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Sustainable consumption and individual responsibility

A qualitative case study of the perceived ability to consume sustainably in three different socioeconomic neighborhoods in Malmö.

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Abstract

The more urgent the climate crisis become, the more responsibility is placed on individuals to reduce their carbon emissions and become 'sustainable consumers'. If individuals are given such a responsibility, it is important to examine whether they perceive that they can fulfill it. This thesis main aim is therefore to qualitatively examine how and to what degree income impacts people's perceived abilities to become sustainable consumers. Additionally, it explores how other factors such as motivation, knowledge and infrastructure can hinder individuals' perceived abilities and potentially relate to income. To study this, a comparative case study was done where 25 individuals from three different socioeconomic neighborhoods were interviewed. Thus, this thesis also explores how the perceived ability differed between socioeconomic neighborhoods. Drawing from research on the 'attitudebehavior' gap as well as Micheletti's and Barkman's theories on sustainable consumption, the results indicated that higher levels of income generally resulted in a larger perceived ability to consume sustainably, where there were clear differences in perceived abilities between the neighborhoods. However, the influence of income could change depending on availability of green infrastructure, level of motivation and knowledge. A high level of motivation and knowledge could for example undermine the restraining effects of income.

Key words: Sustainable consumption, Perceived ability, Attitude-behavior gap, Just transition, Malmö Words: 19 995

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1 Introduction

1.1 Background

In 2015, all United Nations member states accepted the 2030 Agenda for Sustainable Development. This agenda consists of 17 sustainable development goals, providing a shared blueprint for the adaptation to a sustainable society for both the people and the planet (United Nations Department of Economic and Social Affairs, n.d.). Goal 12 concerns ensuring sustainable consumption and production patterns and includes the goal to reduce the consumption-based emissions of greenhouse gasses (United Nations Statistics Division, n.d.).

Scandinavia is one of the regions with the highest levels of sustainable development practices (Bibri & Krogstie, 2020). The Swedish government has adapted all targets of Agenda 2030 and has the implemented a national goal to decrease the level of consumption-based greenhouse gas emissions, referred to as CO2e (carbon dioxide equivalents) from here on (Naturvårdsverket, n.d.-d; Sveriges miljömål, 2022). In 2020, Swedish households accounted for around 60% of the consumption based CO2e emissions in Sweden, with the average Swedish citizen emitting around 5 tons CO2e/year. The consumption-based emissions consist of emissions from goods and services being used in Sweden, no matter where the emissions occur. A majority of these come from transport-, accommodation- and food consumption (Naturvårdsverket, n.d.-c). In order to reach the Paris Agreement and limit global warming to well below 2 degrees, the level of consumption-based emissions per person should decrease to 1 ton/person per year by 2050 (Naturvårdsverket, n.d.-a).

In Sweden, municipalities carry a large responsibility to develop policy solutions to solve different social and ecological problems (Khan et al., 2020). The Swedish city of Malmö has a reputation as one of the greenest cities in the world, especially after their work with the Western Harbor (ibid, p.166). Malmö municipality is today actively working with social and ecological sustainability in their Environmental Programme (Miljöförvaltningen, 2021). In the program, the Environmental Department stresses the need to work with environmental, social and economic sustainable development simultaneously. Reducing Malmö's consumption-based emissions is one of the prioritized goals and in order to achieve this, "extensive collaboration is necessary with those who live and work in Malmö" (ibid, p.17). The city of Malmö acknowledges that the differences in conditions and resources across the neighborhoods represent a challenge for their environmental effort. Thus, Malmö works according to the principle that it should be easy for citizens of Malmö to make everyday climate-smart choices, regardless the size of

their wallet (Miljöförvaltningen, 2021, p. 3). Is this still the case in Malmö after the drastic rise of inflation and cost of living in 2022? (SCB, 2022).

There are different narratives regarding how we should proceed in reducing our carbon emissions. One widespread narrative perceives individuals and the market to carry the responsibility to combat climate change by reducing their CO2e emissions (Middlemiss, 2010). Even though there are many critical voices, a large part of the transition towards a fossil free society is usually reduced to lifestyle choices and profit-maximization on the free market (Hjorth Warlenius, 2022, p.408). There are a variety of measures that households are recommended to take to reduce their carbon footprint (consume less and more efficiently, reuse and repair). Individuals are recommended to purchase products that are eco-labeled, locally produced and ethically sourced (UNDP, 2022). These recommendations and guidelines are in line with Michele Micheletti's ideas of political consumerism and the use of 'buycotting' and 'boycotting' (Micheletti, 2003). Buycotting is seen as purchasing a certain product or service to support a political issue, while boycotting means not purchasing a product to support a political cause (Barkman, 2014, p.57). Barkman argues that while boycotting does not require a certain income, buycotting on the contrary can be a costly form of engagement (2014, p.57).

