and caregiver on a severely limited income that renders them resource-poor, house-poor, and time-poor" (Mulroy & Lane, 1992, p. 59), equipping them with limited resources to access adequate housing. For many people with care responsibilities, housing adequacy, therefore, fundamentally shapes how housing enables them to care, which has been overlooked in both the fundamental literature about care (Sevenhuijsen, 2003; Tronto, 1993) and housing adequacy (Ayala et al., 2019; UN-Habitat, 2010).

Conceptualising housing as an infrastructure of care helps understand "how housing systems organize the possibilities of caregiving and receiving at a household and social scale" in a system that traditionally renders care an individual responsibility (Power & Mee, 2020, p. 489). This process of organising the possibilities of caregiving is linked to what Power describes as "caring capacity" to illustrate "the factors and relations that make care possible" (2019, p. 766). Tronto argues that "care is perhaps best thought of as a practice" (1993, p. 108), linked to the resources enabling or inhibiting the practice of caring. The material and social resources assembling care as a practice can be seen as those factors and relations constituting the capacity to care. Further definition of these resources is lacking in current literature on care, critiqued as being mostly abstract and highly culturally specific (Cooper, 2007). However, Power offers the conceptualisation of housing as one of the resources assembling the capacity to care by acknowledging that care develops through interactions with entities that are always more-than-human and are shaped by their presence, such as social relationships, tangible objects, or less tangible entities like regulatory frameworks (Power, 2019).

Housing as an infrastructure of care, therefore, offers a focus on everyday care-practices, connecting small-scale actions with larger-scale inequalities (Hall, 2020). Housing markets shape which housing materialities are affordable and accessible to the household scale and housing governance shapes both the market and the materialities through housing policies and management practices (Power & Mee, 2020). However, the consequences of this on the household scale operate "along the lines of social difference" and shape opportunities to care by race, class, gender etc. (ibid., p. 499). Research points out how, for single-mothers, affordability of housing has the highest impact on their capacity to care (e.g. Christie, 2000; Goldsmith-Pinkham & Shue, 2020; Mulroy & Lane, 1992), highlighting the dilemma of use-value and trade-value in financialised housing markets (Kuschinski, 2019; Latocha, 2022). Due to the high difference in rental prices between social housing and privately financed housing, social housing is the best and/or only option for many women to secure their ability to care (Mee, 2009).

Due to their care responsibilities, single-mothers have specific demands on their living space to cope with the burden of care-practices between raising children, housework, paid work and self-care. The management of these activities depends not merely on the materiality of housing, but also socio-economic factors and individual circumstances (Bruin & Cook, 1997).

Nonetheless, the materiality of housing plays an important role in the care-practices of single-mothers. On the one hand, research about single-mothers' housing satisfaction points to the design in terms of floorplans and amenities of the apartment and the residential building (Anthony, 2015; Anthony et al., 1990; Seum, 2021), and on the other hand, to the accessibility of infrastructures such as kindergartens, schools, local retail, public transport and their employment (Cook, 1988; Mulroy & Lane, 1992) as well as social networks and communities in the housing environment (Markusen, 1980; Oberhauser, 2017).

Care is considered a private practice under neoliberal politics, making the individual responsible for their care and rendering care invisible (Power, 2019), which is linked to the gendered division of labour and the home as the women's sphere where care takes place (Becker, 2008; Margalit, 2021; Watson, 1986). Housing policies, even though not explicitly considering care, are strongly value-driven and mostly catered towards the ideal of the nuclear family, shaping both access to housing and the materiality of housing units themselves (Seum, 2021; Watson, 1986). This is especially the case with social housing, where housing policies predefine factors such as eligibility criteria and floor space per person, therefore having a strong disciplining approach on who *deserves* access to state welfare (Kuschinski, 2019). Effective social housing governance enabling a social housing market which fulfils the materiality requirements of single-mothers contributes significantly to their capacity to care, creating a housing infrastructure that "actually cares" (Power & Mee, 2020, p. 501).

Hamburg in Germany as a case study for this research will help to illustrate how materialities of housing, regarding design and environment, shape single-mothers' care-practices. Rents in this city have risen by over 21 % between 2011 and 2019 (Kuschinski, 2019), rendering social housing the only affordable option for many. However, its use-value, especially regarding care, has hardly been highlighted so far (ibid.). The city's active housing policy under the paradigm "City for all" (FHH, 2021a) instals specific regulations on the materialities of social housing through the funding guidelines of the IFB Hamburg (IFB Hamburg, 2022). It is therefore an excellent place to demonstrate the influence of housing policy on the materialities of social housing and how these shape the care-practices of single-mothers contributing to their capacity to care.

1.1 Research Objectives and Questions

This research aims to identify the housing materialities hindering or contributing to single-mothers' capacity to care. It illustrates how this is influenced by Hamburg's social housing policy to draw the connection between material housing needs of single-mothers and local housing policy. In addressing this, this research tries to identify and illustrate why the incorporation of care in the housing sector is essential to ensure adequate housing for women and achieve gender equality.

To do so, the following research question and sub-questions are posed for this thesis:

How do housing materialities contribute to single-mothers' capacity to care and how do housing policies influence this?

- How does Hamburg's housing policy shape the materialities of social housing?
- How do single-mothers experience housing materialities in the context of Hamburg's social housing?

• How do single-mothers perceive their capacity to care and how do housing materialities contribute to their care-practices?

1.2 Scientific and Social Relevance

This study's relevance stems from its emphasis on the housing materialities in Power and Mee's concept of housing as an infrastructure of care (2020). They highlighted a research gap on how care is negotiated within normative home design (p. 492) and how housing governance affects housing materialities (p. 498). This study focuses on social housing as it is historically shaped by normative policies as a component of housing governance, but also because social housing is rent-controlled and thus presents an opportunity to explore how the materiality of housing affects caregiving capacity in affordable housing.

Furthermore, this research aims to add the concepts of gender and *care-work* to the current debate on social housing in Germany, which focuses mainly on the market-based evaluation of the social housing stock (e.g. Holm et al., 2018; Lebuhn et al., 2017). When addressing the needs of particular population groups, social housing is frequently neglected. In the German context, driven by demographic change, the focus centres on the housing demands of senior citizens (e.g. Oettgen & Schumacher, 2015). Moreover, when the socio-political aspects of housing policy are discussed qualitatively, the focus on women and *care-work* is missing in almost all work on social housing (Metzger, 2020; Rinn, 2018; Vogelpohl & Buchholz, 2017).

Linking existing research on social housing to the housing needs of women in *care-work*, especially single-mothers, allows for a detailed examination of how current housing policies contribute to adequate housing and single-mothers' capacity to care, which is especially important in the context of diversifying family models. This can offer a basis for more gendersensitive policy-making regarding social housing that actually enables care. It highlights furthermore the need for a focus on the use-value of housing, not only the trade-value, that has been the core of recent political and societal debates (e.g. Hamburger Abendblatt, 2022).

2. Theoretical and Conceptual Framework

This section discusses how the research was framed through the concepts used in the academic discourse underlying this research. To begin, this chapter examines the relationship between housing and gender, particularly focusing on single-mothers. Secondly, the concept of housing as an infrastructure of care will be discussed and the debate on women and housing policies highlighted. Lastly, the capacity to care is explained through the concept of daily care-practices, especially care for children and oneself. In summary, it discusses why housing is closely related to care-work and therefore to gender inequalities in our society.

2.1 Women, Housing and Care

The home is the space of care-work and those who do this work are structurally women (Reichle & Kuschinski, 2020). Even though in western contexts many women become more and more involved in productive labour, they are still mainly responsible for care-work, especially when children come into the equation (Rodenstein, 2017). This results in a significantly higher workload for women with significantly lower pay than for their male counterparts (European Commission, 2021). This gendered division of labour is supported by a still prevailing, state-supported, small-family household ideal, with one main earner and one additional earner (Sauer, 2013).

The structural organisation of housing makes this particularly clear. The current capitalist organisation of housing combined with the gendered division of labour creates a reality in which access to housing is highly gendered (Reichle & Kuschinski, 2020). The dichotomy of housing as a commodity and the use-value of housing becomes particularly significant for those for whom housing is the centre of daily care-practices and who at the same time live with the economic disadvantages that this very care-work is neither waged nor socially valued. The structural link between care-work and the home has two consequences: On the one hand, it individualises the responsibility of care-work to the household; on the other hand, it shifts the visibility of care-work to the private as opposed to the public (E. Dowling, 2018; Power, 2019). Both lead to the structural invisibility of care-work as it removes the responsibility from the state (ibid.). This social and spatial construction of the private as opposed to the public within the modern western ideal of home is therefore a fundamentally gendered and classist structure (Reichle & Kuschinski, 2020; Young, 2005) and part of what is debated to be the crisis of care (E. Dowling, 2021; Fraser, 2016).

Based on this understanding, a critical analysis of housing must identify, explain, and investigate the connections between space and society that lead to an uneven distribution of resource housing. At its core is the understanding of the socially established tension between housing as a basic human need and a commodity or trade-value and use-value.

2.1.1 Single-mothers and Housing

Single-parent families are more likely to live below the poverty threshold as well as being prone to pay a higher share of their income for housing (Cook, 1989; Mulroy & Lane, 1992; Nieuwenhuis, 2020). They face extremely high housing insecurity in the free housing market and high-stress levels regarding both housing and care (Clampet-Lundquist, 2003; Ma & Sebastian, 2021), threatening their physical and mental health (Broussard et al., 2012). For this reason, single-mothers often make up a significant proportion of recipients of housing benefits (for the US context Hatch, 2022; for the EU context Nieuwenhuis, 2020). Nevertheless, this does not mean the policies surrounding those housing benefits are catering for their needs

(Lessa, 2002). This, for example, shows in social housing policies that assume the children only live with one parent, even though shared custody is becoming more and more common (Nieuwenhuis, 2020).

2.2 Housing as an Infrastructure of Care

Given the individualisation of domestic and care-work and the simultaneous neoliberalisation of housing provision, the quality of care in housing has become a bigger focus in feminist academic debates. Within this debate, Power and Mee propose to conceptualise housing as an infrastructure of care, which follows the conceptualisation of infrastructures not as a dimension of urban technology but of everyday life (Alam & Houston, 2020; Graham & McFarlane, 2015; Power & Williams, 2020). The notion of infrastructures of care is founded on a feminist ethics of care and enables the recognition of everyday care spaces (Alam & Houston, 2020; Power & Mee, 2020). The focus on how women accomplish their daily routines enables to identify "material and socio-cultural support structures - the infrastructure for everyday life" (Gilroy & Booth, 1999, p. 309). Individualisation of social responsibility, economisation of the social, and the ensuing commodification of reproductive activity are fundamental criticisms of feminist care ethics, based on the recognition of "marginalised individuals and communities, who are excluded from infrastructural provisionings; experience uneven urban conditions of deprivation and non-participation" (Alam & Houston, 2020, p. 3). The influence and significance of public policy and governance-action in terms of its contribution to improving strategies for coping with everyday-life can be assessed once we understand infrastructure as social and cultural, not only physical (Gilroy & Booth, 1999).

According to Marx's definition of a political economy, the state plays a crucial role in moderating social interactions and individual behaviour through the management and coordination of the value-dominated economy (Latocha, 2021; Marx, 1867), which is particularly visible in the policy field of housing and everyday-life. This falls in line with current relational approaches to housing that "are used to elaborate the extended spatial, material and affective ontologies of housing and home" (Easthope et al., 2020, p. 1495). The concept of "housing as an infrastructure of care" starts exactly at this point by visualising how care is not situated in the private of housing, i.e. in the home, localising and analysing how care is assembled also through housing markets and governance and how they influence each other (Power & Mee, 2020). They build their conception on the understanding of infrastructures as socio-technical systems and identify the values selectively inscribed "into infrastructures, (re)producing social difference" via usage (ibid., p. 485).

2.2.1 Housing Materialities

Despite various efforts to collectivise care in the past through architecture or housing materialities (Hayden, 1980), domestic care-work is physically integrated and individualised by housing through the location of the kitchen, bathroom and washing machine within the apartment (Hayden, 1980; Power & Mee, 2020). As housing materialities underpin the concrete experience of care by a "particular geographical patterning (...) manifested in the social and material conditions of the locality" (Dyck, 1990, p. 467), it is important to recognise those as an important factor enabling or disabling care. Space does make a difference in women's life, not only in terms of physical arrangements complicating the logistics of mixing productive and reproductive labour but also as a crucial component of how the social connections around care are built and perceived (Dyck, 1990; Lavelle, 2020; Morgan, 2020).

To analyse this further, it is important to differentiate and then reconnect two dimensions of housing materialities, namely housing design and the housing environment.

Housing Design

"Housing size, housing design, layout and fabrication inform how housing is lived by its residents" and therefore how housing as an infrastructure of care enables or disables carepractices (Power & Mee, 2020, p. 492). This focus on the use-value has been somewhat neglected in the recent debate on housing, which focuses more on market-based trade-value analyses, but it follows quasi seamlessly from early feminist research on women's housing from the 1980s and 1990s, which focuses on the use-value, everyday-life and care (Hayden, 1980; Watson, 1986, 1988). However, the value of their work is still current, as housing design has not changed much since then and many still live in housing buildt during that time (Jocher et al., 2012).

