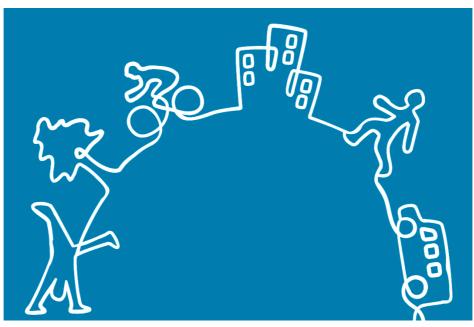
Ingvill S. Drevland

Healthy cities and healthy urban design

Master's thesis in Health Science

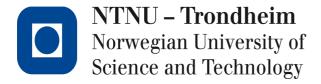
Supervisor: Professor Geir Arild Espnes

Trondheim, June 2016



thecityfix.com

Norwegian University of Science and Technology (NTNU)
Faculty of Social Science and Technology management
Department of Social Work and Health Science



Abstract

As an occupational therapist, I have always found the interaction between humans, their environment and their activities interesting, and how the environment can influence what we do and our occupational patterns is something that fascinates me. As my interest for urban health and healthy cities has grown during this master program, I have chosen to use the experience and knowledge I have from my field of expertise and put it in the context of healthy urban planning. This master's thesis therefore consists of two articles focusing on urban health and healthy urban planning. The first article is a review of how the environment can influence health and well-being of urban dwellers. The second article is based on the results from the first article, and is a qualitative study focusing on what creates health in the urban environment, and how this is related to the actual urban design.

Article I: Today a great amount of the world population lives in urban areas. As health essentially is created outside the health sector, the urban environment becomes an important determinant of health. Thus, it becomes important not only to understand how to develop healthy urban environments, but also to understand what this entails. This review article therefore aims to explore how the built environment can influence the health and well-being of urban dwellers, and what this means for health promoting measures in the urban environment. The built environment appears to affect health and well-being of urban dwellers on both the individual and community level. However, in the process of developing healthy urban environments or health promoting measures in the urban environment, it is important to understand the different environmental dimensions.

Article II: With the rapid urbanization around the world, it is argued that the urban environment is an important arena for health promotion. The main aim in this study is to identify what creates health in an urban environment and how this is related to the actual urban design. This is a phenomenological study that includes in-depth interviews with three men and five women aged 23-65. Systematic text condensation was used to analyze the material and three categories were identified as health promoting factors of urban life: (1) Accessibility, (2) Variation and (3) Flexible social arenas. The study shows how the three categories are related to the actual urban design and how they can affect health and well-being of urban dwellers. It is also argued that these three categories are connected to each other and as a whole might facilitate healthy urban environments, and thus healthy urban dwellers.



Sammendrag

Som ergoterapeut har jeg alltid vært interessert i samspillet mellom mennesket, aktivitet og dets omgivelser, og hvordan omgivelsene påvirker mennesker og deres aktivitetsvalg fascinerer meg. I løpet av masterstudiet har jeg imidlertid blitt spesielt nysgjerrig på urban helse og sunne byer. Med dette som bakgrunn har jeg valgt å sette kunnskapen og erfaringen jeg har fra mitt fagfelt i konteksten helsefremmende byutvikling. Denne masteroppgaven består derfor av to artikler som omhandler dette temaet. Den første artikkelen er en litteraturgjennomgang av forskningen som er gjort om omgivelsenes innvirkning på byboeres helse. Den andre artikkelen bygger på funnene fra litteraturgjennomgangen og er en kvalitativ studie med fokus på hva som skaper helse i byen og hvilken sammenheng dette har med byens fysiske utforming.

Artikkel I: En stor andel av verdens befolkning bor i dag i urbane strøk. Da helse i hovedsak skapes utenfor helsesektoren, blir menneskers omgivelser en viktig helsedeterminant. Det blir derfor ikke bare relevant å forstå hvordan utvikle sunne byomgivelser, men også å forstå hva dette innebærer. Målet med denne litteraturgjennomgangen er derfor å utforske hvordan de bygde omgivelsene i byen kan påvirke helse og velvære for byboere, samt hva dette betyr for helsefremmende tiltak i byomgivelser. Litteraturgjennomgangen viser at de bygde omgivelsene kan påvirke helse og velvære både på individ- og samfunnsnivå. Det blir imidlertid også viktig å forstå omgivelsenes forskjellige dimensjoner i prosessen med å utvikle sunne omgivelser eller helsefremmende tiltak i byomgivelsene.

Artikkel II: Som en årsak av den raske urbaniseringen, både i Norge og i andre deler av verden, har byomgivelsene blitt en viktig arena for helsefremming. Hovedformålet med denne studien er å identifisere hva som skaper helse i byens omgivelser og hvordan dette er knyttet til den faktiske utformingen. Dette er en fenomenologiske studie som inkluderer dybdeintervjuer med tre men og fem kvinner i alderen 23-65. Systematisk tekstkondensering ble brukt for å analysere materialet og tre kategorier ble identifisert til å belyse helsefremmende faktorer for byboere; (1) Tilgjengelighet (accessibility), (2) Variasjon (Variation) and (3) Fleksible sosiale møteplasser (Fexible social arenas). Studien viser hvordan disse tre kategoriene er knyttet til den fysiske utformingen og hvordan de kan påvirke helse og velvære. Videre argumenteres det for at disse også er knyttet til hverandre og at de som helhet kan legge til rette for sunne omgivelser og byboere.



Acknowledgements

Working on this master's thesis has been a great learning experience and I would like to thank some of those who have helped me along the way. A big thanks to my supervisor, Professor Geir Arild Espnes, for his helpful comments, but also for his interest and commitment in my project and much needed cheering. Thanks to my stepdad, Sten Dueland, for his technical help and to my favourite linguist, Espen Utne Landgraff, for proofreading my thesis. Last, but not least, I would like to express my gratitude to all the informants, who have shared their time, thoughts and experiences with me.



Tabel of contents

Article I - Health promotion in the urban environment	
Introduction	2
Search strategy	3
hereduction earch strategy heoretical foundation Clarification of concepts Health promotion and Salutogenesis Environment and activity esults Built environment and physical health Built environment and mental health viscussion onclusion eferences List of figures Figure 1: Sense of Coherence Figure 2: General Resistant Resources Figure 3: Concepts included in the salutogenic approach Figure 4: The dimensions of the environment health promoters need to understand	3 4 4 8
	9 11 12
Discussion	14
Conclusion	17
References	19
List of figures	
Figure 1: Sense of Coherence	6
Figure 2: General Resistant Resources	6
Figure 3: Concepts included in the salutogenic approach	
Figure 4: The dimensions of the environment health promoters need to understand	17
List of tables	
Table 1: Articles included in the review	10



Article II - Urban health and its relation to the urban design	
Introduction	26
Theoretical foundation Health promotion and Salutogenesis The WHO Healthy Cities Program	27 27 28
Methods and materials Interview Data analysis	30 30 30
Results Accessibility Variation Flexible social arenas	32 32 33 34
Discussion	36
Limitations	40
Conclusion	27 28 30 30 30 32 32 33 34 36
References	41
Summing up the thesis	45
List of figures	
Figure 1: The three subtopics describing what creates health in an urban environment	32
Figure 2: Creating health for urban dwellers	39
List of tables	
Table 1: The five phases already completed by WHO-HCP	29
APPENDIX A: INTERVIEW GUIDE	
APPENDIX B: NSD APPROVAL	
APPENDIX C: CONSENT FORM	
APPENDIX D: WORK MATRICES	



Article I

Health promotion in the urban environment

Review article

Ingvill S. Drevland

Norwegian University of Science and Technology (NTNU)

Department of Social Work and Health Science

Abstract: Today a great amount of the world population lives in urban areas. As health essentially is created outside the health sector, the urban environment becomes an important determinant of health. Thus, it becomes important not only to understand how to develop healthy urban environments, but also to understand what this entails. This review article therefore aims to explore how the built environment can influence the health and well-being of urban dwellers, and what this means for health promoting measures in the urban environment. The built environment appears to affect health and well-being of urban dwellers on both the individual and community level. However, in the process of developing healthy urban environments or health promoting measures in the urban environment, it is important to understand the different environmental dimensions.

Keywords: urban health, healthy urban planning, health promotion, salutogenesis, built environment

Posted by author guidance for *Health & Place*

Number of words: 5665 (abstract and keywords not included)

Introduction

Over the last decades, there has been a rapid global urbanization. According to United Nations (UN) (2016), over half of the world population lives in urban areas, a proportion that is expected to increase. The urban migration is partly due to the many positive aspects of urban life (employment, higher incomes, access to health care, etc.), which in turn have led to better health status in urban than in rural areas. The urban health status is however threatened by unfavourable impacts of the urban environment. Among many, this includes increased fat in diet, sedentary lifestyles, air pollution, congested traffic and crowded living conditions (Bai, Nath, Capon, Hasan & Jarvon, 2012). Furthermore, Barton and Grant (2011) note that today's development of urban environments causes both pathogenicity and unsustainability. Arguably, this makes the urban environment an important arena for health promotion and a key component in creating healthy cities.

Enabling people to take control over and improve their health is a core element in health promotion, and as the first international conference on health promotion in 1986 stipulated; "Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love" (World Health Organization (WHO), 1986, p. 4). Among other things, this refers to the built environment, and much attention has been directed towards how the urban environment impacts urban dwellers' health. As health essentially is created outside the health sector, this article has a salutogenic angle (health promotion). Furthermore, decisions regarding the built environment are also usually made outside the health sector, and thus "the public health sector must find effective ways to influence and support those who are responsible for making decisions that affect the quality of urban life" (Macfarlane, Wood & Campbell, 2015, p. 5).

This article is a review of the existing empirical research in the field of healthy urban planning and aims to explore the following research questions:

- (1) How can features of the built environment influence health and well-being of urban dwellers, and furthermore,
- (2) What does this mean for health promoting measures in the urban environment?

The search strategy will be presented in the next section, followed by a clarification of concepts and a presentation of this article's theoretical foundation. In the last part of the article, the findings will be presented, and finally there will be a discussion of them.

Search strategy

For the purposes of this article, there have been conducted several literature searches in scientific databases including Web of Science, PubMed and Google Scholar using a varity of keywords ("healthy cities", "health promoting city parts", "health promotion", "built environment", "physical environment", "social environment" and "healthy urban planning"). The keywords were used in different permutations to gather as much research as possible. The main aim was to find empirical articles addressing the built environment and health, preferably focusing on cities or city parts. However, some articles focusing on the built environment in general was included. In addition, only research conducted in the developed part of the world published after 2005 was included, with one exception: one key reference published in 2003 was found in one of the articles and included in the review.

Theoretical foundation

The following perspectives and theories are chosen to gain a better understanding of the research conducted in the field of healthy cities and healthy urban planning. Health promotion and Aaron Antonovsky's theory about "Salutogenesis" are central concepts in this article, but to fully understand how features of the environment influence people, Gary Kielhofner's "Model of Human Occupation" is chosen as a supportive theory. There will, however, first be a clarification of the concepts *health*, *healthy cities* and *environment*. The phenomenon "healthy cities" is only presented briefly here, but will be explored further in article 2.

Clarification of concepts

Health is a disputed concept and it is therefore found appropriate to emphasize how this concept are understood here. In contrast to disease prevention, health promotion focus on positive health, which means that the purpose of health promoting activities is to increase the state of health in the population (Tengland, 2010). This implies that health is seen as a positive concept and "a recourse of everyday life" (WHO, 1986 p. 1). When it comes to urban health, WHO launched "The WHO Healthy Cities Program" (WHO-HCP) in 1987 (Lafond, 2015), a program which aims to be a holistic, strategic framework in developing healthy cities (Dooris, 1999). WHO has provided a definition of what a healthy city is:

"A healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential" (WHO, 1998, p. 13).

This definition highlights different aspects of urban life. However, it seems like the urban environment is essential. Kielhofner (2008) defines environment as "the particular physical and social, cultural, economic, and political features of one's context that impact upon the motivation, organization, and performance of occupation" (p. 86). It can therefore be argued that this supports the definition of healthy cities as they both emphasize that the environment has an impact on people's everyday life. Furthermore, this also implies that the environment has several dimensions that affect people's life.

Health promotion and Salutogenesis

In the 1970s there was a shift in the public health approach. More people recognized that medical means alone were not enough to solve all health problems. The idea that human biology, environmental factors, lifestyle and health care organization influence health in different ways, evolved to what is now known as the "new public health" (NPH). Unlike the traditional public health work, NPH introduced a more inclusive view on what determines health. Though this was a refreshing and new way of looking at health and health promotion, the movement often tended to focus largely on behaviour and lifestyle. As a consequence of this, the broader socio-economic determinants of health were somewhat ignored (Tengland, 2010).

However, health and its relation to policy making, the environment, participation and community action have been increasingly recognized in the health promotion field since the production of the Ottawa Charter for Health Promotion in 1986 (Tengland, 2010). The charter emphasizes that health promotion is a multi-sectorial responsibility and needs to be put high on the political agenda. Furthermore, health promotion should aim to create conditions that are safe, stimulating, satisfying and enjoyable. This means that health promotion should target the different settings of people's everyday life. One of the core elements necessary to make this happen is enabling people and communities to take control over factors influencing their health (WHO, 1986). Key terms here are empowerment and participation, which basically means involving communities and individuals (WHO, 1998).

During the same period as NPH progressed, the medical sociologist Antonovsky started his work on the theory of Salutogenesis. He asked the simple question "What creates health?", which together with the NPH-movement led to a turning point in the health research field. He presented health as a continuum and suggested that people constantly are moving on this continuum. This emphasizes the idea of health as a process, not an outcome. Health promoters therefore need to understand and have knowledge about what makes people move to the health end of the continuum (Antonovsky, 2013). Antonovsky (1996) argued that the salutogenic orientation would be more powerful for health promotion research and practice than the pathogenic orientation. Furthermore, Lindström and Eriksson (2010) states that "people and systems that uses this approach can develop populations and individuals that live longer, [and] are more prone to choose positive health behavior" (p. 11).

In the original salutogenic framework, the key concepts were "Sense of Coherence" (SOC) and "Generalized Resistance Resources" (GRRs), which are closely related. According to Antonovsky (2013), SOC consists of three dimensions that interact with each other (Figure 1). SOC is seen as a life orientation, and Antonovsky (2013) differentiates between a strong, weak or rigid SOC. A strong SOC makes people resistant when it comes to handling stressors they meet trough life, where participation is argued to be an important facilitator.