While households' consumption-based emissions have declined during the last years, they are still far from researching the goals set in the Paris Agreement (Naturvårdsverket, n.d.-b). Consequently, there must be something that hinders households from consuming more sustainably. Within the field of sustainable consumption researchers speak about the 'attitude-behavior gap', where they search for explanations for why individuals, who obtain knowledge of environmental issues, do not adapt sustainable behavior practices (Barkman, 2014; Kollmuss & Agyeman, 2002; Nath & Agrawal, 2022). The authors bring up several factors that can hinder individuals from consuming sustainably - ranging from price, knowledge, **availability**, motivation, and so forth. What most of the researchers however miss is the perspective perceived ability. Meyer (1987) argues that what is most important is not the amount of objective opportunities and abilities that individuals possess, but rather the amount of ability that individuals perceive themselves to possess (Meyer, 1987, p.74). Therefore, this perspective will be included in this thesis - thus contributing to the field.

1.2 Purpose and research question

The overall purpose of this thesis is to examine if the citizens of Malmö perceive that they have the ability and find it easy to make everyday climate-smart choices, regardless of the size of their wallet (Miljöförvaltningen, 2022). If households are expected to drastically reduce their carbon footprint, it is crucial to understand which factors they perceive exist, in order to create more efficient and targeted mitigation policies. Researchers are calling for further research that gives more attention to the ways we can overcome social and political barriers to low-carbon consumption patterns and living (Ivanova et al., 2020; Mattioli et al., 2020; Roberts et al., 2020). While the research center Nordregio in collaboration with the Nordic Council of Ministers currently is working on a similar project in Denmark, where they examine the perceived socio-economic effects of green transition policies on an individual level (Nohrén et al., 2022), no similar study has been done in Sweden. This thesis is thus not only in line with ongoing research projects in other countries, it also contributes to previous research and fills important research gaps in Sweden.

More specifically, this thesis aims at examining to what degree individuals' incomes hinder them from consuming sustainably. Most of the researchers studying the attitude-behavior gap argue that an individual's income can act as barriers to sustainable purchase behavior. However, to what degree it hinders individuals is disputed between the researchers (Kollmuss & Agyeman, Barkman, 2014). Therefore, by studying incomes impact further, this study can contribute with valuable information to the research field.

In order to find out which barriers the citizens of Malmö perceive hinder them from consuming sustainably and how their income hinder their perceived abilities, I will interview individuals from three different socioeconomic neighborhoods in Malmö and ask them about their perceived ability to consume sustainably within three specific consumption categories: transport, food and clothing. By interviewing residents from one high-, middle- and low-income neighborhood, I will be able to examine the impact of income in these specific cases based on the following main research question:

(*i*) How and to what degree does income impact one's perceived ability to become a sustainable consumer?

By studying the perceived abilities in the three neighborhoods, I will also examine the following sub-question:

(ii) How does the perceived ability differ between the three neighborhoods?

In order to examine the degree to which income impact people's perceived abilities to consume sustainably, a few other variables will be considered as well in order to examine if they increased or decreased the degree in which income hindered the perceived ability. To study this, I will answer the following subquestion:

(iii) What other factors impact people's perceived abilities to become sustainable consumers?

2 Previous research

2.1 Research field on sustainable consumption

In 2012 the United Nation Program implemented the Sustainable Consumption and Production framework. The framework was founded on an economic and resource-based approach which quantified the resource impacts of consumption and calculated savings from more efficient techniques, which Chappells & Trentmann (2015) believed saw consumption from an individualistic and rationalistic perspective. In 2015, the UN committed to fulfilling the goals set by Agenda 2030, which is seen as a "shared blueprint for peace and prosperity for people and the planet, now and into the future", with a focus on environmental, social and economic sustainable development (United Nations Statistics Division, n.d.).

Today there is a wide understanding among researchers that the market-based and voluntary tools developed by SCP are rather ineffective in reducing unsustainable lifestyles and material consumption by themselves (Chappells & Trentmann, 2015). There has consequently been an advancement of the field of sustainable consumption in recent years covering a variety of social science disciplines (Reisch & Thøgersen, 2015). Within political science a major focus has been on making citizens active and conscious citizen consumers (Barkman, 2014; Micheletti & Stolle, 2012; Middlemiss, 2010; Reisch & Thøgersen, 2015).

Both Liu et al. (2017) and Araújo et al. (2021) conducted holistic overviews of studies within the field of sustainable consumption covering over 800 articles between 1995-2019. Liu et al. (2017) found that the literature on sustainable consumption can be divided into three main categories: measuring and evaluating levels of sustainable consumption; interdisciplinary research; and influencing factors/driving forces of sustainable consumption.