Watson illustrates that "the dominant ideology of the patriarchal family is embodied in the way rooms are constructed and conceptualised and this, in turn, reinforces specific social relations" (Watson, 1986, p. 2), which can be argued to include care. The livingroom, so the room focused on leisure, is assigned the most space in most modern housing designs, but as the home is the women's workplace, this is mostly centred around the man's leisure, to reproduce his ability to be a productive part of the labour force, fulfilling a core function of housing in capitalism (Latocha, 2022). Watson (1986) argues that the juxtaposition between the family room and the kitchen in terms of use of space is a clear indicator of who is considered in the design of housing. The kitchen itself is mostly too small to allow for work sharing. The introduction of the open-plan design accentuated this even further, placing the woman in the kitchen, whilst being able to supervise her children in the family room, without actually having a place there herself (ibid.). The open-plan housing design is also research object in recent studies, showing that women view this form of housing layout as ambiguous, as on the one hand it enabled child supervision and part-taking in family life whilst doing reproductive labour in the kitchen, like cooking or cleaning, it also puts demands in terms of orderliness and tidiness on women, as their workplace is always on display and visible to everyone (R. Dowling, 2008).

In contrast to spacious family rooms, bedrooms are kept small, therefore offering limited space for individual leisure and privacy, putting family time physically at the centre of the home and organising the spatial possibilities for selfcare (Roberts, 1990; Watson, 1988). The master bedroom is always for both parents, a room for one-self, as Woolf states (Woolf, 1929), being important for the women's individuality, is a rarity. This is especially significant for households that do not fit the nuclear family ideal, as they have to make do with normative housing design and find their own way to arrange and adapt their housing to fit their needs (Power & Mee, 2020).

On the practical side, it can be argued that the very existence of certain amenities influences how care is enabled through housing design (Riß & Haselsteiner, 2019). The presence of a lift enables the use of a pram up to the apartment door, and storage space for prams in the hallway or the apartment is generally necessary for households with children and especially important to consider in the design when living in apartment buildings with limited space. The presence of play areas in the courtyard can also enable care, just as the presence of a balcony can allow a parent some time outside the apartment, whilst still being within the reach of the children (ibid).

Housing Environment

The housing location defines access to both infrastructures and social networks in its environment. It is not considered in Power and Mees' concept, however, its importance in other feminist literature on housing and neighbourhood satisfaction and care makes it necessary to include it in a comprehensive analysis of housing materialities (e.g. Cook et al., 1994; Huning, 2017; Riß & Haselsteiner, 2019).

The location and the accessibility of public transport stations, schools and kindergartens, supermarkets and other services shape the spatiality of everyday-life, often illustrated in debates on the contrast between suburban and urban neighbourhoods (Cook, 1988; Hayden, 1980). Zhang, Eamon and Zhan illustrate how well-serviced and safe neighbourhoods increase interaction and thus access to social resources and networks in the housing environment (Zhang et al., 2015).

Aligning with the neighbourhood condition is the perception of safety (Clampet-Lundquist, 2003; Zhang et al., 2015), influencing the accessibility of infrastructures like public transport as well as the access to social networks. The debate surrounding safety includes so-called spaces of fear, which have historically been identified as threatening to women (Becker, 2000, p. 95) but also general concern for the well-being of the child through physical and social threats like traffic, unfrequented areas or crime-rates (Clampet-Lundquist, 2003).

2.3 Women and Social Housing Policies

Early feminist research illustrates how housing and urban policy are not gender-neutral (e.g. Watson, 1986). This is especially significant, among others, for single-parents (Anthony, 2015; London, 2000) or queer folks (Doan, 2010; Schuster, 2012). They face a struggle in housing acceptability, affordability and accessibility. While policies affecting housing design have an impact on housing adequacy for people not recognised in those policies, eligibility criteria for social housing or housing programmes might impede access to affordable housing. Hatch states this as the phenomenon that "housing and housing policy affect all people but do not treat them all the same" (Hatch, 2022, p. 317). Even when rental housing policies are intended to be gender-neutral, legislation grants administrators significant latitude in their implementation and enforcement, which is mostly to blame for the uneven impact on men and women (ibid.). Furthermore, critiqued by feminist researchers, though housing policies are intended genderneutral, they often have a strong normative character (Kuschinski, 2019; Margalit, 2021; Watson, 1986). Kuschinski points out the strong normative focus of housing policies in Germany on the heterosexist nuclear family through the inbuilt division of labour in apartments (see chapter 2.2.1) and the exclusion or special treatment by various support programmes and policies if the nuclear ideal of family is not met (Kuschinski, 2019). She argues that housing policies can "deepen unequal conditions of reproduction along social power relations" (ibid., p. 125) through housing inadequacy, illustrating how intersectional discriminations influence the conditions in which people care.

2.4 Capacity to Care

Power and Mee (2020) base their concept of housing as an infrastructure of care on the argument that housing takes part in assembling the capacity to care. Their definition of capacity to care is summarised by Power as "the factors and relations that make care possible" (2019, p. 766). There are different approaches to contextualise the capacity to care, mainly following a psychological approach (Hollway, 2006). However, this research argues in line with

geographic assemblage theory (Anderson et al., 2012; Power, 2019), that the pure focus on the psyche ignores the assembling of processes within everyday-life. Even though care exists in all dimensions of life (Tronto, 1993), housing is arguably a very important setting for domestic care-practices. It is helpful to conceptualise the capacity to care as the ability to practice everyday care tasks. The concept of everyday care-practices emphasises the interconnected nature of living, working, caring for others, and relaxing, as well as the fact that it has become increasingly impossible to do so without significant organisational, management effort, which is most typically performed by women (Gilroy & Booth, 1999).

The ability to perform everyday care-practices can be supported by physical resources and social relationships. Cleeve describes this also as the "mundane matterings" of the materialities of care (Cleeve, 2020, p. 3). Attention to materialities can provide a way to make visible the 'ordinary', highlighting how day-to-day child care is enabled or supported by material things (ibid.).

Social resources also influence care-practices, from the relationship between caregiver and receiver to third persons or networks involved in the care process (Hollway, 2006). Research indicates that single-parents prioritise these social networks higher than coupled-parents regarding their care-practices (Bruin & Cook, 1997), as these support dealing with the double-burden of childcare and paid work. Horelli also calls this the "supportive infrastructure of everyday life" (Horelli, 2009, p. 206).

When resources are limited or threatened, stress is felt, and well-being is preserved when people can retain resources (Dugan & Barnes-Farrell, 2020). This has been researched for the family car (Waitt & Harada, 2016) and the pram (Clement & Waitt, 2018) for enabling mobile childcare. This is connected with the time-squeeze single-parents are in (Jarvis, 2005). Following the argumentation of stress, well-functioning infrastructures of everyday life can enable more optimal use of the scarce resource time and therefore contribute to less stressful care-practices (ibid).

2.4.1 Capacity for childcare

As single-mothers bear the responsibility for childcare mostly alone, depending on their living arrangements, whilst having to earn the family's sole income, the factors and relations easing the stress of this double burden are important. Childcare tasks of parents depend on the age of the child. However, they include taking care of the physical and emotional wellbeing of the child as well as taking care of the child's partaking in educational and social obligations like school or kindergartens (Mullan, 2010).

Perceived social support has been identified as a core resource for single-mothers ability to cope with their burden of solemn responsibility (Taylor & Conger, 2017). This social support can come from friends, families and institutions, and, as research about single-mothers' online support networks shows(Ma & Sebastian, 2021), take very different forms as responsibility-sharing, resource-sharing, knowledge-sharing, and emotional and appraisal support (ibid.).

Furthermore, physical factors can also contribute to single-mothers' capacity to care for their children. However, this has been much less explored than the influence of social resources. Research in other fields of care (mostly health and elderly care) indicates how physical factors or materialities shape everyday care-practices and influence the ability to perform care (Buse et al., 2018; Cleeve, 2020). Attention to materialities can provide a way to make visible the 'ordinary', highlighting how day-to-day child care is enabled or supported by material things. They show how physical objects make care easier and more efficient, mostly regarding time but also stress levels (Clement & Waitt, 2018; Jarvis, 2005; Waitt & Harada, 2016).

2.4.2 Capacity for selfcare

Following Hall's critique of research about maternal care, concentration solemnly on the role of women as mothers, rather than on them as individuals worthy of scholarly attention (Hall, 2020), this research aims not to focus on the capacity to care of single-mothers only as their capacity to care for their child, but also themselves.

The capacity for selfcare of single-mothers has been closely linked to their capacity for childcare, as research argues that most mothers put the care of their children before their own (Barkin & Wisner, 2013; Nichols et al., 2015). Research hints that single-mothers only allow themselves time for selfcare when they see their responsibilities for paid labour, childcare and household labour fulfilled (ibid.). However, taking care of oneself is key to reproducing the ability to fulfil these tasks and taking care of one's mental health (Long et al., 2019). Barkin and Wissner illustrate how the capacity for selfcare is mainly resource-driven, especially time-driven (2013).

Selfcare is very diverse for everyone, however common selfcare includes practices like exercising, sleeping, beauty rituals, taking time alone, with friends or with the child to play and other individual recreational activities. These activities can be both aided by physical and spatial factors as well as relations. Relationships can take part in self-care by participating in these activities. They can also offer emotional and appraisal support helping in building internal strength to cope with their situation (Ma & Sebastian, 2021) and aid to set up boundaries and the ability to ask for support to generate resources like time for selfcare (Barkin & Wisner, 2013; Long et al., 2019).

Especially physical and spatial factors like short commutes between daily tasks or the opportunity to combine tasks to save time are key to their ability to generate time to perform selfcare (Long et al., 2019). Furthermore, the available physical and spatial factors determine which selfcare-practices can be carried out (indicated in Scott, 2022). The availability of a park offers the spatiality to go for a run, the availability of a tub offers the physicality to take a bath and so on (ibid.). The setting of selfcare determines the possibilities and practice of selfcare itself.

2.5 Conceptual Framework

It is important to acknowledge that housing plays an indispensable role in single-mothers' carepractice, shaping their ability to care. As social housing is strongly influenced by policy, it is important to analyse this influence. This research seeks to highlight the importance to consider care within housing policies by illustrating how housing materialities shape everyday carepractices.

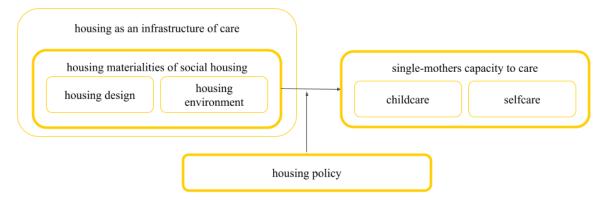


Figure 1: Conceptual Framework

3. Research design, methods and limitations

The research methodology is presented in the following chapter. The operationalisation of the key concepts derived from the research framework is explained, followed by describing the research strategy. The research methodology and sample size are thoroughly detailed. By examining the study's validity, the chapter concludes by presenting its limits.

3.1 Research Strategy

This research follows a qualitative single case-study approach, as it is a comprehensive method based on gathering substantial qualitative data in a real-life context (Lamker, 2014), to analyse the context-specific housing materialities experienced by single-mothers as well as the impact of housing policies on these materialities in the given spatial context of Hamburg. The scope of this case focuses on the city-state of Hamburg, as housing policies act at the state level in Germany and Hamburg offers with the "Alliance for Housing" a proactive housing policy including social housing (FHH, 2021a). This housing policy was initiated in 2011 and has been renewed thrice since. Together with related documents regarding social housing (see annexe), it offers a good overview of how housing policies shape housing materialities.

To comprehend the experiences of single-mothers via the lenses of gender and other intersecting identities such as age, race, ethnicity, and social class, this research follows an intersectional feminist approach (Long et al., 2019). Recognizing single-mothers not as a homogenous category but more as a common denominator helps to identify the factors and differences shaping their care-practices (ibid.).

3.2 Operationalisation: variables, dimensions and indicators

The operationalisation is based on the two main concepts of this research, housing materialities and single-mothers' capacity to care. The concepts discussed in the conceptual framework and debated in the literature review for the present research are defined as follows:

Housing materialities: Housing Materiality is one of the three dimensions that constitute the concept of housing as an infrastructure of care (Power & Mee, 2020). In the context of this research, it is divided into the housing design, constituted by the housing size, layout and amenities within the unit and the house itself, and the housing environment, constituted by the infrastructure and social networks accessible in the direct housing environment.