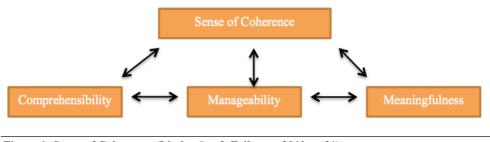


Figure 1: Sense of Coherence (Lindström & Eriksson, 2010, p. 21)

The development of SOC is further determined by the GRRs (Antonovsky, 2013). Figure 2 illustrates a definition of a GRR. It is however important to note that it is not enough to have the resourses. The key is to have the ability to use them in a health promoting way (Lindström & Eriksson, 2010).

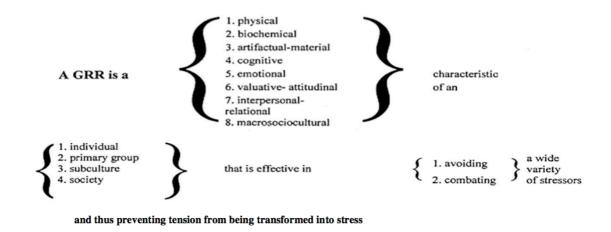


Figure 2: General Resistant Resources (Lindström & Eriksson, 2010, p. 19)

Today, health promotion and the salutogenic framework has become an umbrella word for a wide range of concepts that attempt to explain health. Antonovsky's original concepts are still central, but the salutogenic framework consists of more than SOC and GRR. Lindström & Eriksson (2010) have expanded the theory to include several different concepts explaining health. Figure 3 shows the different concepts included. However, in this article the salutogenic framework as a whole will the object of discussion.

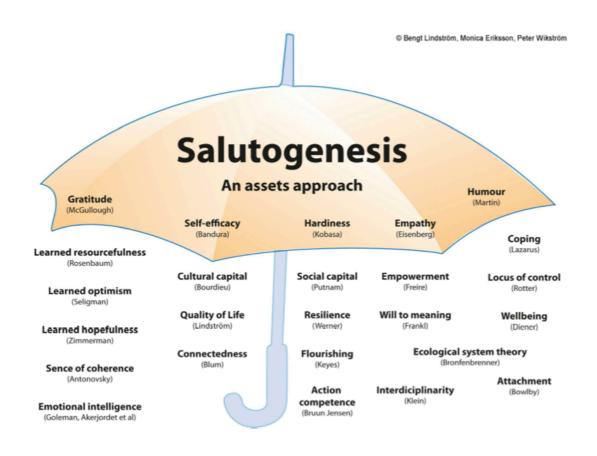


Figure 3: Concepts included in the salutogenic approach (Lindström & Eriksson, 2010, p. 55)

Environment and activity

Participation in different kinds of activities is an important and positive factor for health and well-being, which is also highlighted in connection with health promotion. People's everyday life consists of a wide range of different activities. Participation in these activities is important for people's opportunity to acquire competencies and skills, as well as to connect with others and the community (Law, 2002). "When people work, play, and perform activities of daily living, they shape their capacities, patterns of acting, self-perceptions, and comprehension of our world" (Kielhofner, 2008, p. 126), which implies that people develop through occupation. However, people's environment is constantly influencing activity patterns, and to understand why people do specific things in a specific environment, it is crucial to have an understanding of the environmental dimensions. Kielhofner's (2008) Model of Human Occupation seeks to understand this complex interaction between humans, their occupations and the environment.

Human occupation refers to people doing and participating in all sorts of activities. Because humans are sociocultural creatures – time, space, society and culture shape occupational patterns. According to Kielhofner (2008) people are made up of volition, habituation and performance capacity. This means that what motivates people to engage in different kinds of occupations, how they organize these occupations into patterns or routines as well as their physical and mental ability, all affect what and why people choose to do what they do. The environment can further provide opportunities or resources, but also demand certain behaviour. To understand the dimensions of the environment is therefore seen as a key component.

According to Kielhofner (2008) the environment consists of different dimensions and in this article, four dimensions are found relevant. Firstly, the **physical space** where people do things. How the physical environment in a city is designed will for instance influence how people perceive it, and what they do within it. The second dimension is the **social group** encountered, which in this case could be the urban dwellers. People tend to acquire some of the characteristic (values, behaviors etc.) of the social group they belong to. This could influence what kind of habits and roles the urban dwellers take on. The second dimension is closely related to the third, the **cultural dimension**. The social and physical environment is shaped and interpreted by culture. This implies that the culture is a pervasive feature of a specific environment. The culture can both infuse and influence social and physical aspects of a city, and urban societies will most likely have a different culture than a rural. It is also

conceivable that the culture varies between and within cites. The last dimension is the **political and economic context**. This can affect the freedom to make choices, and the access to relevant resources that affect people's occupational life. This will also mean that the environment consists of demands and constraints that can place limits on action or demand particular behaviour. As a whole, this implies that the environment can have a different impact on different people and legitimizes the importance to understand what changes in the environment entail for different people.

Results

With these perspectives in mind, what does the research say about how features of the built environment in a city can influence health and well-being of urban dwellers? The following section will present the current research on this topic. Healthy urban planning and urban health research is however a multi-sectorial field, thus the evidence-base covers many different aspects. As this article has a health promoting angle, the main focus will be positive health determinants in the built environment. As the following will show, the built environment can promote health in different ways. However, the evidence indicates that there are some specific features in the built environment that have been given much attention in relation to health.

23 articles were included in the review. Table 1 shows an overview of the articles and the method used. It became evident that in relation to health, features of the built environment can influence both physical and mental health and well-being. To make clear how the different features of the built environment can influence different aspects of health, this part is divided into (1) "Built environment and physical health and well-being" and (2) "Built environment and mental health and well-being". Separating physical and mental health might, however, be somewhat contradictory when health promotion in many ways represents a holistic understanding of health. The intension is not to imply that the two are not connected, but to make clear how the different features influence mental and physical health.

Author/published	Title	Method	
Beyer et al., 2014	Exposure to Neighborhood Green Space and Mental Health: Evidence from the Survey of the Health of Wisconsin.		
Daumann et al., 2014	An Active City Approach for Urban Development	Quantitative studies	
Leyden, 2003	Social Capital and the Built Environment: The Importance of Walkable Neighborhoods.		
Handy et al., 2006	Self-selection and the relationship between the built environment and walking: Empirical evidence from northern California.		
Maas et al., 2009	Social contacts as a possible mechanism behind the relation between green space and health		
Mitchell, 2012	Is physical activity in natural environments better for mental health than physical activity in other environments?		
Pietilä et al., 2015	Relationships between exposure to urban green space, physical activity and self-rated health.		
Reyer et al., 2014	Walkability is Only Part of the Story: Walking for Transportation in Stuttgart, Germany.		
Richardson et al., 2013	Role of physical activity in the relationship between urban green space and health.		
Stigsdotter et al., 2010	Health promoting outdoor environments – Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey.		
Stone et al., 2014	The freedom to explore: examining the influence of independent mobility on weekday, weekend and after-school physical activity behaviour in children living in urban and inner-suburban neighbourhoods of varying socioeconomic status.		
Vogt et al., 2015	Neighborhood and healthy aging in a German city: distances to green space and senior service centers and their associations with physical constitution, disability, and health-related quality of life		
Chawla, 2015	Benefits of Nature Contact for Children		
Kelly et al., 2016	Barriers and Facilitators to the Uptake and Maintenance of Healthy Behaviours by People at Mid- Life: A Rapid Systematic Review.	Review articles	
Lee & Maheswaran, 2010	The Health benefits of urban green spaces: a review of the evidence.		
Renalds et al., 2010	A Systematic Review of Built Environment and Health.		
Wolch et al., 2014	Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'.		
Yen & Anderson, 2012	Built Environment and Mobility for Older Adults: Important Policy and Practice Efforts.		
Faskunger, 2011	Promoting Active Living in Healthy Cities of Europe		
Grant, 2015	European Healthy City Network Phase V: patterns emerging for healthy urban planning.	Evaluations of WHO-HCP	
Jackisch et al., 2015	Is a healthy city also an age-friendly city?		
Poulsen et al., 2014	Growing an Urban Oasis: A Qualitative Study of the Perceived benefits of Community Gardening in Baltimore, Maryland.	Qualitative Studies	
Woodgate & Skarlato, 2015	"It is about being outside": Canadian youth's perspectives of good health and the environment.		

Table 1: Articles included in the review sorted after method used

Built environment and physical health

Daumann, Heinze, Römmelt, & Wunderlich (2014) argue that a healthy city must acknowledge the value of having active citizens. They highlight a wide range of benefits to invest in policies and programs that foster physical activity, including fewer health care costs, expanding social networks and less air and noise pollution. The term active lifestyle or active living is frequently used in connection with healthy cities. Faskunger (2011) defines this as a "way of integrating PA (Physical activity) into daily routines, such as walking and bicycling for transportation, taking the stairs, and using recreational facilities" (p. 143). Thus, physical activity can be seen as an umbrella term for a wide range of different activities. In relation to this, walkable neighbourhoods become relevant and active transportation is a key-term here. The latter can be defined as "any human-powered movement to get from one place to another" (Daumann et al., 2014, p. 219) and Reyer, Fina, Siedentop & Schlicht (2014) argue that "walkability seems to be a promising concept to measure the influence of urban areas on health behaviour and active lifestyles" (p. 5851).

It has been explored whether neighbourhoods with a high level of active transportation have urban dwellers that choose to live there because it is walking-friendly. However, after controlling for personal attitudes, Handy, Cao & Mokhtarian (2006) found that the built environment had an independent effect on people's walking behaviour. Furthermore, Reyer et al. (2014) argue that active transportation around the neighbourhood is more likely to be used in areas with high density and mixed land use. Proximity to parks also influences how much people walk, and the safety of streets and sidewalks are significant for both walking and cycling. This indicates that access to safe bike and walking paths might be of importance for the use of active transportation.

Mixed land use and the importance of independent mobility have further been recognized in relation to both children (Stone, Faulkner, Mitra, & Buliung, 2014) and older people (Daumann et al, 2014). Stone et al. (2014) show that independent mobility is crucial for children's level of physical activity. Furthermore, children who have some independent mobility seem to have a higher level of physical activity during the week. However, the study showed that neighbourhood safety is an important factor in letting children have at least some independent mobility. In the study conducted by Daumann et al. (2014), respondents over the age of 65 also reported that safety was an important factor. Other factors essential for them to engage in physical activity in their neighbourhood were for instance benches to rest on during

a walk. Daumann et al. (2014) therefore argue that a walking-friendly environment should have "safe and simple crosswalks, pavement continuity, a reduced flow of traffic, and the availability of shade and benches and other places to rest" (p. 10).

Richardson, Pearce, Mitchell & Kingham (2013) identify a higher level of physical activity in areas with accessible green spaces, which might have an impact on urban dwellers' physical health, both objectively (by monitoring eg. cardiovascular disease) and subjectively (self-rated health). However, other studies have not found a connection, which indicates that the relationship is somewhat inconclusive. Vogt et al. (2015) ague that where the study is conducted, might play a crucial role for the results. As Lee & Maheswaran (2010) point out, spatial studies like these might also fail to capture the social dimensions. They refer to access of parks, but also fear of crime and more individual factors such as motivation for physical activity. This indicates that the level of physical activity might not increase by just improving access. This is also consistent with other studies (Daumann et al., 2014; Kelly et al., 2016; Vogt et al., 2015). However, Pietilä et al. (2015) argue that green spaces near people's homes can provide low-cost access to an arena well suited for physical activity. Wolch, Byrne & Newell (2014) also note that for example trees absorb airborne pollutants and help filter the air. This sheds light on the fact that green spaces or parks impact people's health, not solely as a feature that promotes positive health behaviour.

Built environment and mental health

The built environment also seems to have an impact on urban dwellers' mental health and well-being. Some studies indicate that mixed land use can have a positive impact on social capital. "Social capital represents the degree of social cohesion which exists in communities" which "is created from the myriad of everyday interactions between people" (WHO, 1998, p. 19). Walking-friendly neighbourhoods might therefore not only be positive for urban dwellers' physical health. In a study conducted by Leyden (2003), walking-friendly and mixed land-use neighbourhoods also seem to promote social capital. People living in areas where they are not car dependent are not only more likely to use active transportation, but also more likely to feel connected to their community, participate politically and trust other people. These results are also consistent after controlling for other independent variables. This is also confirmed in a review study conducted by Renalds, Smith & Hale (2010).

Having different kinds of services close to their homes appears to be important for urban dwellers' health and well-being. However, it seems to be mostly related to the feeling of independence for older people (Daumann et al., 2014; Jackisch, Zamaro, Green & Huber, 2015). It is therefore suggested that modifications of the environment is a good way to empower older people and enable them to live independent lives, which can be related to mental health and well-being. Other examples of making it possible for older people to be independent in their everyday life are adaption of public spaces, housing and transport infrastructure (Jackisch et al., 2015). Yen & Anderson (2012) highlight that this is crucial for older people to be able to "age in place", or in other words, "live in their homes or communities as long as possible" (p. 951).

Having parks and available green spaces have also been studied in relation to mental health and well-being. Stigsdotter et al.'s (2010) study indicates that the connection between proximity to green space and health is positive. Related to stress and mental health, people living close to parks report higher self-rated health. This is also consistent with Beyer et al.'s (2014) research. Furthermore, Mitchell (2012) concludes that physical activity in natural environments has a positive affect on mental health. Green spaces and parks also appear to be positive for social capital and community ties, which in turn have health benefits. Maas, van Dillen, Verheij & Groenewegen (2009) ask if this is because of the social contact people get if there are parks available or if parks and green spaces are an independent factor that has an impact on health. They conclude that: "[...] the relation between green space and social contacts has more to do with the fact that green spaces can strengthen sense of community via place attachment and place identity of its residents, than with actual contacts with neighbours" (p. 593).

This might be linked to Jackisch et al.'s (2015) notion that the physical design of a city or a neighbourhood may foster a sense of belonging. If there are green spaces available in a neighbourhood, they can, however, function as social arenas and a meeting place for neighbours (Lee & Maheswaran, 2010). There are, for instance, a lot of positive health outcomes associated with community gardening. Community gardening is shown to provide both enhanced physical and psychological well-being, but also lead to stronger social bonds in a community (Poulsen et al., 2014). Using free green space to grow vegetables is one example of building arenas for social interaction, supporting social capital, as well as physical activity and active living (Grant, 2015).