Studies which measure and evaluate levels of sustainability generally focus on the environmental impact of consumption, drawing out relevant policy implications using different methods such as carbon footprint, life-cycle analysis or input-output analysis (Liu et al., 2017). In early studies, the focus was placed on greening and streamlining the supply side (Liu et al., 2017; Araújo et al. 2021, p.18). Later studies however tended to focus on the demand side and household consumption, attempting to find links between individual lifestyles and associated energy consumption and carbon emission. There have been numerous articles which examine the level of CO2e emissions from different products and services, as well as studies mapping out the levels of CO2e emissions from different socio-economic groups (Andersson & Nässén, 2016, 2016; Csutora & Vetőné Mózner, 2014; Holden & Linnerud, 2010; Ivanova & Wood, 2020; Kanyama & Dunér, n.d.; Kartha et al., 2020; Nässén, 2014; Zhang et al., 2015).

The category 'influencing factors/driving forces of sustainable consumption' was however the predominant research direction (Liu et al. (2017). Influential factors have been studied from a variety of perspectives, such as individual consumer behavior, lifestyle, human values, urban structure, government policy, etc. Liu et al. (2017) argue that this research can be divided into social-context-based or psychology-based solutions aiming to affect consumer behaviors. Regarding individual consumer behavior, most of the researchers have focused on attitude-behavior patterns (ibid). More specifically, this research looks the 'attitude-behavior gap', trying to identify which barriers or facilitators that either promote or hinders sustainable consumption (Barkman, 2014; Blake, 1999; Joshi & Rahman, 2015, 2017; Kollmuss & Agyeman, 2002; Lorenzoni et al., 2007; Nath & Agrawal, 2022; Sheoran & Kumar, 2020; Tan et al., 2016; Young et al., 2010).

2.2 Barriers to sustainable consumption

Most researchers agree that what determines individual sustainable consumption is very complex (Barkman, 2014; Faber, 2012; Holden & Linnerud, 2010; Joshi & Rahman, 2017; Kollmuss & Agyeman, 2002; Liu et al., 2017; Lorenzoni et al., 2007; Sheoran & Kumar, 2020). Researchers often speak about the 'attitudebehavior gap' to explain why people who are aware of environmental problems either become sustainable consumers or not. There has been a plethora of theoretical frameworks which explore this gap, offering a variety of explanations and perspectives. What they all have in common is their view of factors or 'barriers' hindering sustainable consumption (Barkman, 2014; Faber, 2012; Holden & Linnerud, 2010; Joshi & Rahman, 2017; Kollmuss & Agyeman, 2002; Liu et al., 2017; Lorenzoni et al., 2007; Sheoran & Kumar, 2020). Faber et al. (2012, p.17) define a barrier as: "*a factor that prevents an intention from being developed or a factor that prevents an intention turning into a behavior*".

There is a plethora of factors that either enable or inhibit sustainable consumption. Most researchers categorize the factors into individual and external factors (Barkman, 2013; Lorenzoni et al., 2007; Joshi & Rahman, 2015a, Kollmuss & Agyeman, 2020, p.248). Individual factors are based on socioeconomic or psychological factors, whereas external factors are based on societal and contextual factors (Barkman, 2014, p.53). Barkman only focused on internal factors and divided them into three internal categories: motivations, resources and perceived ability (ibid).

A large group of researchers has focused on how socioeconomic factors can impact sustainable consumption (Barkman, 2014; Holden & Linnerud, 2010; Ivanova & Wood, 2020; Kollmuss & Agyeman, 2002; Nässén et al., 2015; Susanty et al., 2021). According to Barkman (2014, p.58), most previous research agrees that a higher level of education means a larger degree of political consumption, which is when: "consumers' use of the market as an arena for politics in order to change institutional or market practices found to be ethically, environmentally, or politically objectionable" (Stolle and Micheletti, 2013, p.39). Koos (2012, as cited

in Barkman, 2014, p.58) argues that education plays a significant role in empowering consumers in understanding the complexities and problems in the production and supply of goods through the market. However, after having done a large quantitative study, Barkman found that education was not an important factor in explaining why people consume sustainably (ibid, p.124). Kollmuss & Agyeman (2002) found a similar result, meaning that longer education means a larger chance of more knowledge about environmental issues, but does not necessarily result in increased pro-environmental behavior. While education should provide an individual with more knowledge about how their consumption impacts the environment, a higher education also usually leads to higher income, which most often correlates with larger CO2 emissions (ibid, p.215).