Single-mothers capacity to care: The capacity to care is based on the works of Tronto and Hollway, and describes "the factors and relations that make care possible" (Power, 2019, p. 766). This research focuses on childcare and selfcare and how these everyday care-practices are enabled or disabled by physical and social resources that contribute to the capacity to care.

| Concept | Variables | Sub-variables | Indicators |
|--------------------------------------|--|---|--|
| Housing materialities | Housing design | Housing size | Square metres of the housing unit, square metres per rerson, number of rooms |
| | (Cook, 1988; Roberts, 1990; Seum, 2021) | Housing layout | Rooms in the housing unit, open-plan living or separate kitchen, bedroom sharing of children, individual parent bedroom, privacy |
| | | Housing amenities | Access to childcare infrastructure like playgrounds, elevators to the apartment, communal spaces |
| | Housing environment (Clampet-Lundquist, | Access to infrastructures | Access to: public transport, parking, kindergartens and schools, after-school care, medical care for children, supermarkets etc, parks and recreational areas, individual places of self-care |
| | 2003; Cook et al., 1994; Zhang et al., 2015) | Access to social networks | Access to: other (single-)mothers, family networks, friend networks, parents, the child's father |
| | | Safety | Perceived safety of the neighbourhood, perceived safety of infrastructures |
| Single- mother's care capacity | Capacity to care for children (Taylor & Conger, 2017) | Physical resources that contribute to the capacity to care for the child (Buse et al., 2018; Cleeve, 2020) | Physical resources: making everyday childcare more time-efficient making everyday childcare less stressfull enabling the option to combine childcare with other tasks like household labour |
| | | Social resources that contribute to the capacity to care (Ma & Sebastian, 2021; Taylor & Conger, 2017) | Social resources: • helping with childcare through time-sharing, responsibility-sharing, task-sharing, knowledge-sharing • providing emotional support and appraisal regarding childcare |
| | Capacity to care for oneself (Barkin & Wisner, 2013) | Physical resources that contribute to the capacity to care for oneself (Buse et al., 2018; Cleeve, 2020) | Physical resources: • shaping and enabling selfcare- practices like exercise, spending time with friends, spending time alone (e.g. sleeping, beauty rituals, hobbies) |

| | Social resources that contribute to the capacity to care (Ma & Sebastian, 2021; Taylor & Conger, 2017) | help with selfcare through generating free time (e.g. external childcare or taking care of household tasks) take part in self-care processes (e.g. through exercising together, going on walks, spending time together etc.) Relationships that provide emotional support and appraisal regarding the mother |
|--|---|--|
|--|---|--|

3.3 Research methodology

To better understand how housing materialities shape single-mothers caregiving practices, qualitative data collection is used based on operationalising the variables offered in the conceptual framework above (van Thiel, 2014).

The first data collection approach relied on primary data gathering through semi-structured interviews with open-ended questions. For this purpose, the population of this research was defined as single-mothers over 18 with at least one child under 18 living in social housing in Hamburg.

The second method used for data collection was gathering public policy and related documents, which were coded and analysed based on the operationalisation of housing materialities- All three versions of Hamburg's main housing policy document, the *Alliance for Housing* were analysed, as the policy gets renewed based on the legislative cycles of the city's senate (FHH, 2011, 2016, 2021a). Furthermore, related to the policy are the *Funding guidelines for rental apartments in apartment buildings in Hamburg* (IFB Hamburg, 2022). These funding guidelines are accompanied by the *Technical Instruction of the Authority for Urban Development and Housing on the Implementation of the Hamburg Housing Promotion Act and the Hamburg Housing Bond Act* (FHH, 2021b).

To further contextualise this data analysis, semi-structured interviews with the Authority of Urban Development and Housing and informal interviews with experts on gender and housing and housing activists in Hamburg were conducted. These helped in understanding the political and personal motives of actors involved in the policy-making process and offered an understanding of the decision-making process of Hamburg's social housing policy as well as an insight how the implementation aligns with the policy contents.

Interviews were transcribed verbatim where possible. If impossible (see chapter 3.5), interview summaries have been written. All collected data were analysed through codes based on the operationalisation of the variables. The analysis of the policy documents and the expert interviews were supplemented with codes on the target groups and the social intention of the policy. In keeping with qualitative tactics of concurrent data collection and analysis, the researcher made changes to the codebook during the data analysis process (Hays & Singh, 2012). When the preexisting codes did not suit the data, new codes were added to the codebook, and codes were merged as needed. Each transcript's significant remarks and phrases related to the phenomena were identified and collected separately to create meaning units for the coding procedure (Long et al., 2019). These profound statements encapsulated the essence of the research problem and helped the researcher develop a thematic description of the experiences.

3.4 Sample size

The researcher conducted interviews with 10 participants who fit the above-named criteria (see annexe). The sample size included single-mothers with variously different backgrounds. Out of the ten, four had a migration background. Two single-mothers were unemployed, whilst four worked full-time or part-time and four were still students, one of them also worked part-time. Although these differentiations were not the main focus of this research, it is important to acknowledge them and be aware of the differences in privileges they imply (Misra et al., 2021). While focusing on inequality in terms of a single category, such as being a single-mother, may be easier, inequality always reflects several socially created dimensions of difference (ibid.).

Five to 25 persons are commonly interviewed in phenomenological research like this (Hays & Singh, 2012). The depth and richness of the participant data make this sample size (N = 10) adequate (ibid.). A snowball sampling strategy was used to choose the participants, which entails finding new individuals fitting the research eligibility requirements by utilising the relationships of the participants (Hays & Singh, 2012). This is a suitable approach for reaching out to vulnerable populations (ibid.). The starting point for said snowball sampling was the researcher's network and a Facebook group for single-parents in Hamburg.

Furthermore, non-probability sampling was used to identify experts on gender and housing as well as key stakeholders in Hamburg's housing policy-making regarding social housing.

3.5 Challenges and limitations

As this research falls into the Covid-19 timeframe, it had to deal with a variety of communication forms during the fieldwork. Interviews were both conducted virtually and physically in Hamburg. This limits their comparability, as the virtual conversation limited the spontaneity that physical discussions allow, and, in some cases, the natural fluidity was lost during the conversations.

Furthermore, as some of the interviews of single-mothers were conducted within their own homes, the researcher got a much more detailed idea of their real-life housing situation in comparison to only hearing a description. However, it was decided not to follow a coherent approach and to leave it up to the single-mothers to decide on the form and location of the interview, as the researcher recognised that single-mothers are a population with very limited time resources and that the interview should be conducted with as little effort as possible for the interviewees. This also resulted in interviews being conducted in public spaces like playgrounds, where the audio-quality of the recording was limited and transcribing the interviews was hardly possible. In these cases, the interview was documented by note-taking and the audio recording is only used for clarification purposes. A summary of those interviews has been written directly after the interview, to keep the memory of the researcher about the interview as clear as possible.

3.5.1 Reliability

The semi-structured interviews were conducted in German as Hamburg was selected as the case study. Both interviewees and the researcher, speak it as a first language. Just the essential quotes were translated into English, the remaining information was preserved in its native tongue and coded in such, however, the codes used were in English. The policy documents were reviewed using the same coding format. Key paragraphs were translated to English and

checked for proper translation by the researcher herself and a native speaker to ensure reliability.

Furthermore, it has to be noted that the reliability of expert interviews is limited, as they often follow their own ideology and political agenda. This is especially the case when it comes to gender and feminism, which can be considered "buzzwords" in the ongoing political debate and people rarely feel neutral about them (Press, 2012). This is also true for the researcher, who understands this research within the tradition of material feminist urban research (see preamble).

This research used three different data sources to ensure validity (van Thiel, 2014). Data was triangulated between the content analysis of the policy and subsequent documents, the interviews/written communication with policymakers and housing experts as well as the interviews with single-mothers living in social housing. However, the triangulation of the latter with the content analysis and the expert interviews was limited, as the real-life experience of single-mothers is hardly represented in these.

3.5.2 Internal and External Validity

The in-depth analysis within a case study enables to identify, describe and explain relationships between research objectives (Lamker, 2014). By its very nature, case study research is contextual (ibid.). The abundance of empirical data could enhance current ideas, increasing internal validity; nevertheless, external validity is constrained (van Thiel, 2014). Thus, triangulation was strived for by collecting data in three different approaches, as stated above. Despite the number of units analysed, this enabled the collection of sufficient data to ensure that the results are accurate. All the procedures used to gather and analyse the data were also meticulously and chronologically documented to verify internal validity (ibid.).

Due to the context-related information explaining the link between the variables, unrestricted transfer to other contexts is not possible, although a transfer of practical knowledge and thus learning for other contexts and situations is valuable (Lamker, 2014). However, the operationalization of the concepts included indicators from peer-reviewed theory, which would allow them to be analysed in similar situations.

Subjectivity and selectivity are concerns linked with case study research (van Thiel, 2014). Because the management of a large volume of material required a methodical approach to the analysis to retain objectivity throughout the investigation, only pertinent data from this database was chosen for the analysis (ibid.). Nonetheless, biases by interviewees and the researcher cannot be ruled out.

4. Data Analysis

This chapter presents the research findings, starting with an introduction to the case study and its housing policy. Following, it presents the experienced housing materialities and illustrates how shape care-practices, influencing the capacity to care.

4.1 The housing situation in Hamburg

Social housing has a long tradition in Hamburg, Germany's second biggest city with nearly two million inhabitants. In the period from the end of the Second World War until 1987, 275,000 apartments were still subject to rent control in the mid-1980s (Metzger, 2020). The neoliberalisation of urban development and the limited time that social housing is rent-controlled caused a sharp decline in this stock up to the 2000s when the housing crisis dominated the 2011 election and prompted a change in government (ibid.). To pursue an active housing policy, the housing industry, housing organisations, and politicians formed the Alliance for Housing under the new social democratic government (FHH, 2021a). Nowadays the city has over 900,000 apartments, however, only 75.000 of them are social housing (Statista, 2021), distributed throughout the city (see Figure 2).

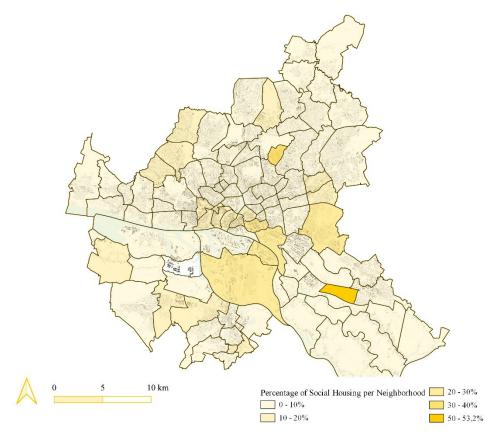


Figure 2: Percentage of Social Housing per Neighbourhood

4.1.1 Alliance for Housing

The main goal is to issue 10,000 building permits each year following the one-third mix (Drittelmix), i.e. one-third each of owner-occupied housing, market-priced rental housing and social housing. The Alliance for Housing has been renewed every legislative term since and varies in content and focus (FHH, 2011, 2016, 2021a). The goal of constructing new

apartments, climate change sensitive urban development, architectural culture, and handling so-called *priority housing seekers* are shared by all of them. The degree differs between policy papers to which the policy attempts to balance societal purposes with achieving goals of the housing industry or in other sectors of urban development.

The agreed goal in the earlier documents is to create housing for households with low and medium incomes and to provide housing for different target groups, especially *priority housing seekers*. These are defined as "homeless people, people with mental illness, mental and physical disabilities, but also single parents and other households that have been recognised as housing emergencies by the relevant district authorities" (FHH, 2011, p. 12, 2016, p. 19). The latest policy lacks this target group orientation and labels the policies' target as "the housing provision for all households" (FHH, 2021a, p. 18). In the provision of housing for lower to middle-income groups and vulnerable households, the focus is on the construction of new social housing in line with the Alliance's new-construction strategy. Rent-regulating instruments were only to be found in the 2016 version.

4.1.2 Social Housing in Hamburg

In Hamburg, social housing is obtained via the so-called §5-voucher, which an individual can get if their income falls below a certain threshold for the corresponding household size. This entitles to move into an apartment which is rent-controlled for a limited period (between 20 and 35 years) made possible by government funding and therefore considered social housing (FHH, n.d.). This stock is constantly shrinking, with over 26% of units falling out of rent-control between 2019 and 2026 (Statistikamt Nord, 2020) (see Figure 3).

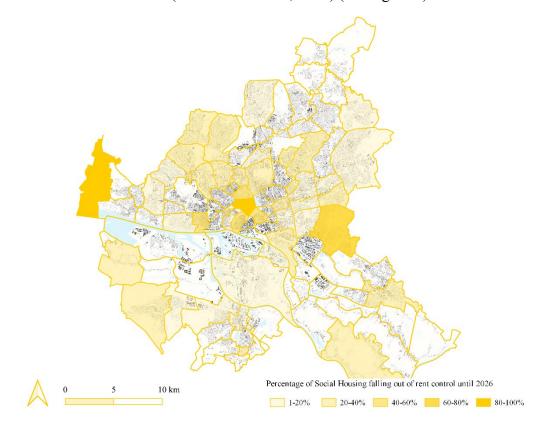


Figure 3: Percentage of Social Housing falling out of rent control until 2026

In Hamburg, the exact funding conditions for social housing are stated by the IFB based on criteria developed by the BSW (BSW Hamburg, personal communication, 21 June 2022), defining the criteria that investors or cooperatives have to fulfil to access loans and ongoing subsidies. In return, the developers commit to a fixed rent price and tenancy agreement (IFB Hamburg, 2022). The federal Housing Promotion Act (WoFG § 9 Abs. 2) regulates the right to access social housing consistently throughout Germany, targeted at households with a low to medium net income. The yearly income cap (net) for the first person in the household is set at 12,000 euros, followed by 6,000 euros for the second person and 4,100 euros + 1,000 euros for each additional person and child (FHH, n.d.). This favours the heteronormative nuclear family model, which has one primary earner and one secondary earner. However, this does not imply that it is the explicit intention of the government that only those who divide up wage and reproductive work are supposed to live in social housing (Expert 02, personal communication, 7 July 2022); rather, it is a reflection of statistical data that illustrates the income ratios of said family models (e.g. Garbuszus et al., 2018).