Chawla (2015) argues that children need green spaces and refers to Hart's (1979) work, which shows that natural environments like wastelands are important for children and their motoric, creative and social development. However, Hart's studies show that parents today do dont let their children play alone without supervision. This might lead to limitations for children's ability to form their own environment and activities. On the other hand, more time with adults and parents might have other positive impacts on the children. Furthermore, a study of Canadian youths, conducted by Woodgate & Skarlato (2015), found that the relationship between health and environment had much to do with the outside environment. The outside environment included built, natural and social environment, and being outside was associated with having both good physical and mental health. A healthy environment was furthermore seen as green, clean and safe.

Discussion

The WHO (1998) definition of healthy cities highlights creating and improving the physical and social environments in a city as important, which is a more general recognition of the built environment and its influence on health. This review has given insight into how more specific features of the environment affect urban dwellers' health and well-being. It is however conceivable that there are other aspects and features of the urban environment that can affect health and well-being, but with the keywords used in the literature search the foregoing is what emerges. In the following, these features might therefore be viewed as examples of how it is possible to assess measures in the built environment. Still, there are indications that the built environment influences physical and mental health and well-being on both the individual and the community level.

Following Antonovsky's (2013) notion that health is a continuum, it can be argued that creating sustainable and health promoting environments might facilitate people moving towards the health-end of the continuum. As argued, it is important to understand the dimensions of the environment to fully understand its influence on urban dwellers and their activities. This is where the second research question becomes relevant, what does this mean for health promoting measures in the urban environment? What follows is therefore a discussion of how the features can be understood in the light of Kielhofner's (2008) environmental dimensions, seen from a health promotion perspective.

First of all, the **physical space** is argued to influence peoples occupational patterns and what people choose to do (Kielhofner, 2008). When assessing the research, this dimension seems to have a great impact on urban health and well-being. If the goal of health promotion work is to enable people to make healthy choices (WHO, 1986), Kielhofner's (2008) suggestions of how the environment influences people's occupational patterns become evident. Based on his assumptions, adapting the built environment might influence what people do in a specific place. Furthermore, some studies show that the built environment influences the level of physical activity and it seems like mixed land-use and well-adapted bike and walking trails might have a greater impact on the level of physical activity than proximity to green spaces. It is therefore conceivable that facilitating active transportation will increase the level of physical activity in a city. As Renalds et al. (2010) point out, measures made on an environmental-level might facilitate an easier integration of habits, and thus get people to adopt a healthier lifestyle. It can therefore also be argued that intervention targeting individual behaviour might not be the most effective when it comes to increasing the state of health for urban dwellers

The physical space also seems to have a social aspect. How the physical environment is perceived, will influence the perception of safety in a city or a neighbourhood. As for instance Chawla (2015) and Jackisch et al. (2015) point out, the safety of a neighbourhood might have an impact on physical activity, use of green spaces and letting children play alone outside. The social aspect of the physical space also becomes relevant in connection with age-friendly environments. Making older people feel more safe and independent is argued to be important for mental health, and removing architectural barriers might be one part of the solution (Jackisch et al., 2015; Yen & Anderson, 2012). As Kielhofner (2008) points out, the environment provides both opportunities and constrains. If people develop through participation in different activities, it is argued to be important that the environment enable people to perform these activities. This might however also benefit other segments of the population.

Secondly, urban dwellers as a **social group** might adapt some of the same characteristics like for instance habits. Kielhofner's (2008) notion of the social group within a specific environment might provide an understanding of why some studies find a connection between green spaces and physical activity while others do not. It is conceivable that if people in a specific area have the habit of using their local green space for physical activity, this might

influence others living in the same area. However, this is only one possible explanation. It can also be related to how well kept these spaces are, how suitable the area is for physical activity or as mentioned, the perception of safety. In relation to health promotion work, it may therefore be argued that consulting the social group of a specific area is relevant when creating arenas for physical activity. This also accentuates the notion of why community participation is important (WHO, 1986, 1998). Thirdly, as Kielhofner (2008) points out, when the social and physical environment is shaped and interpreted by culture, the **cultural dimension** can infuse and influence social and physical aspects of a city. Cultural differences might also provide a possible explanation for the inconsistent results of the studies about physical activity and proximity to parks. If culture has an impact on how the environment is perceived, and thus people's occupational patterns, it can also be argued that when planning health promotional initiatives in the urban environments, it is important to explore the cultural dimension of the given environment as well.

Finally, Kielhofner (2008) argues for an understanding of the **political and economic context**. A city or a city part can have different prerequisites in terms of economic benefits and different political provisions. This can in turn affect health promoting behaviour, as it can affect the freedom to make healthy choices or the provision of the relevant recourses. However, as for instance Daumann et al. (2014) point out, investing in healthy policies can have a wide range of benefits for urban dwellers. This indicates that the political and economic context can provide and facilitate health promoting measures in the urban environment, which, furthermore, can be seen as a recognition of how the broader socio-economic determinants of health can influence health and well-being of urban dwellers. Political commitment is also highlighted as crucial when developing health promoting initiatives, and it is therefore argued that helath promoters working in the urban environment should cooperate with political stakeholders (WHO, 1986).

As a whole, it is argued that these dimensions are important to understand in the process of developing healthy urban environments (Figure 4). It is argued that health promoters need to understand the physical space, the social group in that specific space, their culture, and the political and economic context they are working within. For health promoters to move people to the health-end of the continuum, this indicates that they cannot solely depend on the research conducted in the field when planning healthy urban environments. It is important to understand how features of the environment influence different social groups, with culture as

an important mechanism. Participation, preferably on a community level, and empowerment are therefore argued to be key components when it comes to developing sustainable and successful health promoting measures in the urban environment. Given that the built environment has an influence on health and well-being, and that enabling people to take control over factors influencing their health is one of the cornerstones in health promotion, involving local people can also be argued to be ethical.

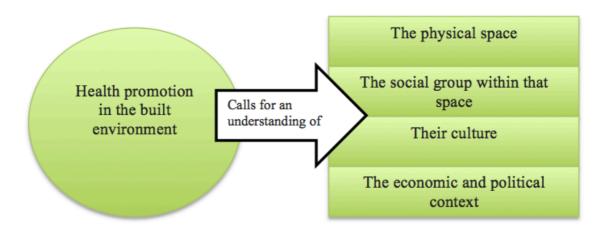


Figure 4: The dimensions health promoters need to understand when assessing measures in the built urban environment

Conclusion

Health promoters seek to increase the health status in a population. With the principles of the Ottawa Charter for Health Promotion and Antonovsky's salutogenic approach, this means focusing on people's resources and enabling people to make healthy choices. As argued, health is created in people's everyday life, which makes the urban environment an important arena for health promotion. The research indicates that as long as the built environment in a city is well-adapted, an urban environment can have numerous opportunities that allow urban dwellers to engage in health promoting activities. There is supporting evidence that green spaces can have a positive impact on both people's mental and physical health as well as their well-being, given that they can function as arenas for mental restoration and physical activity (Richardson, 2013; Stigsdotter et al, 2010). The impact of mixed land use has also been given

much attention and has been explored in connection with how active people's lifestyles are (Faskunger, 2011), but also in relation to social capital (Leyden, 2003) and independence (Jackisch et al., 2015; Yen & Anderson, 2012). It is therefore possible to conclude that the built environment in a city influences urban dwellers' health and well-being on both the individual and the community level.

Adaption of the built environment is argued to be more consistent with a health promoting mind-set, than solely focusing on individual health behaviour. However, for health promoters to enable people to move to the health-end of the continuum, the features of the built environment, which is believed to create health, must be understood and interpreted. It is therefore argued that health promoters need to understand the different dimensions of the environment they are going to work within, since these dimensions can influence urban dwellers' choices and activities, and thus health and well-being.

References

- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International*, 11(1), 11-18.
- Antonovsky, A. (2013). Helsens mysterium. Oslo: Gyldendal Akademisk.
- Bai, X., Nath, I., Capon, A., Hasan, N. & Jaron, D. (2012). Health and wellbeing in the changing urban environment: complex challenges, scientific responses, and the way forward. *Current Opinion in Environmental Sustainability*, *4*(4), 465–472.
- Barton, H. & Grant, M. (2011). Urban Planning for Healthy Cities. *Journal of Urban Health*, 90(1), 129-141.
- Beyer, K. M. M., Kaltenbach, A., Szabo., A., Bogar, S., Nieto, F. J. & Malecki, K. M. (2014). Exposure to Neighborhood Green Space and Mental Health: Evidence from the Survey of the Health of Wisconsin. *International Journal of Environmental Research and Public Health*, 11(3), 3453-3472.
- Chawla, L. (2015). Benefits of Nature Contact for Children. *Journal of Planning Literature* 30(4), 433-452.
- Daumann, F., Heinze, R., Römmelt, B. & Wunderlich, A. (2014). An Active City Approach for Urban Development. *Journal of Urban Health*, *92*(2), 217-299.
- Dooris, M. (1999). Healthy Cities and Local Agenda 21: the UK experience challenges for the new millennium. *Health Promotion International*, *14*(4), 365-375.
- Faskunger, J. (2011). Promoting Active Living in Healthy Cities of Europe. *Journal of Urban Health*, 90(1), 142-153.
- FN-sambandet. (2015). *Urbanisering*. Sourced May 05, 2016 from: http://www.fn.no/Tema/Befolkning/Urbanisering

- Grant, M. (2015). European Healthy City Network Phase V: patterns emerging for healthy urban planning. *Health Promotion International*, 30(S1), 54–70.
- Handy, S., Cao, X., & Mokhtarian, P. L. (2006). Self-selection and the relationship between the built environment and walking: Empirical evidence from northern California. *Journal of the American Planning Association*, 72(1), 55–74.
- Hart. R. (1979). Children's Experience of Place. New York: Irvington.
- Jackisch, J., Zamaro, G., Green, G. & Huber, M. (2015). Is a healthy city also an age-friendly city? *Health Promotion International*, *30*(1), 108-117.
- Kelly, S., Martin, S. M., Kuhn, I., Cowan, A., Brayne, C. & Lafortune, L. (2016). Barriers and Facilitators to the Uptake and Maintenance of Healthy Behaviours by People at Mid-Life: A Rapid Systematic Review. *PLOS ONE 11*(1). Doi: 10.1371/journal.pone.0145074
- Kielhofner, G. (2008). *Model of Human Occupation Theory and Application* (4thed). Philadelphia: Lippincott Williams & Wilkins.
- Lafond, L. J. (Red.). (2015). *National healthy cities networks in the WHO European Region Promoting health and well-being throughout Europe*. Sourced from: http://www.euro.who.int/en/publications/abstracts/national-healthy-cities-networks-in-the-who-european-region.-promoting-health-and-well-being-throughout-europe-2015
- Law, M. (2002). Participation in the Occupations of Everyday Life. *The American Journal of Occupational Therapy*, *56*(6), 640-649.
- Lee, A. C. K. & Maheswaran (2010). The Health benefits of urban green spaces: a review of the evidence. *Journal of Public Health*, *33*(2), 212-222.
- Leyden, K. M. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *Amerivan Journal of Public Health*, *93*(9), 1546-1551.

- Lindström, B. & Eriksson, M. (2010). *The Hitchhiker's guide to salutogenesis*. Folkhälsan Research Report.
- Maas, J., van Dillen, S. M. E., Verheij, R. A. & Groenewegen, P. P. (2009). Social contacts as a possible mechanism behind the relation between green space and health. *Health & Place*, *15*(2), 586-595.
- Macfarlane, R. G., Wood, L. P. & Campbell, M. E. (2015). Healthy Toronto by Design: Promoting a healthier built environment. *Canadian Journal of Public Health*, 106(1), 5-8.
- Mitchell, R. (2012). Is physical activity in natural environments better for mental health than physical activity in other environments? *Social Science & medicine*, *91*, 130-134.
- Pietilä, M., Neuvonen, M., Borodulin, K., Korpela, K., Sievänen, T. & Tyrväinen, L. (2015). Relationships between exposure to urban green space, physical activity and self-rated health. *Journal of Outdoor Recreation and Tourism*, 10, 44-54.
- Poulsen, M. N., Hulland., K. R. S., Gulas, C. A., Pham, H., Dalglish, S. L., Wilkinson, R. K.
 & Winch, P. J. (2014). Growing an Urban Oasis: A Qualitative Study of the Perceived benefits of Community Gardening in Baltimore, Maryland. *Culture, Agriculture, Food and Environment*, (36)2, 69–82.
- Renalds, A., Smith, T. H. & Hale, P. J. (2010). A Systematic Review of Built Environment and Health. *Family & Community Health*, 33(1), 66-78.
- Reyer, M., Fina, S., Siedentop, S. & Schlicht, W. (2014). Walkability is Only Part of the Story: Walking for Transportation in Stuttgart, Germany. *International Journal of Environmental Research and Public Helath*, 11(6), 5849-5865.
- Richardson, E. A., Pearce, J., Mitchell, R. & Kingham, S. (2013). Role of physical activity in the relationship between urban green space and health. *Public Health*, (127)4, 318-324.

- Stigsdotter, U. K., Ekholm, O., Schipperijn, J., Toftager, M., Kamper-Jørgensen, F. & Randrup, T. B. (2010). Health promoting outdoor environments Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey. *Scandinavian Journal of Public Health*, *38*(4), 411-417.
- Stone, M. R., Faulkner, G. E. J., Mitra, R. & Buliung, R. N. (2014). The freedom to explore: examining the influence of independent mobility on weekday, weekend and after-school physical activity behaviour in children living in urban and inner-suburban neighbourhoods of varying socioeconomic status. *International Journal of Behavioral Nutrition and Physical Activity*, 11(5). Doi: 10.1186/1479-5868-11-5
- Tengland, P-E. (2010). Health Promotion and Disease Prevention: Logically Different Conceptions? *Health Care Analysis*, *18*(4), 323–341.
- Vogt, S., Mielck, A., Berger, U., Grill, E., Peters, A., Döring, A., Holle, R., Strobl, R., Zimmermann, A-K., Linkohr, B., Wolf, K., Kneißl, K. & Maier, W. (2015). Neighborhood and healthy aging in a German city: distances to green space and senior service centers and their associations with physical constitution, disability, and health-related quality of life. *European Journal of Aging*, 12(4), 273-283.
- Woodgate, R. L. & Skarlato, O. (2015). "It is about being outside": Canadian youth's perspectives of good health and the environment. *Health & Place, 31*, 100-110.
- Wolch, J. R., Byrne, J. & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning*, 125, 234-244.
- World Health Organization. (1986). *Ottawa Charter for Health Promotion*. Sourced September 01, 2015 from: http://www.euro.who.int/ data/assets/pdf file/0004/129532/Ottawa Charter.pdf
- World Health Organization. (1998). Health Promotion Glossary. Geneva: WHO.