Many researchers also speak about the importance of motivation (Barkman, 2014; Blake, 1999; Holden & Linnerud, 2010; Kollmuss & Agyeman, 2002; Nässén et al., 2015). According to Wilkie (1990, as cited in Kollmuss & Agyeman, 2002, p.249) "motivation is the reason for behavior or a strong internal stimulus around which behavior is organized". Kollmuss and Agyeman (2002) found that in most theoretical models explaining the environmental attitude-behavior gap, motivation is brought up as a potential barrier. Researchers generally distinguish between primary and selective motives. Primary motives are motives that make us engage in an entire set of behaviors, e.g., the strive to live an environmentally friendly lifestyle. Selective motives are motives that influence one particular action and revolve around an individual's personal needs, such as the decision to drive. Barriers to sustainable consumption are usually non-environmental selective motives, such as the motive to drive instead of bike, due to the increased comfort. Kollmuss & Agyeman (2002) argued that selective motives often overrule primary motives (ibid, p.250).

According to Barkman (2014, p.60), motivation, resources and perceived ability are the foundational conditions for sustainable consumption. He found that the relationship between motivation and resources is disputed between researchers. Some argue that motivation is the foundational condition - and it is not until one has the motivation that the resources become relevant. Others argue that the relationship is mutual - a high motivation can outweigh few resources, while few resources also can impact and reduce the motivation. Lastly, he argues that the motivation and resources can be affected by how they are perceived by the individual (ibid).

The low trust in the effectiveness of the sustainable product can also act as a barrier (Joshi & Rahman, 2015). Barkman (2014, p.70) argues that consumers need to feel that their engagement has a positive impact if it should be worth partaking in. The perception that the sustainable option has a weak positive environmental impact will then act as a barrier to sustainable consumption (Joshi & Rahman, 2015). According to Sheoran & Kumar (2020, p.14) this is the second most influential barrier after high prices. This is similar to the idea of 'greenwashing', which is when companies market a product as green, without the product actually meeting the correct standards. This results in a lack of trust in the products, thus becoming another crucial barrier (ibid, p.15; Joshi & Rahman, 2015)

Old habits and behavior can also hinder sustainable consumption. Joshi & Rahman (2015, p.138) showed how a large group of researchers argue that consumers are more likely to follow their old consumption patterns, especially when it comes to low involvement products such as food and clothing. This is especially true for those who have low environmental concern. Kollmuss & Agyeman (2002, p.20) argue that old behavior patterns are strong forms of barriers and often missed in the literature on pro-environmental behavior.

Regarding external barriers, many researchers agree that a lack of availability of sustainable options can hinder sustainable consumption (Barkman, 2014; Joshi & Rahman, 2017; Kollmuss & Agyeman, 2002; Nath & Agrawal, 2022; Sheoran & Kumar, 2020; Tan et al., 2016). Joshi & Rahman (2015, p.134) found that many researchers argue that difficulties in accessing green products and limited availability of options act as major barriers to consumer's green purchase intention and behavior. The unavailability most often even outweighs pro-environmental attitudes and values (Sheoran & Kumar, 2020). Barkman (2014, p.68) argues that the supply of sustainable options is the most important physical factor for engaging in sustainable consumption. Lack of institutional factors is part of the lack of availability to change. A lot of sustainable consumption can only take place if the necessary infrastructure is available, such as public transportation, recycling or charging stations for electric cars (EV:s) (Kollmuss & Agyeman, 2002, p.249; Nath & Agrawal, 2022).

There are however two remaining factors which previous research argue are very influential in the attitude-behavior gap, perceived ability and income. These will be discussed further in the theory section.

2.3 Sustainable consumption in Malmö

There has been a limited amount of research which has looked at sustainable consumption from a consumer perspective in Malmö. Most articles analyzed how the city of Malmö work with environmentally sustainable urban planning, where they analyzed policies, documents and projects, and interviewed civil servants or other individuals in positions of power (Bibri & Krogstie, 2020; Bolger & Doyon, 2019; Holgersen & Hult, 2021; Khan et al., 2020). A couple of articles looked at the project and work behind the Western Harbor (Bibri & Krogstie, 2020; Holgersen & Hult, 2021; Khan et al., 2020), which was one of the first climate neutral neighborhoods in the world (Malmö stad, 2021). While some see it as a leading example of how a district can be climate neutral (Bibri & Krogstie, 2020), others are critical and stress the need to differentiate between production- and consumption-based emissions. If one study the consumption-based emissions, the Western Harbor is far from the most environmentally friendly neighborhood in Malmö (Holgersen & Hult, 2021; Stockholm Environmental Institute, 2022).

Khan et al. (2020) analyzed how Malmö, Stockholm and Göteborg worked with social and ecological sustainability in their urban planning, and found that social

and ecological welfare concerns continue to be managed as two rather separate topics. Further, they found that issues of equity and justice were rather absent in the cities' urban sustainability planning, where little focus was placed on the variation of carbon footprint from different socio-economic groups, which needs to be central in future work with sustainable consumption. Hedenfelt (2013, p 118) found that social sustainability is usually not given as much attention as environmental sustainability, which makes it even more important to conduct socio-economic analysis that includes the individual's perceived experiences of the situation, which is something that this thesis aims to do.