The household size not only determines the income levels to access social housing with a §5-voucher but also the housing size that a household is allowed to access (FHH, n.d.). The size requirements for the respective number of persons usually correspond to one room per person, whereby kitchens only count as rooms if they are open-kitchens in a livingroom. An exception is the 1-person apartment: as the functions of living, sleeping and cooking are not allowed to be in one room, there are always at least two rooms (incl. kitchen). Ranging between 30 to 50sqm, the layout often provides for a bedroom and a livingroom with an open-kitchen. From the second person onwards, the maximum sizes of the apartments increase in steps by 15sqm (ibid.). The allocation for one more room is only possible for "married couples/partnerships under the Civil Partnership Act with the intention of starting a family in a joint household as well as single parents with child(ren) until completion of professional training, including studies if applicable" (FHH, 2021b, p. 18). However, this extra room is only allowed to be max. 10sqm bigger than the maximum household size (ibid.), so there is a discrepancy with the sizes of the apartments that are being built, as they increase in 15sqm steps (IFB Hamburg, 2022).

The IFB funding guidelines for social housing also formulate specific layout requirements (IFB Hamburg, 2022, pp. 28–30). Hamburg is keeping these layout requirements quite open in comparison to other German states, who regulate those by strict norms (BSW Hamburg, personal communication, 21 June 2022), and only defining minimum room sizes and requiring that the floorplans of "well usable apartments should be flexible and adaptable to the needs of the household members and should also meet *gender-relevant quality requirements*" (IFB Hamburg, 2022, p. 28). This one sentence was introduced in the 2020 version of the funding guidelines, but information about the motivation or political process behind this introduction was withheld by the authority (BSW Hamburg, personal communication, 27 June 2022).

These gender-relevant quality requirements are not further defined in the funding guidelines, nor other documents from the IFB. According to the Authority for Urban Development and Housing (IFB Hamburg & BSW Hamburg, personal communication, 10 May 2022), these quality requirements are defined as "flexible floorplans that are oriented towards the different needs of the residents and that are taken into account in the context of funding". However, in an interview with the BSW, it was specified as the investor's decision, as the BSW "... does not presume to tell the investor what floorplans he should and must build for what living needs, but offer him a corridor, which means he can have a very traditional apartment floorplan like in the 1950s with a huge livingroom, a huge master bedroom, and a storage room for the child as well as a small functional kitchen. He can do that. But he don't have to. Because he can also build a floorplan in which the living spaces are all almost the same size, which is then probably

much better suited to the living situation of single parents with a child and so on" (BSW Hamburg, personal communication, 21 June 2022).

Following this statement, it can be assumed that the authority is aware of the housing requirements for people outside the traditional nuclear family which shows some similarity to the critique of early feminist researchers like Watson (1986). However, this is considered less important than their ethos of dictating as little as possible to investors, highlighted multiple times during the interview (BSW Hamburg, personal communication, 21 June 2022). They argue this forms part of their self-image in planning not to presume omniscience whilst recognising that some planning ideals have not been effective in the past (ibid.). Nonetheless, experts argue that the composition of the Alliance for Housing of politicians and the housing industry is intended to give the housing industry as much freedom as possible (Expert 01, personal communication, 11 July 2022). This is necessary because Hamburg does not build social housing itself, but relies on the housing industry to do so by incorporating them into the policy-making process, as well as encouraged by IFB subsidies and obligated through the one-third mix (ibid.).

Furthermore, the BSW points out that "gender-relevant factors for planning and design specifications are included in concept tenders, such as the avoidance of anxiety areas by creating visibility" to extend their impact beyond the housing itself to the housing environment and the planning process (IFB Hamburg & BSW Hamburg, personal communication, 10 May 2022). According to the BSW, the *gender-relevant quality requirements* of Hamburg's housing subsidies are understood as a cross-sectional task (ibid.). However, it can be critiqued that none of this is communicated transparently through the IFB guidelines, thus not rendering it clear to all investors who may not be aware of gender-sensitive architecture and urban planning.

4.2 Single-mothers' experiences of housing materialities

The interviewed single-mothers live all over the city (see Figure 3), more details about their housing and living situation can be found in the annexe. They all moved into social housing within the last ten years. However, some of the apartment buildings are much older and hence not subject to the floorplan requirements set since the introduction of the Alliance for Housing. They were, however, all subject to the same access criteria imposed by the Alliance for Housing.

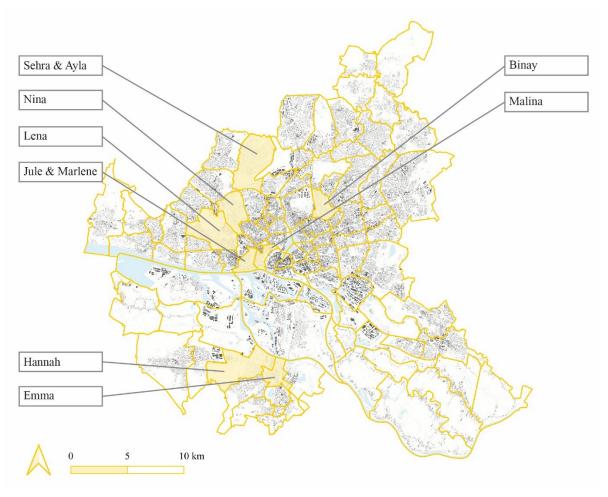


Figure 4: Neighbourhoods of the Interviewees

4.2.1 Housing Design

Housing Size & Housing Layout

The housing size depends on the household size and household constellation (see chapter 4.1.2). Most mothers in this research, even though eligible for an extra room, do not live in apartments that fulfil these criteria. They were aware of their eligibility for one more room, however, they could not find apartments that fit the square metre limitations of only 10 additional sqm in the one-year time frame of the §5-voucher.

"Most apartments with three rooms were over 70sqm when I was searching, so I couldn't get them.... And because I was afraid that my §5-voucher would expire, I took this apartment, that only has two rooms" (Ayla, 26, one child, 58sqm)

Whilst Binay stayed in her abusive relationship until she found housing, Sehra stayed with her two sons in her parent's house for nearly the full year until a four-room apartment in her preferred neighbourhood became available.

In two-person households, it is common for mothers to share a bedroom with their small child, especially if the kitchen is designed as an open-living space within one of the two rooms. The open layout effectively reduces a two-room apartment to a one-bedroom apartment. Lena, who lives with her seven-year-old daughter, describes this as follows:

"We share a bed. This was okay when we moved in here, she was (...) two then, but at some point, this is not normal anymore. And the room is not big enough to fit another bed in, not even a small one" (Lena, 35, one child, 59sqm).

Similar thoughts were on Nina's mind, who lives with twins in a three-room apartment.

"They are five years old and still share the room. I think that will go on for a while. If they don't want to or can't share anymore, then I would have to move into the livingroom and sleep there too. And then one of them would get my bedroom" (Nina, 46, two children, 75sqm)

Many single-mothers grew resourceful to escape a predicament like this. Ayla constructed a room divider and a loft bed with the help of her friends to create her own place in the kitchen/livingroom and to give her daughter some privacy. To avoid giving up her bedroom, Nina considers converting her livingroom into a children's bedroom using a room divider. When there is more than one child, it is typical for children to share a bedroom. This is not regarded negatively, particularly when the children are still small or close in age. Both single-mothers with twins find their children's bedroom sharing quite normal, and Hannah explains that she sees her girls' bedroom sharing as positive because it reminds her of her childhood bedroom-sharing with her sister. However, beyond a certain age, most mothers make plans to provide their children with their own place.

"Yes, when they get older they will want to have their own rooms. And I probably want that too. Just to avoid stress between the two of them. I'll either have to move or make other arrangements here...." (Hannah, 35, two children, 65sqm)

According to a decision of the Social Court of Dresden in 2007, a family receiving unemployment benefit II is entitled to a room of its own for each child (*SG Dresden*, 02.08.2007—*S* 10 AS 1957/07 ER, 2007), as this corresponds to the social norm in Germany. Many of the mothers interviewed communicated the implied social pressure to fulfil this social norm, which also aligns with literature (Bruin & Cook, 1997). Emma even switched her bedroom with her son, when he got older, so now she is staying in the small room whilst her son got the bigger bedroom.

Housing Amenities

Storage rooms in the basement were valued highly by all research participants due to their generally restricted space. Nina and Ayla both have small built-in storage units in their apartments that they consider necessary for storing items such as a pram or their child's running bike, which "you don't want to rush to the basement for all the time" (Ayla, 26, one child, 58sqm). Sehra, who had neither storage options, was frequently chastised by her janitor for posing a fire threat by folding up her pram in the corridor in front of her third-floor apartment.

Pram storage is rarely available in the homes of the research participants. Some participants developed unofficial alternatives for pram storage in the basement, such as storing under the stairs. Only Lena's house had a specific basement room for prams, but she described it as being too small to accommodate all the prams in the house. As a result, she moved her pram upstairs and stowed it on her balcony. Jule had to find a similar solution:

"My twin-pram is massive, so it doesn't really fit into the basement. Also, you don't really want to get your kids out of the pram before you reach the apartment, that's just stressful. So luckily, we have an elevator, so we can take the pram upstairs and store it in our hallway... It takes up basically all the space there, but there is no other solution" (Jule, 28, two children, 82sqm).

Most of the newer buildings have elevators, however, older buildings often lack them. More than half of the interviewees have no elevators in their houses. When asked what they would change in their housing situation, elevators were named by all of them.

The interviewed single-mothers did not value communal areas highly. Some of them had shared laundry and drying units in their housing, however, they did not use those often. They perceived them either as too dirty or as more work doing their washing there. However, communal multifunctional rooms existed in two of the participants' housing and were used for e.g. birthday parties if the apartment was perceived as too small to host people, like in Ayla's case. She also said that the room was used for Covid vaccination, which she perceived as a good opportunity to meet some neighbours.

Several of the single-mothers have a similar feeling about the playgrounds that belong to the house. Most of them perceived them as very positive and reported using them very often with their children or letting their children play there alone if they were old enough. In bigger housing estates, in which most of the participants lived, they reported even a good variety of playgrounds in their direct housing proximity, which Hannah illustrates:

"Yes, I have to say that the playgrounds are really great. There was a very small playground between each of these houses and a few larger ones. We looked directly at the huge football field from our balcony, everything was green and many playgrounds were visible So that was great. We had seven of them right outside our front door, I think...." (Hannah, 35, two children, 65sqm)

4.2.2 Housing Environment

<u>Infrastructures</u>

Nearly all the single-mothers reported satisfaction with the infrastructures in their housing environment. They valued the walkable accessibility of infrastructures like supermarkets, drugstores as well as schools and kindergartens as well as the public transport connectivity to the city centre of Hamburg. Most of them reported having no car and feeling no need to own one, so parking infrastructure that was highly valued in other studies on neighbourhood satisfaction (e.g. Cook, 1988) had nearly no importance for the single-mothers in this study. This can be attributed to higher densities in European cities like Hamburg compared to the suburban setups of most previous research. If necessary they made use of friends' or parents' cars.

Green infrastructure was reported to be satisfying in most cases. Nearly all mothers had access to parks or recreational areas for themselves and their children in their housing environment and reported using them regularly. Marlene, Nina and Emma described the surrounding parks as an important counterpart to their apartment:

"There is the forest. And the meadow is not far away. If we don't go to the playground, we go there. We always go outside. No matter what the weather is like, it's just part of our routine..." (Nina, 46, two children, 75sqm).

Social Networks

Nearly all single-mothers reported the social networks in their housing environment as limited. They rarely counted their neighbours as part of their social networks, as nearly all of them

reported certain anonymity within their houses and the housing environment. Nina was among them:

"You know how it is in big cities. People stay anonymous... like, we say hello to each other in the hallway and I know, if I ring at theirs in an emergency, I'd probably get help, but I also don't really know them enough to ask in a non-emergency..." (Nina, 46, two children, 75sqm).

Most single-parents in this research valued their parents as the most important part of their social network, aligning with Zhang et al. (2015). Lena, Sehra and Emma chose their neighbourhood to be close to their parents. Mothers in co-parenting agreements went through a similar decision-making process considering the proximity of the children's father.

The majority of friends are from before the children were born. When single-mothers obtained social housing in their original neighbourhood, they counted many of their old friends to their social network. However, because the majority of the mothers in this study had to relocate to move into social housing, their friend networks within the housing environment were limited:

"...all my friends are still students like me, they live in the city centre, not out here in Stellingen... It's so far out that they can't just drop by. I only see them when I'm at uni or when I'm actively arranging a get-together" (Ayla, 26, one child, 58sqm).

Aligning with literature (Bruin & Cook, 1997; Zhang et al., 2015), many research participants view access to other parents with dependent children, especially other single-mothers as important, as they are familiar with their circumstances. The single-mothers group, that Sehra and Ayla belong to, meets once a week on the playground. Children of Jule and Malina made friends while attending the same kindergarten.