Yen, I. H. & Anderson, L. A. (2012). Built Environment and Mobility for Older Adults: Important Policy and Practice Efforts. *Journal of the American Geriatrics Society, 60*(5), 951-956.

Article II

Urban health and its relation to the urban design

A qualitative study with Norwegian urban dwellers

Ingvill S. Drevland

Norwegian University of Science and Technology (NTNU)

Department of Social Work and Health Science

Abstract: With the rapid urbanization around the world, it is argued that the urban environment is an important arena for health promotion. The main aim in this study is to identify what creates health in an urban environment and how this is related to the actual urban design. This is a phenomenological study that includes in-depth interviews with three men and five women aged 23-65. Systematic text condensation was used to analyze the material and three categories were identified as health promoting factors of urban life: (1) Accessibility, (2) Variation and (3) Flexible social arenas. The study shows how the three categories are related to the actual urban design and how they can affect health and well-being of urban dwellers. It is also argued that these three categories are connected to each other and as a whole might facilitate healthy urban environments, and thus healthy urban dwellers.

Keywords: Healthy cities, urban health, urban environment, urban design, health promotion, salutogenesis, Norway

Posted by author guidance for Health Promotion International

Number of words: 4978 (abstract and keywords not included)

Introduction

With the rapid urbanization and the health challenges today's society is facing, the question of how to create healthy urban environments becomes relevant. In 1987 The World Health Organization (WHO) presented the WHO Healthy Cities Program (WHO-HCP), a project aiming to create health in the urban environment. The foundation of the WHO-HCP can be viewed as concurrent with Antonovsky's salutogenic approach, both focusing on what creates health rather than what creates disease. On the one hand, some of the literature regarding healthy cities is grey literature, which makes it difficult to identify how specific features of the urban environment might influence health. On the other hand, the WHO has provided a great amount of knowledge through evaluations of city projects, guidelines and a philosophy of what a healthy city should aim for.

That said, the research on healthy urban planning is comprehensive, and a wide range of researchers has explored this in different ways. Some studies show how different aspects of urban life might influence health or lifestyle choices. For instance what creates social capital in a neighbourhood (Leyden, 2003; Renalds, Smith & Hale, 2010), how to increase the usage of active transportation (Daumann, Heinze, Römmelt, & Wunderlich, 2014; Reyer, Fina, Siedentop & Schlicht, 2014) or how proximity to green spaces influences physical and mental health (Stigsdotter et al., 2010; Vogt et al, 2015). In this study, the aim is to explore how the already stated knowledge on healthy urban planning (explored in article 1) appears in a Norwegian context, and furthermore, how this can elaborate on the principals of WHO-HCP and Salutogenesis. This is therefore a qualitative study aiming to explore what creates health and well-being in an urban environment, and furthermore, how this is related to the actual urban design.

First, a short introduction to Salutogenesis and the WHO-HCP is given, then a presentation of the method and materials, followed by the results. In the last section, the results will be discussed in the light of the theoretical perspectives presented.

Theoretical foundation

Health promotion and Salutogenesis

A central concept in the health promotion field is Aaron Antonovsky's theory about Salutogenesis. As opposed to the pathogenic orientation that focus on what makes people ill, the salutogenic orientation turns the focus to positive health determinants and the question; "what creates health?". The medical sociologist Antonovsky introduced the concepts "Sense of Coherence" (SOC) and "General Resistant Resources" (GRRs) and demonstrated how a strong SOC was associated with good health. Having a strong SOC means that the stressors or stimuli people meet trough life feels comprehensible, manageable and meaningful (Antonovsky, 2013). A strong SOC is, however, determined by the GRRs. GRRs include physical, emotional and relational characteristic of a person, group or society and can be found both within humans and in their environment. It is however not enough to simply have the resources; the ability to use them in a health promoting way is the key (Lindström & Eriksson, 2010). In the development of a strong SOC, at least four GRRs need to be accessible to a person: meaningful activities, contact with inner feelings, existential thoughts and social relations (Lindström & Eriksson, 2015).

As a sociologist, Antonovsky was well aware that different societal structures influenced people's ability to gain a strong SOC, as people from higher social strata have greater opportunities and access to the resources needed. He therefore argued that society has a responsibility to facilitatate the development of health promoting mechanisms. One way to do this is by using the salutogenic approach in the development of different health polices, focusing on strengthening the existing GRRs and finding new ones. However, making people aware of the resources available and furthermore enabling them to use them, is seen as a crucial component. Salutogenesis can therefore be argued to be a sustainable approach on a societal level, as it potentially can create health for all (Lindström & Eriksson, 2015).

In "The hitchhiker's guide to salutogenesis" Lindström & Eriksson (2010) have expanded the salutogenic approach to also include other concepts explaining health. Together with the overall salutogenic orientation, the focus in this article is however the GRRs.

The WHO Healthy Cities Program

The WHO Healthy Cities Program (WHO-HCP) was launched in 1987, and it is argued that this program was a direct response to some of the policy initiatives that emerged in the 70s and 80s (Lafond, 2015). The program aims to be a holistic, strategic framework in developing healthy cities and similarly to the Ottawa Charter for Health Promotion, the framework has some similarities to the salutogenic approach (Dooris, 1999). WHO defines a healthy city as: "[...] one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential" (WHO, 1998, p. 13).

In the European region, the network consists of 30 countries, including 1500 cities. The implementation and the function of the program varies from city to city (Lafond, 2015). However, the healthy city movement recognizes that the process of developing healthy cities needs an intersectorial approach. This means including both public and private sector, as well as voluntary and community organizations (WHO, undated). It is also argued that active participation and community action are core elements in developing sustainable and healthy environments, and thus healthy cities (Macfarlane, Wood & Campbell, 2015). The program has developed through five phases, and is now in its sixth phase. These phases have not only provided practical experience on how to improve health and well-being of urban dwellers, but also made it possible to measure progress and set priorities (Lafond, 2015). Table 1 shows a short overview of the five phases already completed.

Phases I and II (1988-1997)

In Phase II (1993–1997), cities advanced the healthy cities approach by developing healthy public policies and drawing up comprehensive city health plans focusing on equity and sustainable development.

Phase III (1998-2002)

Cities attempted to make a transition from health promotion to integrated city health development plans – creating partnership-based policies, with a strong emphasis on equity, the social determinants of health, Local Agenda 21, community development and regeneration initiatives. Cities were required to take systematic approaches to monitoring and evaluation.

Phase IV (2003-2008)

Cities participating in Phase IV made an overall commitment to health development with emphasis on equity, tackling the determinants of health, sustainable development and participatory and democratic governance. Cities committed to work on healthy ageing, healthy urban planning, health impact assessment and physical activity and active living.

Phase V (2009-2013)

Cities gave priority to health and health equity in all policies, which, like other phases, recognize that population health is largely determined by policies and actions outside the health sector. The phase was built on previous city health development planning and focused on three core themes: caring and supportive environments, healthy living and healthy urban design.

Table 1: The five phases already completed (Lafond, 2015, p. 6)

In the sixth phase, the themes and goals of "Health 2020" are given priority, where developing urban environments that foster positive health behaviours is a central element. This is argued to potentially be able to control diseases caused by physical inactivity, diet, tobacco, alcohol and mental health. Among other things, this means improving the setting of people's everyday life, building community resilience and supportive environments (Lafond, 2015). The WHO emphasizes that a healthy city is not defined by the outcome; the process of improving health of the population is the core element. The aim is therefore to build a strong movement for public health at the local level. However, to do so, health must be put high on the political and social agenda, which also highlights the importance of working towards health equity. This implies that a healthy city is a city that is committed to improving the health of its citizens, and is not only seeking a particular health status. In turn, this means that regardless of current health status, any city can become a healthy city (WHO, undated). This acknowledgment is similar to Antonovsky's (2013) notion of health as a process, but also closely related to the idea that health promotion seeks to help people to take control over their lives and enable them to make healthy choices (WHO, 1986).

Methods and materials

This is a phenomenological study aiming to describe the informants' common opinions regarding healthy cities. More accurately what creates health in an urban environment, and furthermore, what the informants have experienced and how they have experienced health in the urban environment (Creswell, 2007). This study includes semi structured in-depth interviews with three men and five women aged 23 to 65. All the informants have different life situations in terms of housing, family and work/education. What they have in common is that they all live in medium sized cities in Norway.

Interview

The interview guide was prepared with the results from the first article and with the principles of WHO-HCP in mind. Following Kvale & Brinkmann (2009), a semi-structured interview guide (Appendix A) was used, which they recommend in phenomenological studies. This gives the informants a bigger chance to speak freely about what is important to them, and also makes it possible for the researcher to ask follow-up questions. The Norwegian Social Science Data Service (NSD) approved (Appendix B) the study before the interview process was started. Participation in the study was voluntary and the informants themselves contacted the researcher after seeing a post on social media. The informants gave oral consent to participate. Appendix C shows the consent form used. This form was sent to the informants in advance, but also shown and explained when the interviews were conducted.

Data analysis

The data analysis was based on Malterud's (2013) modification of Georgi's Systematic Text Condensation method (STC). This is an explorative method and is considered suitable to describe the theme and research question of this article. STC consists of four steps, which will be presented in the following.

The first step is to get a solid impression of the dataset by reading the interviews and taking notes followed by identyfing categories or themes that seem to explain the research question. As mentioned, the aim of the analysis was to identify the informants' common experience and attitudes related to healthy urban design. The informants were therefore also sorted under the categories in this step. This was helpful to get an impression of how the informants were

distributed among the categories. Two of the categories were given low priority in the following step, as these appeared to, firstly, have few informants, and secondly not have a very strong connection to the research question. Thus, four categories were kept and used further in the analysis (Malterud, 2013).

The next step is to sort out the parts of the interviews that have meaning or seem relevant for the research question. As opposed to Georgis version of STC, Malterud (2013) does not consider the whole dataset as meaningful. Following her modification of STC means that in this step the aim is to identify meaning units that can describe what creates health and well-being in an urban environment. The meaning units were colour coded and placed under the categories from the first step. In this step it became clear that one of the categories ("Community participation") was not linked to the physical environment. Although this is an important aspect of WHO-HCP, it was deleted in the present study. One of the categories was also given a different name, as the meaning units coded under it described a somewhat different aspect than originally anticipated ("Communication to the city" → "Accessibility").

In the third step, each of the categories are analyzed individually with a goal to systematically abstract and condensate the meaning units. In this process, the "empirical data are reduced to a decontextualized selection of meaning-units" (Malterud, 2012, p. 799). The final step is to synthesize this into consistent statements. This is presented in the following section. Appendix D shows the work matrices used in the process from finding meaning units to the condensation work, and how they are linked to the final categories.

Results

All the informants were asked what they think creates health. Many of the participants emphasized that physical activity was important their physical health. However, importance of strong social bonds, having access to meaningful activities and participation in the community was also mentioned in relation to mental health and well-being. Their answers provided the basis for the rest of the interview, and made it possible to understand and interpret the rest of the answers regarding the research question. The analysis resulted in three categories (Figure 1), which are believed to describe what creates health in an urban environment and how it is related to the actual urban design.



Figure 1: The three subtopics describing what creates health in an urban environment.

Accessibility

A city can offer a wide range of different services and leisure and adventure activities, something that is mentioned as very positive for urban dwellers' health. The informants also describe easy access to more natural surroundings as a positive factor of city life. However, that there are parks or green areas nearby where they live also seems to be important. Furthermore, having basic services close to where people live is also mentioned as advantageous in a city. This means that you usually do not have to travel far to cover basic needs and makes everyday activities easy and convenient. However, many of the informants point out that certain places around their city feel less accessible and inconvenient to get to.

Even if you can get basic needs covered in close proximity to where you live, when most midsize cities are divided into different city-parts and neighbourhoods, a logical connection between the city-parts and the city centre appears to be important. Safe and well-adapted bike and walking trails, for instance, are mentioned as essential. One of the informants argues that

this might make the city more open and accessible and also makes people less car dependent. The public transportation system is also mentioned as important when it comes to making people less car dependent. Logical bus routes and reasonable prices seem to be good measures to get people to take the bus. The informants also seem to think that if the public and active transportation system is well developed, people will use it more, which might be good for both the environment and the level of activity. One woman said: "If we use active transportation in our everyday life, we might get the physical activity that we need".

It seems that how well-adapted the transportation system is, might influence how often they take the trouble to go certain places. One man said: "Well, proximity is relative. If you develop and adapt the transportation system for active and public transportation, the whole city will feel nearby because you are quite free to move around wherever, whenever". Furthermore, how accessible services and activities are, seems to vary depending on where in the city you live. Some city-parts consist mostly of houses and apartments, which makes the public and active transportation system crucial.

Variation

Variation is something that is mentioned in relation to different aspects of the urban environment. It seems important for the informants, for instance, to make it possible for different people to settle down in one specific area. Here they highlight that different housing arrangements might be relevant. Not all the informants relate this directly to health; it is mostly linked to the importance of having diversity in a city-part or a neighbourhood. They highlight that different sizes, prize ranges and level of universal design might make it possible for different social and age-groups to settle down. In relation to housing, one of the informants also mentions that he thinks large apartment complexes inhibit social contact. In addition to this, various degrees of collective living solutions are mentioned by two of the informants. This seems to be related to the social aspect of health and the notion that housing arrangements might be able to promote social interaction and contact between neighbours.

Some of the informants refer to variation in the physical design. This means that a city-part should consist of different physical things (stores, schools, apartments, parks etc.) that generate activity throughout the day. In relation to this, it seems like the design of buildings and the outside environment can play a crucial role. In addition to this, the importance of not

centralizing all the cafés or shops in one place is mentioned. This seems to trace back to the notion of creating vibrant city-parts and neighbourhoods, which seems to be related to well-being. One woman said: "I think well-being should get top-priority when you're planning a city. That might create more vibrant neighbourhoods. If people are going to want to spend time in their neighbourhoods or city-parts, people have to really enjoy their environment. It should be designed in such a way that people want to do more than just sleep".

A variation in the physical design might as mentioned generate different kinds of activities. This was also mentioned as an independent positive aspect of urban life. On the one hand, the wide range of leisure activities found in the city is seen as positive. The traditional activities like athletic clubs or marching bands might not fit everyone, and the wide range of opportunities in a city makes it possible for everyone to find something they are interested in. In relation to this, one of the women mentions the importance of having an activity you can master. On the other hand, some of the informants mention that they think there is a lot of unexploited potential in their neighbourhoods or city-parts when it comes to arranging different kinds of activities. It does not have to be only sports and so on. They highlight that there are a varity of activities that can be arranged if one is creative. If a city-part is well-adapted for different kinds of people and activities, two of the informants conclude that this might make it possible for people to live a whole life in one geographic area.