Lastly, in order to map out the consumption-based emissions of the citizens, Malmö's Environment Commission uses the Swedish Environmental Institute's (SEI) Consumption Compass. Here SEI provides data on the level of consumptionbased emission in each postal code area in Sweden. The emissions can be divided into different consumption categories - where behavioral changes that can reduce CO2e are offered. These behaviors need to be adapted by the citizens and SEI believe that the adoption potential depends on: the economic cost of the behavior change; the availability to techniques or infrastructure; or non-economic factors such as norms and ideas (Stockholm Environmental Institute, 2022). SEI does however not have any data or studies which has looked at the adaptation potential and recommend researchers to further investigate this (Axelsson, 2022). To conclude, considering that there has been no previous research which has looked at people's perceived abilities to become sustainable consumers in Malmö, in combination with SEI and Malmö's Environment Commission call for further data which explores how different mitigation policies and behavioral changes best can be adapted by the population, this thesis fills an important and requested research gap.

3 Theory

3.1 Concept of sustainable consumption

Since consumption covers many disciplines there are a variety of definitions and there seems to be no consensus regarding one single definition among the researchers (Kollmuss & Agyeman, 2002). In the SDG 12 sustainable consumption is defined as: "The use of services and related products, which respond to basic needs and bring a better quality of life, while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generation" (United Nations Department of Economic and Social Affairs, n.d.)

In this thesis, the focus will be on environmentally sustainable consumption (green consumption) which can be defined as when: "consumers consider the environmental impact of purchasing, using, and disposing of various products, or using various green services" (Joshi & Rahman, 2015a, p. 128). More specifically, the focus will be on individuals' carbon footprint - which includes both the total CO2e emissions that each product/service emits during its lifetime, as well as the amount of individual consumption. There is a plethora of other factors that could be taken into account - such as deforestation, biodiversity loss, spillage of chemicals, toxic material and plastic (Naturskyddsföreningen, 2021), or even social sustainability, workers exploitation and child labor. However, since this thesis is focused on the mitigation of climate change and minimizing individuals' carbon footprints, this thesis will only focus on CO2e emissions. Secondly, as mentioned in the introduction, this thesis will only focus on buycotting - i.e. the purchase of sustainable products (what constitutes sustainable products will be discussed in the methods chapter) since this form of consumption can be impacted by income, in comparison to boycotting which is not dependent on income (Barkman, 2014; Nath & Agrawal, 2022). Lastly, I will only focus on the perceived ability to consume sustainably, and not on the outcome of actual consumption.

3.2 Income

3.2.1 Income as a barrier

Many researchers agree that the price is one of the most impactful barriers to sustainable consumption (Barkman, 2014; Joshi & Rahman, 2015; Nath & Agrawal, 2022; Sheoran & Kumar, 2020; Tan et al., 2016; Wijekoon & Sabri, 2021). However, how and to what degree is disputed between the researchers. Barkman (2014, p.57) argues that buycotting and purchasing specific sustainable products can be dependent income as it can be a more expensive form of engagement. Barkman however finds that previous research is ambiguous when it comes to income's impact. While some studies found that income had a positive impact on buycotting, others did not find a specific relationship between the two variables (ibid, p.58).

According to Joshi & Rahman (2015, p.134), Nath & Agrawal (2022) and Sheoran & Kumar (2020), high price is one of the most critical barriers to sustainable consumption, which is problematic considering that sustainable products usually demand a premium price (Nath & Agrawal, 2022). If the price is higher than the expectation, it will most likely undermine an individual's environmental attitude and increase the attitude-behavior gap, which will negatively impact their sustainable purchase intention and behavior (Joshi & Rahman, 2015, p.134). Oftentimes, consumers desire cheap sustainable products and are usually not ready to prioritize sustainable development over their personal wellbeing and pleasure (Wijekoon & Sabri, 2021).

According to Gough (2017) poor households face a triple injustice in relation to climate change, as they are impacted harder by the effects of climate change and the measures put in place to mitigate it, while having contributed relatively little to it themselves. Chancel (2022) argues that poor households are more at risk of being affected by policies aiming to reduce environmental harm, such as regressive carbon taxation of heating and fuel. Poorer households tend to spend a larger portion of their income on these goods, while also being more sensitive to the rise of prices (ibid).