Safety

Contrasting the literature from North America (Cook, 1988; Jones & Teixeira, 2015), none of the single-mothers reported being overly concerned with the safety of their neighbourhood or the infrastructures. They all reported moving mostly freely through their neighbourhood and showed no safety concerns using infrastructures. Most of them felt fine letting their older children play alone in the playgrounds surrounding the house. The only safety concern voiced regarding their children was the danger of big streets and car traffic. Binay, Lena and Emma, whose children are already in elementary school, reported that they would let their child walk to school alone at some point, but they are concerned about traffic:

"Because we've never had a car, my son knows road traffic really well and is quite safe, so I'm not really worried. It's more the way back that you think, okay, when he's out and about with his boys, you think, will they be so careful when they cross the road? And then with all the traffic in the afternoon?" (Emma, 35, one child, 70sqm)

4.3 The effect of housing materialities on care-practices

All interviewees agreed that housing serves as a resource and setting for daily care-practices. Their capacity to care was linked to the way housing as a care resource made care more or less stressful and time-effective. Those, who reported satisfaction with their current housing situation, reported their housing as a positive resource in daily care-practice, making care easier and less stressful. This also applies to situations when mothers reported actively pursuing self-care, however, it is mostly tied to childcare-practices and associated housekeeping.

4.3.1 The perceived capacity to care

Motherhood is described as difficult regardless of background, and it is more difficult for single women who are both primary caretakers and primary wage earners for their children (Taylor & Conger, 2017). Single-mothers reported having limited emotional capacity due to the rigours of parenting a kid without the help of a spouse or co-parent. Their capacity to care is limited due to high stresses such as daily hassles, social isolation, and financial strain (ibid.). Closely linked to money was the accessibility of material resources to make their everyday-life easier.

"Sure, if we had more money, my life would be much easier. I could afford help with all my responsibilities and wouldn't rely so much on my mother... Or just buy a vacuum-robot." (Binay, 35, three children, 82sqm)

They described their everyday life as requiring a lot of organisational efforts, aligning with findings of Gilroy and Booth (1999), to balance all their responsibilities, especially if they had multiple and/or younger children. Those with older children like Marlene and Emma reported regaining some autonomy over their life, not stressing from one task to another. The constant stress affected the mothers' mental health, which conforms with literature (Kim & Kim, 2020), as nearly all of them reported a fear/experience of depression or burnout. They communicated the stress of everyday-life and their goal to be a "good mother" as the main factors for that, describing always prioritising their children over themselves or housework.

"Sometimes I feel like I'm reaching my limits trying to be a good mother. There are only 24 hours in a day and I only have two hands to do everything that two parents normally do." (Malina, 33, one child, 68sqm)

Even though all of them described their everyday-life as being a struggle, they all try to make the best out of their situation and work with the resources available to them. Regardless of the stress, they all valued being a mother and articulated the wish to give their children the best childhood possible:

"Even though I don't wish anyone to be a single parent, I think that's the shittiest thing that can happen to you, I definitely wouldn't want the situation any other way. Yes, it's hard, but my children are worth it. And there is always some way to make it easier. "(Nina, 46, two children, 75sqm)

Aligning with the operationalisation of this research, most single-mothers valued physical and social resources that made their care easier through minimising stress, limiting the time spent on tasks and being helpful in emergencies.

4.3.2 The effect of housing materialities on childcare-practices

Housing Design

The number of rooms and the layout of the home had great impact on daily care-practices. Those, who had bedrooms for each household member in addition to a livingroom, reported that their housing fit their daily care-practice and allowed for flexibility for their family to evolve and fit their future care-practices as well, corresponding to literature on housing satisfaction (Bruin & Cook, 1997; Jones & Teixeira, 2015). Contrasting, if there were not enough rooms, mothers reported their childcare-practices being limited and voiced concern about the development of their child. Lena, who still shares the bedroom with her seven-yearold daughter, is worried:

"Even now in wiggle-tooth puberty, there is no way at all, spatially, to wiggle away from each other." (Lena, 35, one child, 59sqm)

There were two main limitations in accessing housing that offered that extra bedroom the policy allocates. Both Lena and Ayla reported not being able to find an apartment that fits the square metre limitations whilst having that extra room. This is due to the allowed increase of 10sqm for single-parents, while the increase for one more person in the household would be 15sqm. Due to a lack of regulation, it can be concluded that investors often use this maximum size of the apartment which then is no longer an option for single parents. The other limitation is affordability, as those single-mothers without a (full-time) job reported not being able to afford that extra room.

Housing layout is viewed as more differentiated amongst the participants. Generally, they reported equal room sizes offered for more flexible usage of the space, whilst uneven room sizes dictated certain usages and caused problems, like in Sehras case, where her children fought over the bigger bedroom, creating stress. According to the literature, these patterns in floorplans are designed for the nuclear family, making flexible use by other family models problematic (Seum, 2021; Watson, 1986). Opinions on open-kitchen floorplans differentiated vastly, aligning with R. Dowling (2008). For those who had their own bedrooms, the open-kitchen was a resource that allowed them to take care of their children whilst doing other tasks, making daily care less-stressful. However, for those who had fewer bedrooms than people in their apartment, the open-kitchen was a burden (mostly for selfcare-practices, see chapter 4.3.2). Furthermore, children-bedrooms close to kitchen/living spaces were viewed as easing stress, shortening ways in case of an emergency. Lockable windows and children-bedroom windows towards the balcony were likewise reported to ease stress when allowing small children to be alone in a room, so they could not accidentally open the window and fall out.

Lastly, the availability of housing amenities like elevators or basement storage (see chapter 4.2.1) made care-practices less demanding and more time efficient, or, if not available stressful and even limiting. Without an elevator, Nina recounts the situation as follows:

"...the twins as babies or toddlers and I always carried one landing after the other. Yes, so everything always had to go up and down twice. One landing after the other...." (Nina, 46, two children, 75sqm)

For some single-mothers, the effort of navigating the stairway alone with their children lets them not leave the house if not necessary or combine as many things as possible to avoid the burden of the stairway.

Playgrounds and parks close to the house were described as positive resources for childcare, making routes short and time-efficient and allowing older children to play alone there like in Emmas and Marlene's case:

"... on the way back (from kindergarten) you could always sit down in the playground, so to speak. And in the meantime, he can play there on his own without me worrying and I can do something else..." (Marlene, 41, one child, 65sqm)

Ideally, the playground was within viewing distance of the apartment, so mothers could have an eye on the children when playing. This was the case for some mothers like Nina, Tina or Binay, and others like Jule or Marlene voiced this as an ideal scenario.

Housing Environment

Walking was described as their prefered mode of mobility with children, everything within walking distance was considered their housing environment. Most of the interviewees reported satisfaction with the accessibility of infrastructures within walking distance in their neighbourhood, which Binay and others described as making everyday-life less stressful and

more convenient. Similarly, the proximity to schools and kindergartens was seen as an easing factor in everyday-life. However, mothers struggled to find kindergarten placements in their new neighbourhood after moving. Therefore, several of them, among them Nina and Hannah, had to travel long distances to keep their children in the old kindergarten.

"I have to have an affordable apartment and then I need a kindergarten place, which I probably won't get because getting a kindergarten place in Hamburg is a catastrophe, and then I have to pull out the children who might already have a hard time. But you can't afford an apartment close to your kindergarten either." (Hannah, 35, two children, 65sqm)

Overall, certain housing materialities enable or disable childcare-practices, influencing how they are perceived by the mothers. Some features contribute to the use-value of their housing, easing care, whilst others make care harder and more stressful. The mothers were aware of this, as they voiced changes that would improve their care-practices for their children when asked about their optimal living situation at the end of each interview.

However, the biggest factor in this research contributing to the capacity to care were social networks, which aligns with the literature (Taylor & Conger, 2017). Most single-mothers in this research reported limited social resources. Those who could stay in their original neighbourhood had larger social networks than those who had to move to a different neighbourhood to access social housing. Relationships taking part in childcare were viewed as very important, however, these were the most limited. For many single-mothers, only their parents and the child's father would take this responsibility, so their proximity contributed immensely to their capacity to care. For Jule, Lena, Sehra and Emma, these are her parents and for Marlene, Hannah and Nina, these were their children's fathers. The others had no such arrangements.

"But I have always been lucky that my son's father has been here for years and I have always had days off. And then I just put everything I had to do that I couldn't do with my child there" (Marlene, 41, one child, 65sqm).

Relationships that share tasks and responsibilities with the mothers were more common, like combining picking up children from kindergarten. These relationships were mostly fulfilled through other parents, especially other single-parents. Both Jule and Malina, as well as Sehra and Ayla, supported each other like that. And lastly, the network that most mothers felt they have, even if they were missing the before mentioned, are networks that help in emergencies. These roles were mostly fulfilled by neighbours, friends and family and were viewed as always there and therefore limiting stress like in Emma's case:

".... but now at school, that's where the contacts are so I can call, too. Oh, I'm stuck on the train. Can you please take him? And that works great too, luckily!" (Emma, 35, one child, 70sqm)

However, all mothers reported the difficulties they had building up their networks that actually help with care as they did not want to be a burden to anyone and felt individually responsible for their child, even though the German saying "it normally takes a village to raise a child" was said in multiple interviews. Jule, Binay, Malina and Marlene all raised the wish for single-parent houses, where single-parents could live in their own apartments, but had common space to support each other with childcare responsibilities and be each other's social network.

4.3.3 The effect of housing materialities on selfcare-practices

Nearly all mothers reported that they only practised real selfcare if they had child-free time. Both material and spatial factors as well as relationships were a key resource for child-free time. Spatially, the proximity of childcare infrastructure like kindergartens offered them more time for themselves, if they were not or part-time working. This was not the case for working single-mothers. As described in chapter 4.3.1, only few people in the single-mothers' lives took responsibility for childcare and therefore offered single-mothers free time. Those in coparenting arrangements could rely on those days when the father had the child and some mothers like Sehra, Emma or Malina had similar arrangements with their parents. Nonetheless, even relationships that did not offer them child-free time contribute to their selfcare. Many of the single-mothers reported combining childcare tasks like playground visits with friends or other mothers. Generally, friendships were valued highly as part of their selfcare in offering emotional support and appraisal. Other single-mothers were viewed as special friends, as they could fully understand their situation, something that coupled parents or friends without children could not.

Nonetheless, child-free time was the biggest factor in enabling selfcare. Selfcare-practices within the apartment included meditation, yoga, working out, beauty rituals and for many watching TV, connecting with friends through social media or browsing their phones. Within the apartment, they valued their own space as key for selfcare and restoration. Many of them reported decorating their apartment to feel more at home, which they associated with relaxation. This aligns with literature, which states that alterations of the home do not have to be a sign of dissatisfaction, but can be an expression of personality and identification (Omar et al., 2012). Sehra, who moved into the smallest room in the apartment to offer her sons equally sized rooms, stated that she made the room very cosy for herself, so it felt personal to her.

"I decorated my room in very much my taste, like it looks a little bit like my teenage bedroom. It really makes me feel at home. It feels like my own space... I'm represented here... And there are no child toys or anything like that here..." (Sehra, 27, two children, 80sqm).

However, the biggest restraint of selfcare within the apartment was the limited space and the lack of privacy for the mothers. Those who had their own, closable bedrooms were not as affected by this as those who shared bedrooms with their children or slept in the kitchen/livingroom. Lena reported she could not even watch TV in the evenings, as the bedroom door of their shared bedroom went off directly from the livingroom and did not offer enough sound protection for her daughter to sleep when she watches TV. For Ayla, sleeping in the livingroom limits her capacity for selfcare, as no space in the apartment feels like her own.

Selfcare-practice within the housing environment included going on walks, meeting friends, going out for coffee (alone or with friends), going for a run or other sportive activities. Generally, green spaces like parks were valued highly. Additionally, the housing location played a role for their selfcare-practices, as those who live in central locations reported friends would come over more often than those who live further away from the city centre, like in Jule's case:

"I live so centrally that for many of my friends it's easy to come to visit. And when the children are in bed and I can't leave the house, we can sit in the livingroom or on the balcony and just talk... This means a lot to me!" (Jule, 28, two children, 82sqm)

In conclusion, even though single-mothers reported different selfcare-practices and the influence of their housing on them, most of them agreed that especially with small children, selfcare is extremely limited and not enough to restore the energy their everyday life and their sole responsibility for their family takes from them. However, this is not directly linked to housing, but the individualisation of care in our society and the lack of support single-mothers experience in German society.

5. Conclusions

Concluding this research, this chapter aims to answer the main research question by highlighting the housing materialities contributing to or hindering the capacity to care of single-mothers, following the sub-questions of the research. Finally, recommendations for future research and policymaking will be made, illustrating how policymaking and research can contribute to more gender equality.

5.1 Conclusions of the research sub-questions

How does Hamburg's housing policy shape the housing materialities of social housing?

On various levels, Hamburg's housing policy affects the experienced housing materiality of single-mothers in Hamburg's social housing. On paper, the addition of one room for single-parents demonstrates that the authorities are aware of the various housing needs and do not generally assume gender-neutrality, as criticised by Hatch (2022). Unfortunately, the practical implementation of this policy regulation is challenging, as the extra room for single-parents only allows for a 10sqm claim, whilst the maximum square metre restrictions in social housing for the next larger household size increases by 15sqm. To maximise profit, most investors construct the largest possible unit size (Expert 01, personal communication, 11 July 2022), which drastically limits the housing stock available to single-parent families. In the context of this study, this meant that more than half of the single-mothers were living in smaller social housing units than they were entitled to.

This phenomenon, related to the gendered data-gap (Criado-Perez, 2019), remains invisible since no statistics are collected on how many households eligible for social housing are single-parents, and thus have a different size requirement than other households with the same number of persons. Furthermore, no data is collected on how many apartments that meet these size requirements are built; the social housing built is only registered according to the number of rooms in the apartment. Therefore, there is no overview of how many apartments that meet the requirements for single-parents exist, nor how many are needed.