Flexible social arenas

Flexible social arenas refer to different kinds of places where urban dwellers can interact with each other in both formal and informal ways. The term flexible reflects the informants suggestion that one specific arena might be used in different ways. The need for different kinds of arenas might be explained by one of the informants: "I think health is mostly related to what and who surrounds you. If the place you live facilitates social interaction and makes it easy to connect with others that might give you a feeling of being seen, which in turn might create health".

Many of the informants would like to have some kind of formal arena in their community. They point out that this could have a positive impact on both the feeling of fellowship in the community and the level of activity in their neighbourhood. An example of this might be a community centre. A woman suggests that an indoor space like that can function as a youth

club in the evening, but also as day care for older people. Some of the others propose that a place like that also gives the community a place to arrange other social events for the community. One of the informants argue that: "Everybody needs to do something more than regular everyday-stuff. Ok, you have a safe job, a safe economy. I however think it is important to have something besides this. Being together with other people and creating something creates health. Participating in activities together with others creates health".

The importance of out-door space is also mentioned by all the informants. One woman said: "There have to be something there, a room where people can live their life, not only work or live. There has to be out-door spaces where people can be social and physical and recuperate. I think that is very important!". They further highlight parks and other green spaces that have different kinds of features adapted for different kinds of social and physical activities. This could be for instance a jungle gym or a big chessboard. They stress that the design of these places should initiate both physical and social activities. One man described the different possibilities with an out-door space: "Some places you can see for example playgrounds or parks where they have ping pong tables, small football courts or exercise facilities or similar stuff that facilitates different kinds of activity. This makes it possible for people to be together outside and creates an arena for social contact, which I think is important for people's health".

Some of the informants also shed light on the fact that more informal arenas for social contact are important. The street where people live might function as an informal arena. The actual design of the street might affect how natural it is to greet your neighbours. This is also connected to what two of the informants say. They specifically mention walking-friendly environments and how this might be positive. One of them said: "I think one benefit of having a walking friendly neighbourhood is that you meet people on your way to for example the supermarket. When everybody is driving, you're always by yourself". This can reflect the importance of designing neighbourhoods that make it possible to walk between the different services people use in their everyday life. Neighbours will then get a chance to interact with each other as a part of their every day life in a more informal way.

The need for flexible social arenas, as mentioned by the informants, might reflect the fact that social bonds within the community is important for urban dwellers' health and well-being. This might lead to an increased activity, both physical and social, and reflects the informants' remarks of what creates health. One man said: "When people experience participation and social gathering, I think it influences the sense of well-being, which of course is related to our physical health as well. However, if you perceive your everyday life as meaningful by having social contact with other people and positive activities that gets you out of your house, this might prevent isolation and depressions and so on".

Discussion

This study has explored what creates health in an urban environment and how this is related to the actual urban design. The results indicate several aspects of urban life that potentially can create health. However, the informants describe different functions of the built environment that can promote or inhibit health promoting activities. It may therefore be argued that the physical design of a city or a city-part plays a significant role in creating health and well-being for urban dwellers.

Accessibility seems to be important for the informants. Accessibility appears to be linked to different aspect of urban life, for instance having easy access to green spaces and parks. Previous studies have explored if there is a connection between health status and proximity to green spaces and Stigsdotter et al. (2010) argue that having access to green spaces and parks seems to have an influence on mental health. This might explain why the informants all stress the importance of vegetation. Even though the informants also highlight that access to different kinds of services and activities is important, it seems that accessibility is largely connected to how easy it is to get around the city. On the one hand their statements indicate that it is important to have the most basic things close to where they live. On the other hand, it seems that how easy it is to travel around the city is crucial for the feeling of accessibility. The transportation system appears to be the key here, and based on these results it is likely that if the transportation systems were well-adapted, it would make the whole city feel more accessible.

As Lindström & Eriksson (2015) points out, the salutogenic approach can be used on a societal level by investing in healthy policies. In relation to creating health in the urban

environment, it is therefore argued that for instance investing in well-adapted transportation systems might benefit urban dwellers' health. The participants seem to think that a well-adapted transportation system generates active transportation, which can impact the level of physical activity. Creating urban environments that foster physical activity is also a goal in the sixth phase of WHO-HCP (Lafond, 2015). However, following the notion that making people aware of the opportunities is the key to increase health (Lindström & Eriksson, 2015), it might be argued that it is not enough to develop transportation systems, which indicates that there is a need for additional measures. A study conducted by Kamruzzaman et al. (2016) also concludes that even though the environmental factors influence the level of active and public transportation, attitudinal change strategies should be integrated in the process if the goal is to increase the usage.

The informants note that variation in housing is important to create diversity in a neighbourhood. They here refer to both age groups and people from different social strata. This is an interesting notion, as the informants do not connect this directly to health. It can however be interpreted as an ethical stand, and this is also concurrent with the WHO-HCP notion of health equity (WHO, undated). Is seems like the informants imply that a variation in housing might have an influence on social segregation. Furthermore, it seems like different housing arrangements could influence social interaction between neighbours. Social bonds are also something Antonovsky highlights as an important GRR (Lindström & Eriksson, 2015). Even though the social relationship neighbours have is not the most important in people's life, it is conceivable that this can impact for instance social capital in a neighbourhood.

Other studies have found a connection between health and variation in land use, however the main focus has been on the level of active transportation and physical activity (Leyden, 2003; Reyer et al., 2014). This study indicates that a variation in the physical design and the structure of a city or a city-part seems to be important for other reasons. According to the informants, this seem to be connected to creating vibrant neighbourhoods, as it can generate activity through the day and a wide range of leisure activities. This is mentioned as one of the benefits of urban life and appeares to be linked to the importance of having meaningful activities that one can master, which Antonovsky also highlights as an important GRR (Lindström & Eriksson, 2015). However, it seems that there is unexploited potential when it comes to utilize the benefits of arranging activities. While it is not clear why this is, it is conceivable that it might have something to do with lack of engagement or suitable arenas.

Both formal and informal arenas appear to be important to the informants, which seems to be connected to the notion that social interaction with other people is important for health in general. The informants seem to think that parks are suitable arenas for having different kinds of social gatherings, and that these arenas can promote social contact between neighbours. This is also consistent with other studies (Lee & Maheswaran, 2010; Poulsen et al., 2014). This might also be traced back to Antonovsky's notion of social relations as an important GRR (Lindström & Eriksson, 2015). To strengthen this GRR in an urban environment it can, based on these results, be argued that developing different kinds of social arenas might be a solution. The informants present many different alternatives of how these arenas should be design in order to promote physical and social activities. Arguably, this strengthens the notion of community participation in the process of developing healthy cities (Macfarlane et al., 2015).

The GRRs, which Antonovsky identified as resources within a person or in a person's environment, might be found in the urban environment. On a societal level, health promotion activities based on the salutogenic approach should aim to create new or to strengthen existing GRRs (Lindström & Eriksson, 2015). According to the results of this study, this means ensuring accessibility, which might lead to a variation in opportunities and numerous social arenas. This is considered to illustrate a more specific way in which the WHO-HCP goal of creating environments that foster both physical and social activity (Lafond, 2015) can be reached.

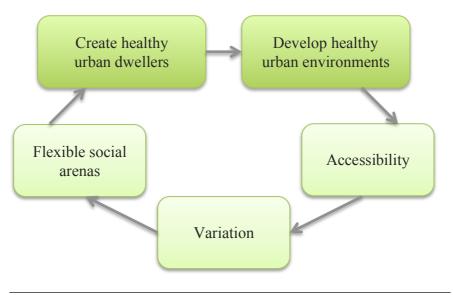


Figure 2: Creating health for urban dwellers

Taken together it may therefore be argued that these aspects of urban life are connected. The present study shows that to create health for urban dwellers, developing healthy urban environments plays a crucial role. Based on the informants' statements it can therefore be argued that Figure 2 outlines what creates health in an urban environment. To create healthy urban dwellers, one important measure is to develop healthy urban environments that are accessible with a well-adapted transportation system. This might lead to a variation in activity opportunities, services and diversity in people. If there is a variation in the physical design as well, this might create a wide range of flexible social arenas, which the informants highlighted as important for health.

Limitations

This study consists of eight interviews, which in some cases can be considered to be a relatively small sample. However, after the eighth interview, the data was assessed to be sufficient in terms of saturation regarding the topic of this article. On the other hand, it could have been relevant to include older and younger informants. This might have led to a greater variety of answers, and might have provided a fuller picture of how the urban environment influences health and well-being through the life course. Furthermore, Malterud (2013) recommends that more than one researcher should take part in the analysis process since different people might find different parts of the dataset interesting based on their theoretical understanding. This article is, however, a part of an individual master's thesis, which entails that the author alone conducts the analysis. Consequently, the author's theoretical understanding and experiences might have affected the results. The author has therefore made an effort to discount the preconceptions by rereading the interviews several times and contemplating the chosen categories carefully.

Conclusion

This study has given insight into what Norwegian urban dwellers believe to be health creating factors in the urban environment and how this is related to the actual design of a city. The informants' notion of what creates health and their suggestions of how to develop healthy urban environments is argued to elaborate on how to reach the WHO-HCP goal of creating environments that foster positive health behaviour. The aspects the informants highlight can furthermore be interpreted as important GRRs and it is therefore argued that strengthening these aspects of urban life might increase health for urban dwellers. This means making the urban environment more accessible in terms of developing public and active transportation systems. This might be the key to utilizing the variety of opportunities a city can offer. Furthermore, this can lead to a wide range of flexible social arenas, which can foster both physical and social activities.

References

- Antonovsky, A. (2013). Helsens mysterium. Oslo: Gyldendal Akademisk.
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design*. California: SAGE Publications, Inc.
- Daumann, F., Heinze, R., Römmelt, B. & Wunderlich, A. (2014). An Active City Approach for Urban Development. *Journal of Urban Health*, *92*(2), 217-299.
- Dooris, M. (1999). Healthy Cities and Local Agenda 21: the UK experience challenges for the new millennium. *Health Promotion International*, *14*(4), 365-375.
- Kamruzzaman Md., Washington, S., Baker, D., Brown, W, Giles-Corti, B. & Turrell, G. (2016). Built environment impacts on walking for transport in Brisbane, Australia. *Transportation*, 43(1), 53-77.
- Kvale, S. & Brinkmann, S. (2009). *Interviews Learning the Craft of Qualitative Research Interviewing* (2.edt.). California: SAGE Publications, Inc.
- Lafond, L. J. (Red.). (2015). *National healthy cities networks in the WHO European Region Promoting health and well-being throughout Europe*. Sourced from: http://www.euro.who.int/en/publications/abstracts/national-healthy-cities-networks-in-the-who-european-region.-promoting-health-and-well-being-throughout-europe-2015
- Lee, A. C. K. & Maheswaran (2010). The Health benefits of urban green spaces: a review of the evidence. *Journal of Public Health*, *33*(2), 212-222.
- Leyden, K. M. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *Amerivan Journal of Public Health*, *93*(9), 1546-1551.
- Lindström, B. & Eriksson, M. (2010). *The Hitchhiker's guide to salutogenesis*. Folkhälsan Research Report.

- Lindström, B. & Eriksson, M. (2015). *Hikernes Guide til Salutogenesen Helsefremmende arbeid i et salutogent perspektiv*. Oslo: Gyldendal Akedemisk.
- Macfarlane, R. G., Wood, L. P. & Campbell, M. E. (2015). Healthy Toronto by Design: Promoting a healthier built environment. *Canadian Journal of Public Health*, 106(1), 5-8.
- Malterud, K. (2012). Systematic text condensation: A strategy for qualitative analysis. *Scandinavian Journal of Public Health*, 40(8), 795-805.
- Malterud, K. (2013). *Kvalitative metoder i medisinsk forskning* (3. utg.). Oslo: Universitetsforlaget.
- Poulsen, M. N., Hulland., K. R. S., Gulas, C. A., Pham, H., Dalglish, S. L., Wilkinson, R. K.
 & Winch, P. J. (2014). Growing an Urban Oasis: A Qualitative Study of the Perceived benefits of Community Gardening in Baltimore, Maryland. *Culture, Agriculture, Food and Environment*, (36)2, 69–82.
- Renalds, A., Smith, T. H. & Hale, P. J. (2010). A Systematic Review of Built Environment and Health. *Family & Community Health*, *33*(1), 66-78.
- Reyer, M., Fina, S., Siedentop, S. & Schlicht, W. (2014). Walkability is Only Part of the Story: Walking for Transportation in Stuttgart, Germany. *International Journal of Environmental Research and Public Helath*, 11(6), 5849-5865.
- Stigsdotter, U. K., Ekholm, O., Schipperijn, J., Toftager, M., Kamper-Jørgensen, F. & Randrup, T. B. (2010). Health promoting outdoor environments Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey. *Scandinavian Journal of Public Health*, 38(4), 411-417.

Vogt, S., Mielck, A., Berger, U., Grill, E., Peters, A., Döring, A., Holle, R., Strobl, R., Zimmermann, A-K., Linkohr, B., Wolf, K., Kneißl, K. & Maier, W. (2015). Neighborhood and healthy aging in a German city: distances to green space and senior service centers and their associations with physical constitution, disability, and health-related quality of life. *European Journal of Aging*, *12*(4), 273-283.

World Health Organization. (1986). *Ottawa Charter for Health Promotion*. Sourced September 01, 2015 from: http://www.euro.who.int/ data/assets/pdf file/0004/129532/Ottawa Charter.pdf

World Health Organization. (1998). Health Promotion Glossary. Geneva: WHO.

World Health Organization. (undated). *What is a healthy city?* Sourced October 10, 2015 from:

http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities/who-european-healthy-cities-network/what-is-a-healthy-city

Summing up the thesis

As a whole, this master's thesis contributes with new insight into how the physical design of a city may impact urban dwellers' health and well-being and what health promotion in the urban environment can entail. As the first article shows, different features in the urban environment can create health and well-being, and there is considerable research investigating the relationship between health and the environment. However, what makes this article unique is the illustration of how to assess and interpret a specific urban environment from a health promoting angle.

The second article provides a more comprehensive description of health creating factors in the urban environment and its connection to the physical design, than previous studies have done. Based on the assumptions made in the first article, it is however possible that the results are valid especially for a Norwegian context. Even so, it can be argued that this thesis is useful for people working with urban planning, as it together with the illustration of how to assess measures in the urban environment, also provide a theoretical context and a possible explanation for why specific factors are important health creating determinants.