Barkman (2014, p.77) even argues that individuals who lack motivation or sufficient capacity cannot even be expected to perceive barriers to sustainable consumption, since they do not have the foundational capacities (psychological or physical) to become such consumers. Diekmann & Franzen (1999) go even further and argue that individuals might not even need to lack environmental motivation in order to be incapable of changing their behavior. In their study they found that while people in low-income countries do not rank environmental issues as the most pressing problems, they do rate the severity of environmental problems high. Diekmann & Franzen thus believes that the ranking reflects the reality of scarce resources and not a lack of environmental concern of less affluent people (1999). This supports the idea that resources and economic ability is one of the foundational abilities to become a sustainable consumer. If one does not have the economic means to become a sustainable consumer, in this case high enough income, factors such as attitudes and intentions do not matter to the same extent (Joshi & Rahman, 2015).

Borden and Francis (1978, as cited in Kollmuss & Agyeman, 2002) hypothesized that individuals who have satisfied their personal needs are more likely to act ecologically, since they have more resources (money, time, energy) to care about pro-environmental issues. This assumption underlies many other models, such as Maslow's Hierarchy of Human Needs. It is also evident that individuals with higher incomes have better economic preconditions to become sustainable

consumers. For example, individuals with higher income should not consider the price of sustainable products/services as high as others with lower incomes, and thus should not be as affected by the price (Barkman, 2014, p.70). Secondly, as higher income often correlates with higher education, and higher education often results in increased knowledge about environmental issues (Kollmuss & Agyeman, 2002, p.248), one could assume that higher income should result in larger environmental knowledge.

Furthermore, municipalities usually offer affluent neighborhoods, like the Western Harbor in Malmö, infrastructure which facilitates more sustainable practices (Bibri & Krogstie, 2020; Khan et al., 2020, p.4). For example, it is generally easier for individuals living in affluent neighborhoods to purchase EV:s (electric vehicles) since they are more likely to afford it and have access to better charging infrastructure. In Sweden there are public and non-public EV-charging stations, with the private ones constituting 80-90% of the charges (Lewald & Alfheim, 2021). There is however an inequality in the distribution of the charging stations within and between cities. For individuals owning a house or piece of property it is a lot easier to install a charging station (Lundberg, 2017), whereas it can be very complicated for individuals living in rented apartments or co-ops. If the property owner refuses to install a charging station (Lewald & Alfheim, 2021), it becomes a lot more complicated for the individual to purchase and use an EV (Bergman, 2022). The same applies to solar cells, where a survey done by Telge Energi (renewable electricity company) showed that most respondents believed that only individuals living in houses or owned property could install solar panels, while individuals living in apartments felt hopeless (Lindholm, 2021). We can thus conclude that individuals with higher incomes generally should have sufficient capacities (especially financial) to become sustainable consumers - is this the case?

3.2.2 The relationship between income and carbon footprint

Several researchers across the globe have found that household carbon emissions and ecological footprint rise with income (Chancel, 2022; EEA, 2021; Ivanova & Wood, 2020; Khan et al., 2020; Nässén, 2014; Nässén et al., 2015; Stoddard et al., 2021; Wiedmann et al., 2020; Zhang et al., 2015). In 2021 in Europe, the poorest 50% of the population emitted around five tons of CO2e per year, the middle 40% around 10.5 tons and the top 10% around 30 tons CO2e per year (Chancel et. al, 2022, p.122). Globally between 1990-2015 the richest 10% (630 million individuals) were responsible for 52% of the cumulative carbon emissions, while the poorest 50% of the world's population (3.1 billion people) only accounted for only 7% of the cumulative emission (EEA, 2021).

This relationship exists in Sweden as well. According to Ivanova & Wood's (2020, p.2) calculations, the 10% with the highest incomes in Sweden emit 11.2 tones CO2e per capita, in comparison the 3.6 ton which the households with the 10% lowest incomes emitted (Nohrén et al., 2022, p.351). Nässén (2014) and Khan et al. (2020) found that net income was the most important variable explaining the

size of CO2e emissions from households in Sweden. In Sweden and in Europe, the highest emitters are associated with larger shares of air and land travel emissions. Transport use shows a stable increase with income and expenditure and has the highest carbon intensity among the consumption categories. The biggest problem is the air travel of the affluent (Ivanova & Wood, 2020, p.6).

3.3 Conceptual ecological footprint

There are varying understandings of the level of responsibility that individuals carry within the field of sustainable consumption. Middlemiss argues that there are two general themes of theories in this field - individualist or situated (Middlemiss, 2010, p152). In the individualist camp of theories, the individual is seen as the principal lever of change and as the key agent who needs to take the correct decisions (ibid). In the other camp, authors emphasize the importance of social context. Spaargaren (2003) stresses the importance of context and argues that sustainable consumption is: "the deliberate achievements of knowledgeable and capable agents who make use of the possibilities offered to them in the context of specific systems of provisions" (ibid, p.688). Middlemiss (2010, p.154) draws upon this idea and argues that the responsibility of the individual to consume sustainably is dependent on the capacity of the individual that is given by their specific context.