Although gender-relevant quality requirements for floorplans are set in Hamburg, they are not specified transparently. When queried, these were described as flexibly usable floorplans for a wide range of households, although the funding conditions contain no binding criteria (IFB Hamburg, 2022). Therefore, investors can develop 1950s-style floorplans that favour the nuclear family model, or floorplans with fewer normative implications with comparably sized rooms. However, Hamburg aims to impose as few restrictions on housing investors as possible to make the construction of (social) housing as attractive as possible.

The policy's evident emphasis on new development overlooks rent regulations, resulting in significant rent hikes in the city (Hamburger Mieterverein & Gymnasium Ohmoor, 2021). As a result, for certain population groups, including many single-parents, social housing is basically the only affordable way to live in Hamburg. Because the demand for social housing outnumbers the available supply by far, and the spatial distribution of housing is unequal throughout the city, many single-mothers working in this field are forced to relocate to areas where they may find social housing. This contributes to displacement because they are suddenly separated from their social networks and support structures.

How do single-mothers experience materialities in the context of Hamburg social housing?

In this research, the experienced housing materialities vary. The majority of interviewees live in housing that is smaller than their legal entitlement. Although the sample size of this study does not allow for further generalisation, those who live in appropriate-sized residences typically have a higher level of education and/or a higher income. Because of the limited space of the flat, various forms of bedroom sharing existed, such as bedroom sharing between siblings or mothers and children. To avoid this, mothers have been creative with their furnishing or how they allocate available space among family members. Some mothers lived in apartments with similar-sized rooms, allowing them to freely choose their purposes, whereas others lived in apartments with dramatically differing room sizes, dictating usage or requiring adaption.

The majority of mothers said they could easily walk to all the amenities in their neighbourhood. Most of the neighbourhoods had childcare infrastructure, however, some people reported difficulty enrolling their kids in kindergarten after moving there because of the availability of social housing. The interconnectivity within the neighbourhood and its environs was found to be less satisfactory, but since the majority of mothers did not own a car, public transportation played a significant role in daily routes.

Finally, nearly all mothers reported limited access to social networks in their housing environment, particularly after moving into a new apartment. Some of them stated that they chose their housing location based on existing social networks, particularly family networks. Aligning with Clampet-Lundquist (2003), they endured long wait times for accommodation in often inadequate conditions, such as their teenage bedroom at their parents' house, or they stayed in abusive relationships longer.

How do single-mothers perceive their capacity to care and how do their housing materialities contribute to their care-practices?

The experienced housing materialities shape single-mothers' care-practice in various ways. Firstly, its spatiality shapes which care-practices are actually possible and how they are done. Secondly, housing materialities influence how much effort daily care takes, how stressful it is perceived and how much time it consumes. This applies to current care routines, but extends to future care as well, as most mothers do not see themselves moving in the future due to affordability reasons.

The housing design dictates the possibilities of care within the housing unit. An open-plan kitchen can enable preparing food whilst supervising children. The interviewees reported that space for a washing machine within the apartment saves time to go to the basement to do laundry there and prevents having to take the child with them. floorplans that allow flexible usages enable adaptation to future care needs when children get older. Playgrounds visible from the apartment offer the opportunity to let the children play outside whilst being occupied inside. The housing environment plays a similar role, where infrastructures like supermarkets, playgrounds or parks within walkable distance shape daily routes and activities that are done alone or with children.

However, this influences not only how care is possible, but also how it is experienced by the mother. The effort needed for care is closely linked to how much capacity is needed for care. Aligning with literature (Broussard et al., 2012; Mulroy & Lane, 1992; Zhang et al., 2015), stress was the biggest factor in how care is experienced, closely followed by how time-consuming care is considered to be. For example, being able to supervise children whilst doing

another task is described by multiple mothers as time-effective and therefore less stressful. Other materialities are viewed to increase stress, like the lack of an elevator, which requires single-mothers to deal with their children, their groceries and the pram at the same time when coming home. Contrasting, a walkable neighbourhood offers combining tasks, like the school run and buying groceries, making the most out of that time. However, big streets and heavy traffic are stressors for navigating the neighbourhood with children and hinder letting them do things on their own.

Finally, the location of housing has a big impact on accessing social networks that take part in single-mothers' care-practices. Most mothers reported that their social network, which actually aids with care, was extremely limited and extending it was difficult. Part of those were mostly their families, the children's fathers and rarely friends. Nonetheless, as many of them got displaced to a different neighbourhood, these networks became hard to access, so many mothers described having basically no one who helps with care regularly nor giving them time off their childcare responsibility to practise selfcare. Only when it comes to emergencies do they value having other families in their house, as they have children too and probably understand the situation. Otherwise, most single-mothers view care as their sole responsibility, which causes stress and is viewed as an emotional burden.

5.2 Conclusion of the main research question

How do housing materialities contribute to single-mothers' capacity to care and how do housing policies influence this?

As Power and Mee (2020) originally suggested, housing can be viewed as a resource that contributes to the capacity to care of single-mothers. Housing affects not only which care happens daily and how it happens, but also how much effort it requires. Single-mothers are not only responsible for daily care, but also the provision of housing. As stated by Reichle and Kuschinski (2020, the use-value of the housing is therefore particularly important. Unfortunately, due to limited monetary resources and the lack of affordable and social housing, very few single-mothers in this study have been able to obtain housing that has both a high use-value and is affordable, lining up with Mulroy and Lane (1992). This is consistent with studies from North America, where affordability was the dominant factor in the housing situation of single-mothers (Clampet-Lundquist, 2003; Jones & Teixeira, 2015; London, 2000). The mothers in this research report that they would not be able to live in Hamburg without social housing, and therefore perform care-work in apartments that often make this difficult or that are in locations where they are without help for care-work through their social networks.

The basic ability to perform daily care for their children and themselves, their capacity to care, can be severely restricted or improved by housing. Their experienced housing materialities depend on what housing they can access. Due to the shortage of social housing, they can rarely choose between apartments and have to take what they can get. Although the housing policy recognises the different housing needs of single-parents, the implementation, according to Hatch's (2022) argument, lacks coherence with the policy's intention and makes it difficult for most single-mothers to access housing that meets their needs, so they live in housing that makes their daily care practise even more difficult than it is as a single-parent (Anthony, 2015). Unfortunately, as part of the gendered data-gap (Criado-Perez, 2019), this problem exists in the dark, as there is no gender-sensitive or target-group specific data to evaluate social housing in Hamburg.

Furthermore, the unaffordability of market-priced rental housing and the lack of social housing in all neighbourhoods of the city (Freie und Hansestadt Hamburg, 2015), leads to displacement of single-mothers out of their preexisting social networks and leaves them without support networks, which have been argued as crucial multiple times (Ma & Sebastian, 2021; Taylor & Conger, 2017; Zhang et al., 2015). To avoid this, many mothers accept conditions that limit their capacity to care. Even though the policy approach of a *City for all* is well intended, it proves limited awareness of the most vulnerable inhabitants' housing needs and living realities, deteriorating their care-conditions and therefore affecting the capacity to care for many.

5.3 Relevance of the main findings

Despite being based on the case study of Hamburg, this study provides insight into the relationship between housing and everyday care-practices of single-mothers in Germany or similar countries. Even though the housing materialities here are discussed within the context of social housing in Hamburg, there is a general transferability of the findings about single parents in multi-storey housing, independent of the local context. The way housing design facilitates and shapes care adds to the discussion of feminist researchers from the 1980s, such as Watson and Hayden, and provides a more current perspective on the subject. Furthermore, the emphasis on social housing in this study provides a more nuanced view of how housing shapes the capacity to care when affordability is not the primary concern of the inhabitants. However, this research also shows that the affordability of social housing for many is the only option to stay in a popular city like Hamburg and affordability is still the main factor for compromising the use-value of the apartment for single-mothers. Additionally, it adds insight into the importance of social networks for single-parents even in societies with generally good access to childcare, and the restrictions single-mothers accept to keep their social network intact.

Furthermore, this research adds a feminist perspective to the current discussion about Hamburg's housing policy, which has been mostly missing in the debate so far. The feminist perspective offers a consideration of the use-value of housing, instead of looking mainly at the trade-value/affordability and the market, as has been the case so far (Metzger, 2020; Rinn, 2018; Vogelpohl & Buchholz, 2017). In focusing on the specific target group of single-mothers, this research offers an understanding of why gender-sensitive policy-making and data collection is a necessary step to create a *city for all*, as otherwise there is the danger of unawareness towards individual population groups and of failing to achieve well-intended policy goals.

5.4 Lessons and recommendations

5.4.1 Recommendations for housing policymaking

Although target group-specific policy-making has to be critically considered in the light of othering (Kuschinski, 2019), this work shows that policy-making without target groups is dangerous for basic living conditions of the most vulnerable. An important step to work in a target group-specific way of limiting further discrimination is the collection of gender-sensitive data (Criado-Perez, 2019). In Hamburg, a relatively large amount of data already exists, but on different scales and with varying degrees of transparency. Uniform data collection here would simplify the determination of supply and demand and make it possible to readjust housing policy to be more gender-sensitive.

Additionally, a transparent definition of the already existing *gender-relevant quality* requirements as layouts with similarly sized rooms to allow flexible usage and a coherent obligation to build these within the funding guidelines should be specified in the subsidy conditions. Coherently, a minimum number of apartments that fits the specific spatial entitlements of single-parents should be mandatory per housing project. Since it should not be assumed that everyone has the necessary knowledge or desire to incorporate gender-sensitive design, these should be made obligatory for investors.

Lastly, in terms of the need for further action, I appeal for the topics of gender and care in the urban context to be more firmly anchored in universities' research and teaching to educate all future decision-makers in this regard, and for authorities to implement this knowledge based on academic knowledge.

5.4.2 Recommendations for future research

This research shows the importance of the re-emerging focus on use-value (e.g. Gerbsch et al., 2022) and housing adequacy within the debate about trade-value currently dominating the academic discourse on the German housing crisis. A feminist approach to this problem offers the possibility of explaining the underlying political-economic and everyday practical processes more comprehensively (Vogelpohl, 2022). The main recommendation for further research, therefore, is to include an intersectional feminist perspective in housing research.

The connection between housing and care offers a great starting point for research similar to this and needs further deepening. In particular, displacement from existing neighbourhood networks due to a lack of social housing and rising rents needs further illumination in Europe, as existing research focuses on North America and Australia (e.g. Jones & Teixeira, 2015; Mee, 2009), where completely different regulations are present.

Lastly, even though this research comes from a housing research approach, it shows that future care research should consider housing as a setting for many care-practices. Care research (e.g E. Dowling, 2018; Tronto, 1993) mostly omits a focus on housing, even though it is the focal point of everyday-life and care for most people.

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Appendix 1: Research instruments

List of Documents in the Document Analysis

| Title | Title (german) | Year | Publisher | Type of Document |
|--|--|------------------------|--|--|
| Housing Alliance | Bündnis für das Wohnen | 2011, 2016, 2021 | Freie und Hansestadt Hamburg | Policy Document |
| Funding guidelines for rental apartments in apartment buildings in Hamburg | Neubau von Mietwohnungen 1. Förderweg: Förderrichtlinie für Mietwohnungen in Mehrfamilienhäusern in Hamburg | 2022 | Investitions und Förderbank Hamburg | Subsidy Guidelines |
| Technical Instruction of the Authority for Urban Development and Housing on the Implementation of the Hamburg Housing Promotion Act and the Hamburg Housing Bond Act | Fachanweisung der BSW zur Durchführung des Hamburgischen Wohnraumförderungs- gesetzes und des Hamburgischen Wohnungsbindungs- gesetzes | 2021 | Freie und Hansestadt Hamburg | Policy Implementation Instructions |

List of Interview partners

Expert Interviews

| Reference in Text | Position | Relation to research subject | Date of Interview |
|----------------------|---|--|--|
| BSW Hamburg | Behörde für Stadtentwicklung und Wohnen | Currently involved directly with the housing policy development and implementation of the policy through the IFB funding guidelines | 21.06.2022 • Email communication on the 10.05.2022 & 27.06.2022 |
| Expert 01 | Housing Activist | Activist and Researcher, currently working on the housing crisis and social justice in Hamburg, also from a gender perspective | 11.07.2022 |

| Expert 02 | Housing and Gender Expert | Researcher, currently working on gender and housing in the context of Hamburg | 07.07.2022 |
|-----------|------------------------------|---|------------|
|-----------|------------------------------|---|------------|