However, more research is needed. One start could be, based on what is revealed in this present thesis, that exploring other segments of the urban population might be relevant to get a fuller picture of how the environments should be designed. For instance exploring the experiences and thoughts of other age groups, minority groups and people with different needs and different disabilities. How to ensure community participation; effective and sustainable ways to integrate local people in the processes of developing healthy urban environments might also be an important area to investigate.

Appendix A

Intervjuguide

- Kort presentasjon av prosjektet
- Introduksjon av informanten
 - o Navn
 - o Alder
 - o Interesser

Tema 1: Begrepet helse

- Hva legger du i begrepet helse/Hva tenker du når du hører ordet helse?
 - O Noe du har, får eller kan oppnå?
 - o Hva skaper god helse?
 - o Hvordan tror du helsen påvirkes av omgivelsene våre?

Tema 2: Omgivelsenes påvirkning

- Hvordan påvirker omgivelsene det du gjør og hvordan du har det?
 - o Trygghet
 - o Bruk av aktiv transport
 - o Sosial og fysisk aktivitet
 - Hva skal til for at du vil bruke nærområde til sosial og fysisk aktivitet?

Tema 3: Utforming

- Hva er viktig der du bor for at du skal kunne ha det bra eller ha god helse?
- Hvis du hadde muligheten til å bygge en helt ny by eller bydel, hvordan ville den sett ut?
 - o Uteområdene
 - o Boliger
 - o Transportmuligheter
 - o Beliggenhet

Appendix B

Norsk samfunnsvitenskapelig datatjeneste AS

NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Geir Arild Espnes Institutt for sosialt arbeid og helsevitenskap ISH NTNU

7491 TRONDHEIM

Vår dato: 24.02.2016 Vår ref: 46866 / 3 / AMS Deres dato: Deres ref:

NSD

Harald Hårfagres gate 29 N-5007 Bergen Norway Tel: +47-55 58 21 17 Fax: +47-55 58 96 50 nsd@nsd.uib.no www.nsd.uib.no Org.nr. 985 321 884

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 21.01.2016. Meldingen gjelder prosjektet:

46866 Helsefremmende bydeler

Behandlingsansvarlig NTNU, ved institusjonens øverste leder

Daglig ansvarlig Geir Arild Espnes

Student Ingvill Sørensen Drevland

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/meldeplikt/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 15.05.2016, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Anne-Mette Somby

Kontaktperson: Belinda Gloppen Helle tlf: 55 58 28 74

Vedlegg: Prosjektvurdering

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Avdelingskontorer / District Offices:

OSLO: NSD. Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel: +47-22 85 52 11. nsd@uio no

TRONDHEIM: NSD. Norges teknisk-naturvitenskapelige universitet, 7491 Trondheim. Tel: +47-73 59 19 07. kyrre svarva@svt.ntnu.no

TROMSØ: NSD. SVF, Universitetet i Tromsø, 9037 Tromsø. Tel: +47-77 64 43 36. nsdmaa@sv.uit.no

Personvernombudet for forskning



Prosjektvurdering - Kommentar

Prosjektnr: 46866

INFORMASJON OG SAMTYKKE

Ifølge prosjektmeldingen skal utvalget informeres muntlig om prosjektet og samtykke til deltakelse. Informasjonsskrivet lagt ved meldeskjemaet er godt utformet og muntlig informasjon skal inneholde de samme opplysningene til utvalget.

INFORMASJONSSIKKERHET

Personvernombudet legger til grunn at dere behandler alle data og personopplysninger i tråd med NTNU sine retningslinjer for innsamling og videre behandling av forskningsdata og personopplysninger.

PROSJEKTSLUTT OG ANONYMISERING

I meldeskjemaet og informasjonsskrivet har dere informert om at forventet prosjektslutt er 15.05.2016. Ifølge prosjektmeldingen skal dere da anonymisere innsamlede opplysninger. Anonymisering innebærer at dere bearbeider datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjør dere ved å slette direkte personopplysninger, slette eller omskrive indirekte personopplysninger og slette digitale lydopptak.

Appendix C

Forespørsel om deltakelse i forskningsprosjektet "Helsefremmende byer"

Bakgrunn og formål

I Ottawacharteret for helsefremming trekker Verdens helseorganisasjon (1986) fram at helse skapes utenfor helsesektoren, der mennesker bor, arbeider, leker og elsker. Et av målene i Ottawacharteret er å gjøre mennesker i stand til å ta gode valg og leve gode liv. I forlengelsen av dette kan blant annet menneskers fysiske og sosiale omgivelser, nærmere bestemt nærmiljø og bydeler være sentrale arenaer for helsefremming. Trondheimserklæringen (2014) slår fast at for å oppnå gode levekår må det investeres i universell velferd som for eksempel bolig og oppvekstmiljøer. Det blir også løftet fram at for å fremme psykisk helse og trivsel i hverdagen, må det også stimuleres til gode sosiale nettverk, deltakelse og sosial støtte i hverdagslivet. Videre har det de siste tiårene vært stor tilstrømning til byene og omlag 80% av Norges befolkningen bor i dag i urbane strøk (Zahl, 2014).

Med dette som bakgrunn er formålet med dette prosjektet å utforske *hvordan byboere mener omgivelsene i byer og bydeler bør utformes for å skape helse og velvære*. Deltakelse i denne studiene er en del av min masteroppgave, som gjennomføres ved institutt for sosialt arbeid og helsevitenskap på NTNU.

Hva innebærer deltakelse i studien?

Det skal gjennomføres dybdeintervjuer på omtrent en time. Jeg vil lede samtalen ved å introdusere forskjellige temaer/spørsmål som jeg ønsker å høre dine tanker om. Det vil være temaer som utforming av offentlige steder, hva en by eller bydel bør inneholde, samt hvordan omgivelsene dine påvirker deg og din helse. Intervjuene vil tas opp med båndopptaker slik at den videre analysen kan behandles på best mulig måte. For å kunne avtale tidspunkt og møtested vil jeg ha behov for ditt telefonnummer eller din epostadresse.

Hva skjer med informasjonen om deg?

Alle personopplysninger vil bli behandlet konfidensielt og lydopptaket vil kun være tilgjengelig for meg og min veileder. Alle deltakere vil bli anonymisert og vil ikke kunne gjenkjennes av andre i den ferdige oppgaven. Prosjektet skal etter planen avsluttes i mai/juni 2016. Opplysningene om deg vil da oppbevares på en kryptert minnepenn innelåst på NTNU for så og slettes etter at oppgaven er vurdert.

Frivillig deltakelse

Dersom du har spørsmål til studien, ta kontakt med Ingvill Drevland, tlf: 99263060, epost: ingvilldrevland@msn.com eller Geir Arild Espnes, epost: geir.arild.espnes@svt.ntnu.no. Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert. Samtykke til studien innhentes muntlig ved gjennomføringen av intervjuet.

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

Mvh, Ingvill S. Drevland Appendix D

Inform	Magning unit	Cubarouna/Cardanata	Coto
Informant	Meaning unit	Subgroups/Condensates	Category
Lisa	Tilgang på natur eller grønne lunger gjør det lettere å gå ut i det rommet eller at det er lett å komme seg dit med buss eller sti eller sykkel.		
Jan	Kort vei til marka, kort vei til sjøen, kort vei til fjellet, det syns jeg er veldig bra!		
Elise	Jeg tror at hvis du har parker og marker og så videre i nærheten, så er det fortere at man bruker det og det tror jeg er bare positivt for alle sin helse å komme seg ut, treffe andre, frisk luft.		
Thomas	På vinteren er det skiløyper og at det er tilgang der med kollektivtrafikk og at det er veldig lite som skal til for å komme seg ut av byen og ut i naturen, det tror jeg er veldig positivt.	Many of the informants highlight access to nature and	
Eli	Jeg syns jo at dette er en fantastisk by å bo i, i forbindelse med at vi har så mange muligheter, det fjell og natur rundt oss på alle kanter. Det går jo litt på muligheter, selvfølgelig, altså hvis du er nødt til å sette deg i bilen og kjøre mange mil. Å gå på ski er ikke det enkleste i verden hvis du må kjøre en fem-seks mil først.	green areas as important. They describe that the possibility of getting out of the city as a positive factor, but also that there is parks or green areas nearby where they live.	
Hanne	Ja, det må være der folk bor med jevne mellomrom på en måte, det tror jeg. Hvis ikke blir det jo et prosjekt å komme seg dit, hvis du må sykle eller kjøre eller, da blir det sånn at, "nei, da gjør vi det i helga, for da har vi bedre tid", sant. Så er det like i nærheten av der en bor, så er det mye større sjanse for at man drar dit eller det at en på en måte kan gå gjennom et området på vei til jobb eller fra jobb, da får man heller ikke den der følelsen av at alt er nedbygd.		Accessibility
Lisa	Det er jo det med arbeid da, at det ja, at det er skole, utdanning, arbeid at det også finnes i nærområdet, at det er muligheter, at man ikke må til byen eller videre for akkurat det, men at det også er muligheter for det i nærområdene.		
Jan	Det er små fine byer hvor har du alt, du har de butikkene du trenger, må du på polet så ha du det, må du til legen, så har du det, skal du til fysioterapeut, så har du det, du har det innenfor en kort liten radius.	It seems to be important for some of the informants to have basic services close to where they live. This makes it easy to	
Siri	Jeg tror på en måte at det å ha nærhet til ting, at en har alt utenfor døren, og det går jo på variasjon igjen da, men det tror jeg er viktig.	get to the things they use often.	
Hanne	Nærmiljøet er viktig, at det er utformet slik at det skaper trivsel da, at man ikke må sette seg i bilen og kjøre veldig langt av gåre for å finne det mest grunnleggende i hvert fall.		
Ola	Da er det jo litt sånn at det blir litt tiltak kanskje, men altså, jeg tenker at hvis en er interessert i noe, så bruker en jo tid på å komme seg til ting, men hadde det vært en på en måte en idrettshall rett i nærheten av der jeg bodde, så hadde jeg jo sikkert benyttet den mer, og et treningssenter for eksempel, for det er litt langt til sånne ting fra der jeg bor da, jeg må liksom transportere meg dit for å kunne benytte det da.	Many of the informants describes that it is inconvenient to get certain places around their city. However, it seems like how well-adapted the transportation system is, might influence how often they take	
Elise	Vi brukte jo marka før også, men nå i vinter har vi brukt marka mye mer enn hva vi gjorde sist vinter for eksempel. For der vi bor nå er den	the trouble to go.	

	mye mer tilgjengelig.	-	
	Nå ser jeg en kamp i året, og det er mot Larvik		
Tau			
	og det er fordi jeg kjenner mange folk i Larvik,		
	det er det tiltaket mitt, off, da må jeg kjøre dit,		
Jan	også kø der også parkering, også kø hjem, off,		
	nei, da orker jeg ikke. Sånn tenker jeg. Den		
	Larvikkampen går greit, for da treffer jeg så		
	mye kjent folk.		
	At det er tungvindt å komme seg steder, er helt		
	klart en faktor som gjør at jeg gjør noen ting		
	mindre kanskje. Fordi da blir ting litt mindre		
	enkelt og tar litt mer tid og jeg tror det er en		
	viktig faktor. Terskelen blir litt høyere, men det		
	er ikke sånn at jeg spesifikt kan si at den gangen		
	gjorde jeg ikke det fordi det og det, men at det		
	samler seg opp på en måte litt sånn umerkelig,		
Thomas	men jeg tror at selv om transporten er godt		
Thomas	organisert og hele den nye byen på en måte blir		
	nærme så burde man ha litt spredte tilbud og	"Well, proximity is relative. If	
	fasiliteter, og ikke bare samle alt på et sted fordi	you develop and adapt the	
	det er lett å komme seg dit.	transportation system for active	
	"Nå er jo nærhet relativt, hvis man	and public transportation, the	
	tilrettelegger veldig med sykkel og	whole city will feel nearby	
	kollektivtrafikk, så blir hele byen plutselig	because you are quite free to	
	veldig nær fordi du er så pass fri til å bevege	move around wherever,	
	deg dit, hvor som helst, når som helst."	whenever."	
	Jeg tror det er viktig at bydelene er logisk koblet		
	til sentrum, at det er lett å komme seg til byen	That there is a logical	
Lisa	ved å sykle eller gå. Tilrettelagte sykkel- og	connection between the city-	
	gangstier som er trygge og som er tilpasset både	parts and the city center is also	
	for små og store syklister er derfor veldig viktig.	highlighted. Furthermore, that	
	Tilrettelegge det transportrelaterte slik at folk	it is easy to get there with	
	kunne komme seg rundt uten bil er viktig,	active transportation. For	
	kanskje kunne kjørt inn til byen og sette fra seg	instance is safe and well-	
	byen og bevare byen eller bydelen bilfri med	adapted bike and walking trails	
	sykkelveier og tilrettelagt for fotgjengere og	mentioned as important. One of	
	kollektivtrafikk, at det er det viktigste innen	the informants argues that this	
Thomas	samferdsel da, at transport skal foregå på den	is might make the city more	
	måten da. Det er viktig for at byen eller bydelen	open and accesible. The	
	skal oppleves tilgengelig og åpen og at folk kan	informants also seem to think	
	gå, både med tanke på støy og forurensing og at	that if the active transportation	
	det øker kvaliteten på opplevelsen av byen og	system is well developed	
	bydelen for de som går og sykler og samferdes	people will use it more, which	
	der, og for de som ellers ville kjørt bil.	might be good for both the	
	I en by da, hvis det er litt størrelse på den, så	environment and the level of	
	tenker jeg at det må være litt sånn tilrettelagt for	activity.	
	at det skal, eller at man for eksempel kan sykle	-	
	trygt dit man skal, at man kan gå trygt dit man		
	skal, i forhold til gangveier og sykkelveier og at		
Hanne	det er liksom logiske koblinger mellom ting, ser		
	jo av og til sykkelveier som stopper blindt		
	nærmest og du må fortsatte i veibanen for		
	eksempel, eller ja, litt sånn logikk der, også		
	gjerne et godt kollektivtilbud fordi alt det her er		
	jo med å skape bedre luft, og det er jo viktig for		
	å skape god helse i en by, sant, at man får ned		
	luftforurensingen, tenker jeg.		
	Jeg sykler og går ofte til jobb, da er det i hvert		
Ola	fall tilrettelagt med sykkelvei en stor del av		
	veien, så det går egentlig ganske greit å sykle.		
	1		