Middlemiss created a conceptual model called the '*contextual ecological footprint*', where she drew inspiration from the concepts of environmental justice, environmental citizenship and sustainable consumption. Middlemiss argues that an individual's ecological footprint is dependent on four 'capacities': organizational, cultural, infrastructural and individual capacities. Capacity is understood as the ability of the individual to take on responsibility (Middlemiss, 2010, p.160).

To put it concisely, cultural capacity refers to the values and norms that a person has and how these impact one's ability to take on responsibility. Organizational capacity concerns the resources for sustainability that are offered by the organizations that they belong to. Infrastructural capacity refers to the provision of services and products to the individual, by the government, the community and businesses. Lastly, individual capacity refers to the understanding and awareness of environmental problems, personal finances, motivation and curiosity (Middlemiss, 2010, p.162). These are all in line with the barriers mentioned previously in this thesis. Middlemiss argues that this conceptual model is important since it places an individual's responsibility within the context they inhibit and differentiates individuals by their capacity to act and become sustainable consumers. This model forces policymakers to consider the feasibility of their demands on individuals to consume sustainably and move beyond the old vision of the individual as the 'principal lever of change' (2010, p.165). This thesis will partly draw from this concept and the understanding of individuals' different abilities and capacities to act and become sustainable consumers. What this model however lacks is the aspect of perceived ability. While individuals might have different objective capacities to act, do they perceive to have different capacities and abilities or not?

3.4 Perceived ability

A group of researchers argue that perceived ability is foundational when studying human behavior (Ayllón & Fusco, 2017; Barkman, 2014; Meyer, 1987; Rootes, 1999; Tan et al., 2016). Barkman (2014) relates sustainable consumption to political consumption, arguing that there are many similarities between the two concepts. While political consumerism is very broad and can be used to support any political purpose, sustainable consumption only concerns sustainable development and does not have to be done as a political action by the consumer (ibid, p.14). However, considering their similarities, much research draws upon both concepts when studying the impact of perceived abilities.

Meyer (1987) wrote about the perceived ability's impact on achievementrelated behavior. He argues that the self-perceptions of ability will impact one's choice of activities, determine the amount of expected effort as well as how long the effort will sustain. Meyer believes that what is most important is not the amount of ability that one possesses, but the amount of ability that one believes oneself to possess, since it will guide one's choices of tasks and expectations of success and failure (ibid, p.74). Rootes (1999) argues in a similar line, arguing that for those taking collective action, the question is not about if the political system is objectively open or closed, but if it is perceived to be open or closed. Even if there are few objective obstacles, the mere perception that there is a lack of opportunities for action will generally discourage collective action (Rootes, 1999, p.12). Mcadam et al. (2001) argue in a similar line, stating that: "no opportunity, however objectively open, will invite mobilization unless it is visible to potential challengers and perceived as an opportunity" (ibid, p.43).

Tan et al. (2016) only focused on how perceptions impact green purchase behavior and found that consumers' attitudes, intentions and behavior are impacted by their perceptual judgments and interpretations. If consumers perceive green products as being too time-consuming, expensive or difficult to obtain, it will influence the degree in which the consumers believe they can perform this behavior (ibid, p.269).

Barkman (2014, p.18) relates these ideas to sustainable consumption and argues that there are three main pillars that one needs to engage in sustainable consumption: motivation, resources and perceived ability. Motivation to engage in sustainable consumption can be based on how much one cares for the matter, if one believes to carry responsibility and if one believes that the consumption will make a difference. The resources enable consumers to act on their motivation and is based on their physical resources (such as money), education, knowledge and social capital. How one perceives one's own ability is impacted by one's motivation and resources, and depending on how the abilities and opportunities are perceived by the individual, they will either promote or hinder engagement (Barkman, 2014).

3.5 Analytical framework

My analytical framework takes inspiration from the previous research presented above, as well as from the analytical frameworks presented by Barkman (2014) and Middlemiss (2010). What most of the theoretical frameworks have done is analyzing how several factors can impact sustainable consumption (Kollmuss & Agyeman's, 2002). What they have not done however is to differentiate how one single factor impacts sustainable consumption in different ways. Therefore, in my thesis I want to mainly focus on income and see what role it plays. I will do this by systematically exploring how the independent variable of income impacts the dependent variable of perceived ability to consume sustainably.