Single-Mother Interviews

| Name | Age | Children | Housing Unit | Employment Status | Migration Status | Neighborhood |
|---------|-----|--------------------------------|---|-------------------------------|--|---------------------|
| Hannah | 35 | 2 children, aged 4 and 5 | 65sqm, 2 bedrooms, 1 kitchen, 1 livingroom | Student | Ethnically german | Heimfeld |
| Nina | 46 | 2 children, aged 5 | 75sqm, 2 bedrooms, 1 kitchen, 1 livingroom | Unemployed, re-educating | Ethnically german | Niendorf |
| Lena | 35 | 1 child, aged 7 | 59sqm, one bedroom, open-kitchen | Unemployed | Ethnically german | Bahrenfeld |
| Sehra | 27 | 2 children, aged 4 and 6 | 80sqm, 3 bedrooms, open-kitchen | Part-time worker | Turkish parents, born in Germany | Stellingen |
| Jule | 28 | 2 children, aged 3 | 82sqm, 3 bedrooms, open-kitchen | Student | Ethnically german | Altona- Altstadt |
| Malina | 33 | 1 child, aged 3 | 68sqm, 2 bedrooms, 1 kitchen, 1 livingroom | Part-time worker | 1Turkish parent, born in Germany | St.Pauli |
| Emma | 35 | 1 child, aged 10 | 70sqm, 2 bedrooms, 1 kitchen, 1 livingroom | Student, part- time worker | Ethnically german | Harburg |
| Marlene | 41 | 1 child, aged 10 | 65sqm, 2 bedrooms, 1 kitchen, 1 livingroom | Full-time worker | Ethnically german | Altona- Altstadt |

| Binay | 35 | 3 children, aged 9,7 and 1 | 82sqm, 3 bedrooms, open-kitchen | Part-time worker | Turkish | Barmbek |
|-------|----|----------------------------------|--|---------------------|--|------------|
| Ayla | 26 | 1 child, aged 5 | 58sqm, one bedroom, open-kitchen | Student | Turkish parents, born in Germany | Stellingen |

Interview Guides in English and German

Interview Guide Experts BSW (Authority for urban development and housing)

| Date: 21.06.2022 | Time: 15.00 |
|---------------------|----------------------------------|
| Interviewer: 627372 | Place of Interview: online/Skype |
| Interviewee: | BSW |

Interview Guide

1. Introduction

- 1.1. Do you agree to the audio recording of the interview? The audio recordings will be treated confidential and will only be passed on anonymously to our teachers.
- 1.2. Introduction of Interviewer
- 1.3. Purpose of the Interview
 - Masters Thesis in the Master's Programme of Urban Management and Development at IHS, EUR
 - Housing Design and Housing Environment as an enabler/disabler of childcare and selfcare and the influence of Hamburg's housing policy on it
- 1.4. Nature & Duration of Interview
- 1.5. Privacy and anonymity
- 2. From Housing Policy Decisions to IFB Funding Guidelines
 - 2.1. Can you explain to me how the Alliance for Housing policy decisions are translated into these very practical funding guidelines?
 - Who is responsible for this process?
 - How much individual decision-making authority has the authority for urban development and housing in the process?

- 2.2. Was the integration of gender-sensitive quality requirements a political decision or that of the BSW? How did this decision come about?
- 2.3. What exactly do you mean by gender-sensitive quality requirements?
- Which gender-sensitive quality requirements are there for the housing design?
 - o Housing Size
 - Housing Layout
 - o Housing Amenities
- Which gender-sensitive quality requirements are there for the housing environment?
 - o Access to infrastructure
 - Access to social networks
 - Safety
- 3. Social Housing for Single-Mothers
 - 3.1. What special considerations arise for single mothers with regard to eligibility/space entitlements when accessing social housing in Hamburg?
 - Housing Size (Number of Bedrooms, Squaremeters etc.)
 - Housing Layout
 - 3.2. How many such flats that meet these criteria are actually built? Are these criteria part of the planning process?
 - 3.3. How many single-mothers/parents apply for a "§5-Schein" each year and how many of them are actually accessing housing?
 - 3.4. (If these figures are not broken down by gender/household status) Do you plan to collect these numbers in the future?

4. Outlook

- 4.1. Do you think that the subsidisation regulations for social housing in Hamburg meet the demands of single mothers?
- 4.2. Is there any change planned in those funding guidelines in regards to gender sensitivity / single-mothers?

- 5.1. Do you have any other additions about the influence of Hamburg's housing policy on the housing itself??
- 5.2. Do you have any questions for me?
- 5.3. Thank you for taking the time to do this interview. Can I contact you with any questions after the interview?
- 5.4. "Just to reiterate. All things said in this interview will be kept anonymous and confidential. The data will only be used for this course. If the data is used for any other purpose, we would ask for your permission beforehand."
- 5.5. Conclusion and thanks

Interview Guide Experts BSW (Authority for urban development and housing)

| Date: 21.06.2022 | Time: 15.00 |
|---------------------|----------------------------------|
| Interviewer: 627372 | Place of Interview: online/Skype |
| Interviewee: | BSW |

Interview Guide

- 1.Einführung
- 1.1. Sind Sie mit der Aufzeichnung des Gesprächs einverstanden? Die Tonaufnahmen werden vertraulich behandelt und nur anonymisiert an unsere Lehrkräfte weitergegeben.
- 1.2. Vorstellung des Interviewers
- 1.3. Zweck des Interviews
- Masterarbeit im Masterstudiengang für Urban Management and Development IHS, EUR
- Wohnungsbau und Wohnumfeld als Ermöglicher/Behinderer von Kinderbetreuung und Selfcare und der Einfluss der Hamburger Wohnungspolitik darauf
- 1.4. Art und Dauer des Interviews

- 1.5. Datenschutz und Anonymität
- 2. Von wohnungspolitischen Beschlüssen zu IFB-Förderrichtlinien
- 2.1. Können Sie mir erklären, wie die politischen Entscheidungen der Alliance for Housing in diese sehr praktischen Förderrichtlinien umgesetzt werden?
- Wer ist für diesen Prozess verantwortlich?
- Wie viel individuelle Entscheidungskompetenz hat die Behörde für Stadtentwicklung und Wohnen in diesem Prozess?
- 2.2. War die Integration von geschlechtersensiblen Qualitätsanforderungen eine politische Entscheidung oder die des BSW? Wie ist diese Entscheidung zustande gekommen?
- 2.3. Was genau verstehen Sie unter gendersensiblen Qualitätsanforderungen?
- Welche geschlechtersensiblen Qualitätsanforderungen gibt es an die Wohnungsgestaltung?
 - Wohnungsgröße
 - Wohnungsgrundriss
 - o Ausstattung der Wohnung
- Welche geschlechtersensiblen Qualitätsanforderungen gibt es für das Wohnumfeld?
 - o Zugang zur Infrastruktur
 - o Zugang zu sozialen Netzwerken
 - Sicherheit
- 3. Sozialwohnungen für alleinerziehende Mütter
- 3.1. Welche Besonderheiten ergeben sich für alleinerziehende Mütter bei der Inanspruchnahme von Sozialwohnungen in Hamburg im Hinblick auf die Anspruchsberechtigung/den Platzbedarf?
- Wohnungsgröße (Anzahl der Schlafzimmer, Quadratmeter etc.)
- Wohnungszuschnitt
- 3.2. Wie viele solcher Wohnungen, die diese Kriterien erfüllen, werden tatsächlich gebaut? Sind diese Kriterien Teil des Planungsprozesses?
- 3.3. Wie viele alleinerziehende Mütter/Eltern beantragen jährlich einen "§5-Schein" und wie viele von ihnen erhalten tatsächlich eine Wohnung?
- 3.4 (Falls diese Zahlen nicht nach Geschlecht/Haushaltsstatus aufgeschlüsselt sind) Planen Sie, diese Zahlen in Zukunft zu erheben?
- 4. Ausblick

- 4.1. Sind Sie der Meinung, dass die Förderrichtlinien für den sozialen Wohnungsbau in Hamburg den Bedürfnissen von alleinerziehenden Müttern entsprechen?
- 4.2. Ist eine Änderung der Förderrichtlinien im Hinblick auf Geschlechtersensibilität / Alleinerziehende geplant?
- 5. Schließen
- 5.1. Haben Sie noch weitere Ergänzungen zum Einfluss der Hamburger Wohnungspolitik auf das Wohnen selbst?
- 5.2. Haben Sie noch Fragen an mich?
- 5.3. Vielen Dank, dass Sie sich die Zeit für dieses Interview genommen haben. Kann ich Sie nach dem Interview noch mit Fragen kontaktieren?
- 5.4. "Um es noch einmal zu betonen. Alles, was in diesem Interview gesagt wird, wird anonym und vertraulich behandelt. Die Daten werden nur für diesen Kurs verwendet. Sollten die Daten für einen anderen Zweck verwendet werden, bitten wir Sie vorher um Ihr Einverständnis.
- 5.5. Schlussfolgerung und Dank

Interview Guide Expert Interview

| Date: | Time: 15.00 |
|---------------------|---------------------|
| Interviewer: 627372 | Place of Interview: |
| Interviewee: | |

Interview Guide

1. Introduction

- 1.1. Do you agree to the audio recording of the interview? The audio recordings will be treated confidential and will only be passed on anonymously to our teachers.
- 1.2. Introduction of Interviewer
- 1.3. Purpose of the Interview
 - Masters Thesis in the Master's Programme of Urban Management and Development at IHS, EUR
 - Housing Design and Housing Environment as an enabler/disabler of childcare and selfcare and the influence of Hamburg's housing policy on it
- 1.4. Nature & Duration of Interview
- 1.5. Privacy and anonymity
- 2. Hamburg's Housing Policy and Care Conditions
 - 2.1 How is the discrepancy between housing as a commodity and housing as a place of reproduction dealt with by the political and official side in Hamburg?
 - What narrative is used to tell/argue Hamburg's housing policy?
 - How is the debate between exchange value and use value conducted in Hamburg?
 - 2.2 What consequences does the focus on exchange value have from a feminist perspective?
 - For whom are these consequences particularly significant?

- How is this dealt with from a political argumentation?
 - 2.3 What role does housing welfare in Hamburg play in this argumentation?
- Who is included in this welfare and who is not?
- To what extent does this have a socio-educational character?

3. 3 Reproduction conditions in Hamburg

- 3.1 How do you assess the reproductive conditions, especially in the area of housing, of women in Hamburg?
 - Especially single mothers?
 - What factors in particular influence the conditions of reproduction here?
- 3.2 What is the utility value of housing for women in care work?

4. Outlook

- 4.1 What should be changed in housing policy to improve the conditions of reproduction for women, especially vulnerable women such as single parents?
- 4.2 What changes need to be made to adapt the utility value of housing (materiality etc.) to the needs of women in care work?

- 5.1. Do you have any other additions about the influence of Hamburg's housing policy on the housing itself??
- 5.2. Do you have any questions for me?
- 5.3. Thank you for taking the time to do this interview. Can I contact you with any questions after the interview?
- 5.4. "Just to reiterate. All things said in this interview will be kept anonymous and confidential. The data will only be used for this course. If the data is used for any other purpose, we would ask for your permission beforehand."
- 5.5. Conclusion and thanks

Interview Guide Expert Interview

| Date: 07.07.22 | Time: 15.00 |
|---------------------|---------------------|
| Interviewer: 627372 | Place of Interview: |
| Interviewee: | |

Interview Guide

1. Einleitung

- 1.1. Sind Sie mit der Aufzeichnung des Gesprächs einverstanden? Die Tonaufnahmen werden vertraulich behandelt und nur anonymisiert an unsere Lehrkräfte weitergegeben.
 - 1.2. Vorstellung des Interviewers
 - 1.3. Zweck des Interviews
 - Masterarbeit im Masterstudiengang für Stadtmanagement und -entwicklung am IHS, EUR
 - Wohnungsbau und Wohnumfeld als Ermöglicher/Behinderer von Kinderbetreuung und Selbstversorgung und der Einfluss der Hamburger Wohnungspolitik darauf
 - 1.4. Art und Dauer des Interviews
 - 1.5. Privatsphäre und Anonymität
- 2. Hamburgs Wohnungspolitik und Reproduktionsbedingungen
 - 2.1. Wie wird in Hamburg die Diskrepanz zwischen Wohnen als Ware und Wohnen als Ort der Reproduktion von politischer und behördlicher Seite gehandelt?
 - bzw mit welchem Narrativ wird die Hamburger WOhnungspolitik erzählt/argumentiert?
 - wie wird die Debatte zwischen Tauschwert und Gebrauchswert in Hamburg geführt?

- 2.2. Welche Konsequenzen hat die Fokussierung auf den Tauschwert aus feministischer Sicht?
- für wen sind diese Konsequenzen besonders significant?
- wie wird aus politischer Argentation damit umgegangen?
- 2.3. Welche Rolle spielt die wohnungspolitische welfare in Hamburg in dieser Argumentation?
 - wer wird davon in diese welfare einbezogen und wer nicht?
 - inwiefern hat dies einen sozialerzieherischen Character
 - auf welche Gesellschaftlichen ideale wird hier "hin erzogen"?
- 3. Reproduktionsbedingungen in Hamburg
 - 3.1. Wie schätzt du die Reproduktionsbedingen, insbesondere im Bereich Wohnen, von Frauen in Hamburg ein?
 - insbesonderes alleinerziehnde?
 - welche Faktoren beiinflussen die Reproduktionsbedingungen hier besonders?
 - 3.2. Welchen Gebrauchswert hat Wohnen für Frauen in Care-Arbeit?
- 4. Outlook
 - 4.1. Was müsste Wohnungspolitisch verändert werden um die Reproduktionsbedingungen von Frauen, insbesonders vulnerablen Frauen wie Alleinerziehnden, zu verbessern?
 - 4.2. Welche Veränderungen müssen erhoben werden um auch den Gebrauchswert von Wohnungen (Materialität etc.) an die Bedürfnisse von Frauen in Care-Arbeit anzupassen?