	Jeg kommer meg fra, men det hadde jo vært	
	veldig godt hvis det var egen sykkelvei helt der	
	jeg skulle, for nå må jeg jo krysse litt og styre	
	på litt. Jeg tror hadde vært lettere hvis det var en	
	sånn sykkelvei da, eller et nettverk da av sånne	
	sykkelveier, at du kan sykle til ting, at det er	
	relativt lett da, selv om det er dårlig vær og sånt,	
	så er det i hvert fall en plass der det er formålet	
	da, at du ikke må på en måte presse deg inn der	
	enten folk går eller kjører.	
	Nå ser du jo all den utbyggingen som går på	
	gang- og sykkelveier, det har jo bidratt veldig til	
T	sykkelveksten, jeg tror at hvis det ikke hadde	
Jan	vært den satsingen på gang- og sykkelveier så	
	hadde de liksom ikke folk vært så ivrige på å	
	sykle til jo. Jeg tror det er mer tiltak å sette seg	
	på sykkelen hvis det ikke er lagt til rette.	((7.0
Eli	"Hvis man sykler og går i hverdagen, får vi vel	"If we use active transportation
1-11	kanskje den bevegelsen vi strengt tatt må."	in our everyday life, we might
	I forhold til menneskers fysiske aktivitet og	get the physical activity that we
	trivsel, der de bor da, i det området, så tror jeg	need".
	nok at det er viktig å legge til rette for å bruke	
Siri	minst mulig tid på transport og på en måte legge	
	mest og best mulig til rette for at en kan gå og	
	sykle og ha de funksjonene som en trenger i	
	dagliglivet.	
	Det er jo veldig greit hvis det går en buss, at en	
	slipper å bytte buss for eksempel, det er jo på en	
Eli	måte punkt en og at bussen stopper så pass nært	
	at det ikke er en stor utfordring å komme seg fra	
	busstoppen til der en skal.	
	Jeg tror det er vært viktig og at det er lett å ta	
	kollektivtransport, om det er buss eller bane	
Ola	eller hva det er, men i hvert fall noe som er	
O14	effektivt og som er vits i å bruke, som er	The public transportation
	billigere og går fort.	system is also mentioned as
	<u> </u>	important when it comes to
G * .*	Hvis det liksom er godt nok kollektivtilbud,	making people not car
Siri	godt nok utbygd, så bruker jo folk det. Altså,	dependent. Logical bus routes
	hvis det er lagt til rette for det.	and reasonable prices seem to
	Hvis du skal til byen for å gjøre en aktivitet der,	be good measures to get people
	er det veldig fint å kunne ta buss, da slipper man	to take the bus.
Hanne	jo å tenke på at man skal finne parkering og	to take the out.
HAIHE	sånne ting, ikke sant, men det er uinteressant å	
	ta bussen når man ja, det er både upraktisk og	
	dyrt liksom.	
	Jeg tenker hele tiden at det er fint at jeg slipper	
Eu.	å bruke bil. Vi prøver å unngå å bruke bil så	
Elise	mye som jeg kan. Tilgjengelighet til buss og	
	kollektivtransport er også viktig da.	
	Konekavaransport of også viktig då.	

Hivis husene for eksempel har forskjellige prisklasser vil jo det gjøre at et større spekter av mennesker kan bosette seg der. Du har jo forskjellige priser og standarder, størrelser, at husene og leitlighetene er tilpasset forskjellige behov, forskjellig økonomi, forskjellig bakgrunn. Lisa Lisa	Informant	Meaning unit	Subgroup/Condensate	Category
Jeg tenker det er viktig å tenke på at det skal være mulig å et sted både småbarn og alle aldersgrupper helt opp til eldre da, så måtte ha ivaretatt alles behov på ulike vis. Sånn rent boligmessig, måtte en ha bygå både litt sånne enkel kelitjeheter, eller enkle var fæll ord, små leiligheter for kanskje studenter eller enslige eller ja, og litt sånne tilrettelagte leligheter for eldre. Jeg hadde også villet hatt litt sånn type eneboliger og rekkehus og sånn at man får litt variasjon i både type hus, men også at man ivaretar lære behov. Hvordan det bygeges, er jo sikkert litt avhengig av hvilket miljø man vil ha, hvem du vil skal bo der på en måte, men litt for alle, både pris og alder, sånn at du får litt mer sånn sammensatte samfunn og ikke bare ei gruppe. For helsen til folk tror jeg det er bra at det er en mix av folk, jeg tror ikke det er bra at det kun er gamle folk liksom, det har jo noe med impulsene en får inn da, at en har mulighet til å se at det finnes andre i verden. Det påvirker jo også forståelsen av andre mennesker da, hvordan en ser på andre kanskje. Hvis det er en mix av gamle og unge, da har du litt sånn at det skjer ting og ting går framover på en måte, samtidig som du har de stabile, trygge folka da, det tror jeg gir god helse blant folk. Hvis du blander sammen forskjellige typer bolig, da vil det jo også være forskjellige typer bolig, da vil det jo også være forskjellige intnektsgrupper og sånt blandet, så jeg tror det er bedre for barn i vokse opp i et miljø som beslår av mange. Hvis man vil ha litt variasjon på hvem som bor der, så tor jeg nok det ville bli fint med litt mindre boliger kanskje. En by kan jo også tilby et kulturelt mangfold (mennesker). Det er ikke til å stikke under en stol at verden består av mange. Det er viktig tat det i alle fall er mulighet for forskjellige typer folk å bosette seg der, et veldig dårle eksemple er jo slike steder de bygger opp bare veldig dyer je olisike steder de bygger opp bare veldig dyer je olisike steder de bygger opp bare veldig dyer je o	Lisa	prisklasser vil jo det gjøre at et større spekter av mennesker kan bosette seg der. Du har jo forskjellige priser og standarder, størrelser, at husene og leilighetene er tilpasset forskjellige behov, forskjellig økonomi, forskjellig bakgrunn. Det burde ikke vært noe problem at alle lag går i lag, uansett hvor man går hen, for uansett så har man jo så mye felles ønsker og behov og likheter som mennesker, at ja, nei, selv om at man har ulike økonomiske forutsetninger eller ulik kultur. Så		
Hvis du blander sammen forskjellige typer bolig, da vil det jo også være forskjellige inntektsgrupper og sånt blandet, så jeg tror det er bedre for barn i vokse opp i et miljø som består av mange typer folk. Unger spesielt trenger å lære seg at folk er forskjellige, det tror jeg er kjempe viktig for at de skal kunne være gode samfunnsborgere senere, de skjønner at verden består av mange. Hvis man vil ha litt variasjon på hvem som bor der, så tror jeg nok det ville bli fint med litt mindre boliger kanskje. En by kan jo også tilby et kulturelt mangfold (mennesker). Det er ikke til å stikke under en stol at verden har blitt mindre, og da må vi lære oss å leve sammen. Det forutsetter at vi tilbringer tid sammen. Det er viktig at det i alle fall er mulighet for forskjellige typer folk å bosette seg der, et veldig dårlig eksempel er jo slike steder de bygger opp bare veldig dyre leiligheter i et området. Da er det		Jeg tenker det er viktig å tenke på at det skal være mulig å et sted både småbarn og alle aldersgrupper helt opp til eldre da, så måtte ha ivaretatt alles behov på ulike vis. Sånn rent boligmessig, måtte en ha bygd både litt sånne enkle leiligheter, eller enkle var feil ord, små leiligheter for kanskje studenter eller enslige eller ja, og litt sånne tilrettelagte leiligheter for eldre. Jeg hadde også villet hatt litt sånn type eneboliger og rekkehus og sånn at man får litt variasjon i både type hus, men også at man ivaretar flere behov. Hvordan det bygges, er jo sikkert litt avhengig av hvilket miljø man vil ha, hvem du vil skal bo der på en måte, men litt for alle, både pris og alder, sånn at du får litt mer sånn sammensatte samfunn og ikke bare ei gruppe. For helsen til folk tror jeg det er bra at det er en mix av folk, jeg tror ikke det er bra at det kun er gamle folk liksom, det har jo noe med impulsene en får inn da, at en har mulighet til å se at det finnes andre i verden. Det påvirker jo også forståelsen av andre mennesker da, hvordan en ser på andre kanskje. Hvis det er en mix av gamle og unge, da har du litt sånn at det skjer ting og ting går framover på en måte, samtidig som du har de stabile, trygge folka	be important for the informants. Not all the informants relate this directly to health; it is mostly mentioned in relation to the importance of having diversity in a city-part or a neighbourhood. They highlight that different sizes, prize ranges, level of universal design might make possible for different social and age-groups to settle down. In relation to	Variation
så tror jeg nok det ville bli fint med litt mindre boliger kanskje. En by kan jo også tilby et kulturelt mangfold (mennesker). Det er ikke til å stikke under en stol at verden har blitt mindre, og da må vi lære oss å leve sammen. Det forutsetter at vi tilbringer tid sammen. Det er viktig at det i alle fall er mulighet for forskjellige typer folk å bosette seg der, et veldig dårlig eksempel er jo slike steder de bygger opp bare veldig dyre leiligheter i et området. Da er det	Eli	vil det jo også være forskjellige inntektsgrupper og sånt blandet, så jeg tror det er bedre for barn i vokse opp i et miljø som består av mange typer folk. Unger spesielt trenger å lære seg at folk er forskjellige, det tror jeg er kjempe viktig for at de skal kunne være gode samfunnsborgere senere, de skjønner at verden består av mange.	large apartment complexes	
Det er viktig at det i alle fall er mulighet for forskjellige typer folk å bosette seg der, et veldig dårlig eksempel er jo slike steder de bygger opp bare veldig dyre leiligheter i et området. Da er det	Elise	så tror jeg nok det ville bli fint med litt mindre boliger kanskje. En by kan jo også tilby et kulturelt mangfold (mennesker). Det er ikke til å stikke under en stol at verden har blitt mindre, og da må vi lære oss å leve sammen. Det forutsetter at vi		
er kanskje bare pensjonister som kan bo der. Thomas Ideelt sett burde man ha mikset forskjellige		Det er viktig at det i alle fall er mulighet for forskjellige typer folk å bosette seg der, et veldig dårlig eksempel er jo slike steder de bygger opp bare veldig dyre leiligheter i et området. Da er det er kanskje bare pensjonister som kan bo der.		

		Г
	mennesker fra forskjellige sosioøkonomiske lag	
	eller egentlig så burde det ikke være så forskjellige	
	sosioøkonomiske lag, men når det eksisterer, så	
	burde man ha ikke så mye segregering.	
	Boligmessig burde og kunne man da tilrettelegge	
	for større grad av miksing holdt jeg på å si.	
	Jeg tror vi alle sammen ikke er flinke nok til å ta	
	kontakt jeg og prate og si hei og ta vare på	
	hverandre sånn, det tror ikke jeg, alle sammen er	
Jan	for dårlige. Hvis naboen din blir alvorlig syk, så	
	skygger du unna istedenfor å ta kontakt og prate,	
	det samme hvis det flytter inn en familie fra Bosnia,	
	så du trekker deg litt unna, ikke sant. Hvertfall hvis	
	du får sånne komplekser eller maurtuer.	
	Jeg tror det er mange som opplever at de bor veldig	
	isolert, og at man kanskje burde tenke på	
	forskjellige måter for mer kollektive boløsninger,	
	av varierende grad, det er ikke sånn at alle trenger å	
	bo i samme leilighet på en måte, men at man har	
Thomas	sånne bofellesskap hvor man har hvert sitt rom eller	
1 Homas	leilighet også har en del fellesarealer. Folk har	
	forskjellige preferanser tror jeg, det er noen som	
	kanskje aldri kunne tenke seg å bo i sånne	
	kollektive ting, også er det folk som kunne tenke	Various degrees of collective
	seg å gjøre det til en viss grad, men litte sånn	living solutions were
	varierende grad av kollektivitet på en måte	mentioned by two of the
	Hvis du lever i isolasjon da, som en kan gjøre i en	informants. This might be
	by, som egentlig er lett å gjøre i en by, for folk	positive for some groups in
	trenger egentlig ikke kjenne deg hvis de ikke må på	relation to isolation. This was
	en måte, så kan det lage dårlig helse for folk.	related the social aspect of
	Eneboliger er jo mer sånn, en magnet for å sitte	health, the importance of not
	inne for seg selv, for du har så god plass, så du	being isolated.
Ola	trenger ikke gå ut, men hvis du bor i en	
	flermannsbolig, eller rekkehus eller tomannsbolig	
	eller et eller annet sånn, så gjør jo det at du har mer,	
	kanskje du bor tettere med folk da, samtidig som	
	det kanskje er et uteområdet rundt som gjør at du	
	kan være i og treffe andre da. Ja, et felles området	
	på en måte.	
	Variasjon i hvordan det ser ut, at du får det grønne,	
	trær og litt sånne levende sanselige ting i forhold til	
	litt sånn dødt materialet som bygg gjerne er da. Så	
	tenker jeg også litt sånn i forhold til hus og sånt, i	
	forhold til bygninger og sånt, bruke litt sånt ulike	
	typer materialer, ulik utforming og sånt, at ikke alt	
	blir så homogent og likt da, men at det likevel er en	
	overordnet tankegang eller føringer.	
	"Jeg tenker kanskje det jeg syns er viktigst når en	
	skal planlegge en bydel hvor jeg skjønner at det vil	
Hanne	være mange interesser å ivareta er at man sørger	
Hanne	for at det er luft og rom og lys, at det er viktige	"I think well-being should get
	kvaliteter som man må ivareta når man planlegger	top-priority when you're
		planning a city, that might
	bygg og bygninger og størrelser og plassering i forhold til hvergader og sånt. Leg tror det er viktig	create more vibrant
	forhold til hverandre og sånt. Jeg tror det er viktig	
	å få litt sånn levende bydeler, sånn at du tenker at	neighbourhoods. If people are
	du setter trivselsfaktoren litt sånn i høysetet fordi	going to want to spend time in
	eller så får litt sånne type drabantby. Folk må	their neighbourhoods or city-
	trives, skal folk virkelig like seg der og oppholder	parts, people have to really
	seg der da, at det ikke bare blir at sånt sted der folk	enjoy their environment. It
	sover og så drar de andre plasser for å leve eller	should be designed in a way