- 5.1. Haben Sie noch weitere Ergänzungen zum Einfluss der Hamburger Wohnungspolitik auf die Wohnung selbst??
- 5.2. Haben Sie noch Fragen an mich?
- 5.3. Vielen Dank, dass Sie sich die Zeit für dieses Interview genommen haben. Kann ich Sie nach dem Interview noch mit Fragen kontaktieren?

- 5.4. "Um es noch einmal zu betonen. Alles, was in diesem Interview gesagt wird, wird anonym und vertraulich behandelt. Die Daten werden nur für diesen Kurs verwendet. Wenn die Daten für einen anderen Zweck verwendet werden sollen, bitten wir Sie vorher um Ihre Zustimmung."
- 5.5. Schlussfolgerung und Dank

Interview Guide Single Mothers Date: Time: Interviewer: 627372 Place of Interview: Interviewee: **Interview Guide** 1. Introduction 1.1. Do you agree to the audio recording of the interview? The audio recordings will of course be treated confidentially and will only be passed on anonymously to our teachers. 1.2. Introduction of Interviewer 1.3. Purpose of the Interview Masters Thesis in the Master's Programme of Urban Management and Development at IHS, EUR Housing Design and Housing Environment as an enabler/disabler of childcare and selfcare 1.4. Nature & Duration of Interview 1.5. Privacy and anonymity **Personal Questions** Your gender? What is your age?? What job are you currently working in? part-time as

full-time as

· student in

How many children do you have?

In which Neighborhood are you living?

2. The Living Situation

2.1. Please describe your current household

- how many people live in your household?
- are you living in a co-parenting arrangement or responsible alone for your children?
- 2.2. Please describe your current living situation.
 - Could you please describe your apartment?
 - o How many rooms do you have?
 - o How many square meters do you have?
 - o Is the apartment open-planned, or are the kitchen and livingroom separate?
 - o Do you have a private bedroom?
 - o Do your children have individual bedrooms?
 - Could you please describe the house you're living in?
 - o Which floor are you living on?
 - o Are there stairs or an elevator?
 - o Do you have storage rooms in the building to store prams etc.?
 - o Is there space in the hallway for prams etc?
 - Are there communal spaces?
 - o Are there spaces to share care-work like laundry?
 - Are there playgrounds /garden spaces in the backyard? Are they safe for the children to play in?

2.3. Please describe your current housing environment?

- Which infrastructures do you have in your immediate housing environment and are they accessible/usable to you?
 - o childcare infrastructure (schools, kindergartens, after-school care etc)
 - o transport infrastructure
 - o health-care infrastructure
 - supermarkets and other daily shops
 - o parks and recreational areas
- Which social networks do you have in your immediate housing environment and are they accessible to you /are you a part of them?
 - o other (single-) mothers
 - o friends
 - o family members
 - o the child's father
 - o parents

- Do you perceive your neighbourhood as safe and does this perception influence the way you use all the before discussed things?
- 3. Capacity to Care / Daily Care Practice
 - 3.1. Which role plays your apartment in your daily care practice for your child?
 - Which design/material aspects of your apartment/ the building make your childcare more time-efficient?
 - Which design/material aspects of your apartment/ the building make your childcare less stressful?
 - 3.2. Which role plays your housing environment in your daily care practice for your child?
 - Which aspects of your housing environment make your childcare more time-efficient?
 - Which aspects of your housing environment make your childcare less stressful?
 - 3.3. How do your social network and your relationships in your housing environment help you with childcare?
 - Who is offering help with care through time-sharing, responsibility-sharing, task-sharing, knowledge-sharing?
 - Who is offering emotional support and appraisal?
 - 3.4. Which role plays your apartment and your housing environment in your selfcare practices?
 - What are your selfcare practices you perform at home? How does the apartment influence these?
 - What are your selfcare practices you perform in your housing environment? How does the housing environment influence these?
 - 3.5. How do your social network and your relationships in your housing environment help you with selfcare?
 - Who is helping with selfcare through generating free time (e.g. external childcare or taking care of household tasks)
 - Who is taking part in self-care processes (e.g. through exercising together, going on walks, spending time together etc.)
 - Who is providing emotional support and appraisal concerning you?

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- 4.1. What would the current optimal housing situation look like for you?
- 4.2. How would you change your housing situation to best fit your care needs?

5. Closing

- 5.1. Do you have any other additions about your situation as a single-mother in the Hamburgs social Housing??
- 5.2. Do you have any questions for me?
- 5.3. Thank you for taking the time to do this interview. Can I contact you with any questions after the interview?
- 5.4. "Just to reiterate. All things said in this interview will be kept anonymous and confidential. The data will only be used for this thesis. If the data is used for any other purpose, we would ask for your permission beforehand."
- 5.5. Conclusion and thanks

Interview Guide Single-Mothers

| Date: | Time: |
|---------------------|---------------------|
| Interviewer: 627372 | Place of Interview: |
| Interviewee: | |

| Interview Guide | |
|-----------------|--|
| 1. Einführung | |

- 1.1. Sind Sie mit der Aufzeichnung des Gesprächs einverstanden? Die Tonaufnahmen werden selbstverständlich vertraulich behandelt und nur anonymisiert an unsere Lehrkräfte weitergegeben.
- 1.2. Vorstellung des Interviewers
- 1.3. Zweck des Interviews
- Masterarbeit im Masterstudiengang für Stadtmanagement und Stadtentwicklung am IHS, EUR
- Wohnraumgestaltung und Wohnumfeld als Ermöglicher/Behinderer von Kinderbetreuung und Selbstversorgung
- 1.4. Art und Dauer des Interviews
- 1.5. Privatsphäre und Anonymität

| Persönliche Fragen | |
|-------------------------------------|--|
| Ihr Geschlecht? | |
| Wie alt sind Sie? | |
| Welchen Beruf üben Sie derzeit aus? | |
| - Teilzeit als | |
| - Vollzeit als | |
| - Student in | |
| Wie viele Kinder haben Sie? | |
| In welcher Nachbarschaft leben Sie? | |
| | |

- 2. The Living Situation
- 2.1. Bitte beschreiben Sie Ihren derzeitigen Haushalt
 - o Wie viele Personen leben in Ihrem Haushalt?
 - Leben Sie in einem gemeinsamen Haushalt oder sind Sie allein für Ihre Kinder verantwortlich?
- 2.2. Beschreiben Sie bitte Ihre derzeitige Wohnsituation.
 - Können Sie bitte Ihre Wohnung beschreiben?
 - Wie viele Zimmer haben Sie?
 - Wie viele Quadratmeter stehen Ihnen zur Verfügung?
 - Ist die Wohnung offen gestaltet oder sind Küche und Wohnzimmer getrennt?
 - Haben Sie ein eigenes Schlafzimmer?
 - Haben Ihre Kinder ein eigenes Schlafzimmer?
 - o Können Sie bitte das Haus beschreiben, in dem Sie wohnen?
 - In welchem Stockwerk wohnen Sie?

- Gibt es eine Treppe oder einen Aufzug?
- Gibt es im Gebäude Abstellräume für Kinderwagen usw.?
- Gibt es im Flur Platz für Kinderwagen usw.?
- Gibt es Gemeinschaftsräume?
- Gibt es Räume für gemeinsame Pflegearbeiten wie Wäsche waschen?
- Gibt es Spielplätze/Gartenflächen im Hinterhof? Sind sie für die Kinder sicher zum Spielen?

•

- 2.3. Bitte beschreiben Sie Ihr derzeitiges Wohnumfeld?
 - Welche Infrastrukturen haben Sie in Ihrem unmittelbaren Wohnumfeld und sind diese für Sie zugänglich/nutzbar?
 - o Infrastruktur zur Kinderbetreuung (Schulen, Kindergärten, Horte usw.)
 - o Verkehrsinfrastruktur
 - o Infrastruktur für die Gesundheitsfürsorge
 - o Supermärkte und andere Geschäfte des täglichen Bedarfs
 - o Parks und Erholungsgebiete
 - Welche sozialen Netzwerke gibt es in Ihrem unmittelbaren Wohnumfeld und sind diese für Sie erreichbar / sind Sie Teil dieser Netzwerke?
 - o andere (alleinerziehende) Mütter
 - Freunde
 - o Familienangehörige
 - o der Vater des Kindes
 - o Eltern
 - Nehmen Sie Ihre Nachbarschaft als sicher wahr und hat diese Wahrnehmung Einfluss auf die Art und Weise, wie Sie die oben genannten Dinge nutzen?
 - 3. Capacity to Care / Daily Care Practice
 - 3.1. Welche Rolle spielt Ihre Wohnung in Ihrer täglichen Betreuungspraxis für Ihr Kind?
 - Welche gestalterischen/materiellen Aspekte Ihrer Wohnung/des Gebäudes machen Ihre Kinderbetreuung zeiteffizienter?
 - Welche gestalterischen/materiellen Aspekte Ihrer Wohnung/des Gebäudes machen die Betreuung Ihres Kindes weniger stressig?
 - 3.2. Welche Rolle spielt Ihr Wohnumfeld in Ihrer täglichen Betreuungspraxis für Ihr Kind?
 - Welche Aspekte Ihres Wohnumfeldes machen Ihre Kinderbetreuung zeiteffizienter?
 - Welche Aspekte Ihres Wohnumfelds machen Ihre Kinderbetreuung weniger stressig?

- 3.3. Wie helfen Ihnen Ihr soziales Netzwerk und Ihre Beziehungen in Ihrem Wohnumfeld bei der Kinderbetreuung?
 - Wer bietet Ihnen Hilfe bei der Betreuung durch Aufteilung von Zeit, Verantwortung, Aufgaben und Wissen?
- Wer bietet Ihnen emotionale Unterstützung und Wertschätzung?
- 3.4. Welche Rolle spielen Ihre Wohnung und Ihr Wohnumfeld bei Ihren Selfcarepraktiken?
 - Welche Selfcarepraktiken führen Sie zu Hause durch? Wie beeinflusst die Wohnung diese?
 - Welche Selfcareepraktiken führen Sie in Ihrem Wohnumfeld durch? Wie beeinflusst das Wohnumfeld diese?
- 3.5. Wie helfen Ihnen Ihr soziales Netz und Ihre Beziehungen in Ihrem Wohnumfeld bei Selfcare?
- Wer hilft bei Selfcare durch die Schaffung von Freizeit (z. B. externe Kinderbetreuung oder Erledigung von Haushaltsaufgaben)?
- Wer nimmt an Selfcare teil (z. B. durch gemeinsame sportliche Betätigung, Spaziergänge, Zeit miteinander verbringen usw.)
- Wer gibt Ihnen emotionale Unterstützung und schätzt Sie wert?

4. Outlook

- 4.1. Wie sähe die derzeitige optimale Wohnsituation für Sie aus?
- 4.2. Wie würden Sie Ihre Wohnsituation verändern, um Ihren Sorgebedürfnissen am besten gerecht zu werden?

- 5.1. Haben Sie weitere Ergänzungen zu Ihrer Situation als alleinerziehende Mutter in einer Hamburger Sozialwohnung?
- 5.2. Haben Sie noch Fragen an mich?
- 5.3. Vielen Dank, dass Sie sich die Zeit für dieses Interview genommen haben. Kann ich Sie nach dem Interview noch mit Fragen kontaktieren?
- 5.4. "Um es noch einmal zu betonen. Alles, was in diesem Interview gesagt wird, wird anonym und vertraulich behandelt. Die Daten werden nur für diese Arbeit verwendet. Sollten die Daten für andere Zwecke verwendet werden, bitten wir Sie vorher um Ihr Einverständnis."
- 5.5. Fazit und Dank

Code Report

ATLAS.ti Report

Masterthesis: Housing as an infrastructure of care

Codes

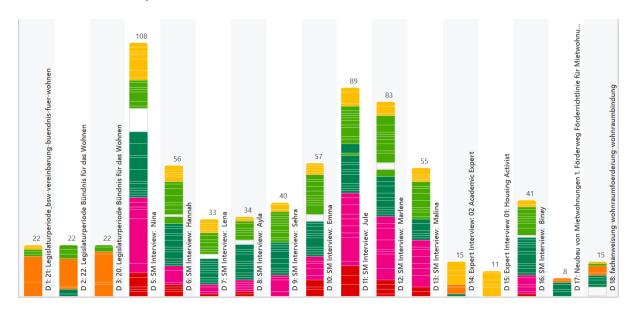
Report created by Janne Martha Lentz on 06 Aug 2022

| Code | Comment | Density |
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| ○ C: Free codes | | 74 |
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| | • personal Informations | 4 |
| | housing search | 13 |
| | • Rent Prices | 6 |
| | Rent-Burden | 12 |
| | • The Child Father / Role in Life | 4 |
| | Optimal Housing Situation | 17 |
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| | Subsidy Guidelines | 4 |
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| | Role of Housing Authority | 2 |
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| | • Social ressource: childcare appraisal support | 2 |
|-------------------------------|---|----|
| | Social ressource: childcare emotional support | 5 |
| | Social ressource: childcare emergency support | 16 |
| | Social ressource: childcare time-sharing | 12 |
| o SC: Childcare Ressources | | 72 |
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| | | |

Code Distribution by Document



Appendix 2: IHS copyright form

In order to allow the IHS Research Committee to select and publish the best UMD theses, students need to sign and hand in this copyright form to the course bureau together with their final thesis.

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