	jobbe eller. Det må være utforming slik at folk vil	that people want to do more	
	være i området sitt når de er ferdige på jobb også,	than just sleep".	
	og i helgene at de bruker området sitt da, ja, lever		
	der og ikke bare sover der." Jeg tror kanskje det aller viktigste er variasjon, at		
	en ikke får på en måte rene bydeler som kun er	Some of the informants refer to	
	bolig eller kun er sentrum, at en har litt av hvert	variation in the physical	
	som genererer aktivitet i løpet av hele døgnet da	design. This means that in a	
	sånn at bydelen ikke blir dø på visste tider av	city-part should consisit of	
	døgnet, det tror jeg er veldig viktig. Utformingen	different thing, for instance not	
	går jo også på trivsel rett og slett, så gjerne litt	only houses. It is important to	
	farge, ja, variasjon i farger, variasjon i materiale og	have some things that are vivid	
	i gateløp og sånn gatebredde, bare sånn at ting ikke	and sensuous. This is linked to	
Siri	blir så flatt og likt. For det er jo nettopp det en by	the design of buldings and the	
	kan tilby, sant, mye inntrykk. Og det tror jeg er litt	outside environment, and in	
	sånn viktig å ta vare på i utformingen da, og i	realtion to this the importance	
	aktivitet for den del. Vi har de siste 70 årene bygget	of not centralise all the cafés or	
	byer for biler, så jeg tror det er på tide å bygge byer	shops in one place is also	
	for mennesker igjen, og da ha, som jeg sa tidligere,	mentioned. This seems to trace	
	at fasader på bakkeplan er initierende, at de er i	back to the notion of creating	
	menneskelig skala, Det må være noe der som gjør	vibrant city-parts and	
	det interessant å gå rundt da, det tror jeg er veldig	neighbourhoods, which seems	
	viktig.	to be related to well-being.	
	Også sånne cafeer og steder hvor folk kunne spise		
	eller drikke og ha den type ting litt sånn spredt		
	utover, sånn at man har liv i, at man ikke bare		
	konsentrerer alt type uteliv og servering og sånn på		
	småsteder, men at man har det litt sånn spredt utover i hver bydel og også kanskje spredt i		
	bydelen, at hele, eller hvertfall store deler av byen		
	og bydelen er levende og ikke bare at, man må jo		
	selvsagt til en viss, man kan jo ikke ha en cafe på		
Thomas	hvert hjørne på en måte, det må også være litt		
	spredt på en måte med at her er det folk som bor og		
	her er det folk som har cafeer og sånt, men man		
	burde forsøke å ha det litt spredt.		
	Man bør fortsatt burde prøve å ivareta levende		
	bydeler og gjerne med litt sånn forskjellige		
	karakteristikker og egenart på de forskjellige		
	bydelene. Men trenger jo ikke at hele byen ser lik ut		
	på en måte, man kan gå inn for å ha forskjellige		
	bydeler, det hadde vært spennende.		
	At bydelen kan tilby arrangementer eller		
	forskjellige kurs eller hva det skulle være. Trimkurs	The informants also mention	
	i parken for alle gratis, hvor folk kan møte opp eller	different kinds of activities as a	
	hva slags arrangementer som helst. Jeg tror det er veldig stort rom for sånne ting som er veldig	positive aspect of urban life.	
	uutnyttet og jeg tror det er noe folk ville flokket seg	On the one hand one of them mentions the wide range of	
	til hvis de hadde det tilbudet. Det er litt mangle på	leisure activities found in the	
Thomas	kreativitet, for det er veldig mye rom for sånne ting.	city as positive. The traditional	
1	Jeg syns det burde ha litt sånn offentlig regi da,	activities like athletic clubs or	
1	ikke for privat regi, sånn at det oppleves som noe	marching bands might not fit	
	som er for alle. Det kunne vært en sånn	everyone, and the wide range	
	samarbeidsting med VEL-foreninger eller hva som	of opurtunities in a city makes	
	helst, men ikke bare sånn at det er ja, at det er en	it possible for everyone to find	
	grad av offentlighet og tilgjengelig er viktig.	something they are interested	
	Jeg er med to dager i uken på noe som heter Tabata,	in. In relation to this another	
Jan	det er gratis. De trener hver dag da, men jeg er det	woman links this to the	
Jan	to ganger i uken. Syns det er et kjempefint tilbud.	importance of having an	
	Det er gratis og i nærheten. Men det finnes også	activity you can master. On the	

	mange sånne kreative ting i aktivitetssekken, det er	other hand, some of informants
	ikke bare idrett og trim, som i nærmiljøet kan være	mention that they think there is
	med å bygge opp helsefremmende tiltak og som	a lot of unexploited potential in
	gjør at du trives bedre. Noen sånne enkle små tilbud	their neighbourhoods or city-
	som fenger alle sammen også kan du da kanskje	parts when it comes to
	etter hvert bygge ut på det og videre utvikle.	arranging different kinds of
	Hvis det bare blir idrettslag og korps igjen, så er det	activities. It does not have to
	mange som ikke vil følge seg hjemme i de to	be only sports and so on, they
	tingene, så det er klart har du et større område en	highlight that there are a verity
Eli	unge kan agere på, så har en også mulighet til å	of activities that can be
	være med på andre aktiviteter. For mine barn har	arranged if one is creative.
	det vært veldig positivt fordi de har fått en del	
	muligheter der som de ellers ikke hadde fått.	
	Det er noe med å komme til et sted hvor man kan	
Elise	mestre noe. Det er jo ingen som gidder å være med	
	på noe man vet man ikke får til eller ikke mestre.	
	Ulike bolig typer gjerne at du tenker deg et slags	
	livsløp da for hele bydelen, at en kan bo der som	
	nyetablert, at du kan få ditt første barn, du kan	Two of the informants mention
.	oppdra hele familien og du kan på en måte, bli	that if city is well-adapted for
Siri	gammel der da, innenfor samme område. At en har	different kinds of people and
	ulik størrelse på leilighetene og at det i tillegg	activities this might make it
	finnes aktiviteter i den bydelen som gjør det mulig.	possible for people to live a
		whole life in one georaphic
	Ja, og at det finnes møterom for alle, og at det er for	area.
Lisa	alle, for unge, nyetablerte med og uten barn og	

Informant	Meaning Unit	Subgroup/Condensate	Category
Lisa	At det er tilrettelagt da, både for aktivitet og et slags fellesskap, men en slags klubb da, om det er en ungdomsklubb eller noe kirkelig - Ja, at det finnes rom for det da. "Alle trenger noe å gjøre annet enn det vanlige livet da, at ok, men har en trygg jobb, trygg økonomi, men etter alt det, noe som er utenfor seg selv, både som man kan skape utenfor seg selv som igjen vil gi tilbake, det med å være sammen med andre folk, på likt eller forskjellig forutsetninger da, at man skaper noe sammen, man kan skape noe for hverandre, man kan lære av hverandre og generelt være i aktivitet da, være ute, så ja blir man frisk og skaper helse."	"Everybody needs to do something more than regular everyday-stuff. Ok, you have a safe job, a safe economy, I however think is important to have something	
Hanne	Kanskje et sånt kulturhus, et lite lokale som kan være et sånt samlingsområdet da, ikke kulturhus, for det høres litt svært ut, men et sted hvor det kan være ungdomsklubb om kveldene og hvor det kan være dagtilbud for eldre på dagen for eksempel.	besides this. Being together with other people and creating something creates health. Participating in activities together with others creates health". A lot of the informants would like	
Jan	Kunne ha vært i et sånt felles rom eller felles hus. Der det kan være alt fra musikk eller sjakk, det kan være alt. Kanskje en aktivitetspark eller at aktivitetshus, kanskje et aktivitetshus da.	to have some kind of formal arena in their community. This could have positive impact on both the feeling of fellowship in a community, but also the level of	Flexible social arenas
Siri	En plass å samles tror jeg kan være veldig viktig, i alle fall hvis en tenker bydel.	activity in their neighbourhood.	
Ola	Hvis det hadde vært et sted der folk var, og et sånn, si et sånn bydelshus eller samfunnshus, der ting skjedde og det ble arrangert og folk samlet seg, altså nabolaget ditt samlet seg, da hadde du jo blitt kjent med naboene kanskje, at det var på en måte naturlig å møtes og snakkes og lage et fellesskap der folk vet hvem du er og ja, du vet hvem andre er.		
Lisa	Det kan være tilrettelagt en lekeplass, en fotballbane eller hva det skulle være.		
Hanne	Hvis det er en stor park, så kan man jo både sitte alene å slappe av eller at du kan lufte bikkja eller du kan ha med deg en gjeng å spille, eller annen aktivitet for eksempel, men det er viktig for folk som bor der å ha litt sånne friområder til aktivitet og trivsel. Hvis nabolaget har noen grønne områder i seg, så er det lettere at man kan ha ulike aktiviteter som er både sosialt og litt sånn skaper tilhørighet til plassen man bor på.	The importance of out-door space is mentioned by all the informants. They hightlight parks and other green spaces that have different kids of freatures adapted for different kinds of social and physical activities. For example some kind of jungle gym. They stress that the design of these	

Jan	Ikke bare fotballbinger, det trenger det ikke være overalt. Det kan også være skateramper, du kan ha mange andre aktiviteter i sånne byrom. Det kan være aktuelt å gjøre om til sånne nærmiljøtiltak. Jeg tror nok at hvis du lager et opplegg så kan det også være et sosialt samlingspunkt.	places should initiate both physical and social activities.	
Eli	Å lære seg å være ute og gjøre noen sånne småting som kan virke spennende og utfordrende. Det tror jeg er viktig for å få god helse. Det er ikke sikkert hagen er det beste stedet å være. Litt trær, litt ting som det kanskje er naturlig å klarte og leke og litt sånn forskjellige apparater som kan gjøre det morsomt for barn finne på noe utfordrende greier.		
Elise	Å ha et uteområder som innbyr til at man skal være der, at det finnes et samlingssted i nærheten.		
Siri	Ja, vegetasjon er en viktig bit veldig, i tillegg til at du må gjerne ha litt steder å sette deg ned, ikke nødvendigvis en klassisk benk, men på en måte at byrommet er utformet på en måte som gir deg lov å ta en pause da. Litt sånn fasader som spiller på lag med folk rett og slett.		
Ola	Et grønt område på en måte, at det er gressplen og noen trær og som er et fritt området der folk kan være, det er viktig tror jeg. Ja, så er det jo å kanskje ha noe sånn greier i dette uteområdet, noe lekeklatreområder, litt sånn spennende ting på en måte, der det går an å gjøre noe da. At det blir et område som har en funksjon.		
Thomas	"I forbindelse med helsen vår, syns jeg det burde vært tilrettelagt for sosiale møteplasser. Du ser jo at det er en del steder som har lekeplasser eller aktivitetsplasser hvor de har bordtennisbord eller parker eller liksom benker og bord og lekeapparater og små fotballbinger og litt sånne forskjellige treningsapparater som er rundt omkring i parker og har alt mulig sånne ting som tilrettelegger for forskjellige typer aktiviteter. Du kan se de har sånn sjakkbrett ute, det syns jeg er kult i parkene, men også mye mer enn det jeg sier nå, du kan la fantasien løpe løpsk på en måte. At man får lov til å gjøre det man vil og har det som sosiale møteplasser og arena for kontakt. Det er en ting å legge til rette for de aktivitetene folk har lyst å gjøre ute og sammen, at man har et sted å gjøre det."	"Some places you can see for example playgrounds or parks where they have ping pong tables, small football courts or exercise facilities or similar stuff that facilitates different kinds of activity. This makes it possible for people to be together outside and creates an arena for social contact, which I think it is important for people's health".	

Hanne	"Det må finnes noe på en måte, rom hvor folk kan leve og ikke bare jobbe eller bo, man må ha noen uteområder og rekreere seg på og være fysisk og sosial. Det er kjempe viktig." Men det krever jo litt planlegging fra de som sitter med byplanlegging også, ikke sant, man er jo avhengig av at det faktisk settes av plass til, om det er park eller om det er skateboardhall, eller det må legges til rette, slik at det ikke alle ting alle ønsker seg havner et sentralt sted i byen på en måte, jeg tenker når man snakker om å gjøre bygdene levende så handler det like mye for oss i byen om å få bydelene litt levende da	"There have to be something there, a room where people can live their lifte, not only work or live. There has to be out-door spaces where people can be social and physical and recuperate. I think that is very important!"
Siri	Hvis en snakker om sosial kontakt mellom naboer, tror jeg også det er like viktig med litt uformelle møteplasser. De kan finnes mange steder, men i den gaten jeg bor da, det er en kjempe trang, smal liten gate med trehus også, jeg kjenner jo ikke de som bor i nabohusene, men allikevel så hilse vi når vi går forbi hverandre i den gata, og det tror jeg er liksom, det av en eller annen grunn er blitt en sånn uformell møteplass da. Jeg tror nok det har noe med utformingen, at den gata er så trang da, så føles det veldig sånn intimt, det er en slags sånn privat sfære, midt i midtbyen, altså sånn, så jeg tror det å lage litt sånne intime byrom er ganske viktig for den sosiale kontakten. Uten at det blir for trykkende.	Some of the informants also shed light over the fact that more informal arenas for social contact is important. The street where people live might function as an informal arena. The actual design the street is one part might effect how natural it is to greet your neighbours. This
Thomas	Bare det å gå og være ute og se andre mennesker på en måte, ikke bare se biler. Jeg tror det kan ha veldig mange positive konsekvenser som man kanskje ikke ser med en gang. Det er en litt sånn barriere for kontakt å bare sitte i bilen og være fotgjenger. Både fordi det er en sånn ujevn maktfordeling på en måte, at han som sitter i bilen er på en eller annen måte mer makt enn fotgjengeren. Og bare det med det sosiale, at man kan se andre mennesker og oppleve at de er i nærheten på samme plan som deg.	is also connected to what two of the informants said. They specifically mention walking-friendly environments and how this might be positive. "I think one benefit of having a
Ola	"Jeg tror det er en fordel at man kan gå mellom de forskjellige tingene (viser til butikker, skoler etc) i nabolaget. Da treffer du jo folk som også er ute å går, når alle kjører er du jo bare for deg selv hele veien."	walking friendly neighbourhood is that you meet people one your way to for example the supermarket. When everybody is driving, you're always by yourself".

"When samvær og sånn, så tror jeg det har veldig stor påvirkning på deres opplevelse av velferd liksom, og hvor bra de har det, og at det selvsagt er nært knyttet til fysisk helse også, at man liksom, alle disse tingene med selvrealisering, ikke bare det, men liksom at man opplever å ha en meningsfull hverdag og samvær med andre og positive aktiviteter og kan være i aktivitet og komme seg ut på en måte og ikke være isolert, det bidrar sikkert mye til å forhindre depresjoner og alt mulig tror jeg."

"When people experience participation and social gathering, I think it influences the sense of well-being, which of course is related to our physical health as well. However, if you perceive your everyday life as meaningful by having social contact with other people, positive activities that gets you out of your house this might prevent isolation and depressions and so on".