However, considering that it would be too narrow to only focus on income, and that there are a plethora of other factors that can act as barriers to sustainable consumption, some will still be considered in this thesis. They will be examined in two ways: firstly, through an explorative approach where I will ask which barriers the individuals perceive hinders them. Secondly, by asking the individuals at the end of the interview how they perceive that a couple of other main barriers (motivation, knowledge, infrastructure, lack of trust, time) hinders them and how they relate to income. However, the main focus will be on the variable of income. In order to systematically analyze how and to what degree income impacts one's perceived ability to consume sustainably, I will use the following framework:



Previous theoretical frameworks

The first row visualizes a very simplistic combination of Micheletti's (2010) and Barkman's (2014) frameworks of how individual and contextual capacities impact sustainable consumption. My theoretical framework takes inspiration from

the previous theoretical frameworks (visualized through the thick vertical arrow). In the second row my theoretical framework is presented, and as visualized, it only focuses on perceived ability to consume sustainably and not on actual sustainable consumption. As visualized through the arrows, the purpose of this thesis is to explore how and to what degree income impacts perceived ability to consume sustainably. As seen above, there are contradicting expectations of how income impacts sustainable consumption, which means that this thesis will contribute with very valuable insights. Moreover, I will examine how other factors can impact sustainable consumption as well as how they relate to income. By using this analytical framework, we will get a clearer picture of how and to what degree income impacts the perceived ability to consume sustainably.

4 Method

4.1 Ontological and epistemological considerations

My epistemological point of departure is critical realism. While sharing the same ontology as positivism (foundationalism), critical realism has a lot more in common with interpretivism. Critical realists believe that social phenomena have causal powers, meaning we can make causal statements, however not all relationships between social phenomena are directly observable. Modern critical realists argue that while social phenomena exist independently of our interpretation of them, our understanding and interpretations of them affect outcomes (Lowndes et al., 2018., p.193). This is in line with the aim of the thesis, which is to understand how perceived abilities of physical opportunities affect outcomes (perceived ability to consume sustainably).

4.2 Comparative case study

In this thesis, the main purpose is to study how and to what degree the independent variable income impacts the dependent variable perceived ability to consume sustainably, and whether there were any differences in perceived abilities between three different socioeconomic neighborhoods. In order to study this, I used a comparative case study design, since they allow for a study of different perspectives of an issue (Creswell, 2007). More specifically, I selected cases based on the diverse case design, which according to Levy (2008) is a "common strategy within explorative case studies where one selects cases based on maximum variation across the independent and/or dependent variables, based on the logic that comparison stimulates the imagination. Such strategies might be useful for exploratory studies in the earliest stages of research." (ibid, p.8)

In my study, I chose cases based on variations on average income, by looking at three different socio-economic neighborhoods (one high- middle- and lowincome neighborhood). The cases of the neighborhoods offered a unique setting for studying the combined effect of income and other variables (e.g. infrastructure, availability, motivation, knowledge) upon perceived ability to consume sustainably. The research was designed to enable an in-depth study of distinctive and special local contexts, combined with a capacity for comparison between cases in relation to specific variables (Lowndes et al., 2006). While the cases were selected based on income and the main purpose is to study how an variance in income's impact the perceived ability to consume sustainably, other variables will be considered as well. These variables were chosen based on the barriers that were mentioned as being the most impactful in previous research (infrastructure, lack of availability, knowledge, motivation, feeling of distrust, time). They will be analyzed and compared to income, in order to get a better understanding of much of an impact income really has on the perceived ability to consume sustainably.

4.3 Selection of case, material and interviewees

4.3.1 Malmö

Malmö is seen as one of the 'greenest' cities in the world (Holgersen & Hult, 2021), with many projects focusing on sustainable development (Hult & Bradley, 2017, 603). This has resulted in them being awarded "best environmental municipality" both nationally and internationally several times (Hult & Bradley, 2017). This means that out of all cities in Sweden, Malmö should be one of the cities which offers the most infrastructure which facilitates sustainable consumption. On the other hand, Malmö is also a city with large social inequalities. Out of the 10 biggest cities in Sweden, Malmö was the most segregated city in 2018 (Delegationen mot segregation, 2021). In 2019, Malmö had the third lowest median income in Sweden (SCB, 2020), where their citizens faced the biggest risk of economical vulnerability out of all cities in the region (Region Skåne, n.d.). While having a similar employment rate to the national average (67.8%), Malmö had the highest unemployment rate (15.3%) in Sweden in 2020 compared to the national average of 8.5% (Ekonomifakta, 2022). To conclude, Malmö is a good case to study how income impacts the perceived ability to consume sustainably, since it is a city with large socio-economic differences, but with high ambitions to facilitate sustainable consumption.

4.3.2 High-, middle- and low-income neighborhoods

There are many different ways that one can measure income, and in this thesis I decided to look at earned income before tax (förvärvsinkomst), which include pension, sickness benefit and other taxable incomes (not economic aid) (Malmö Stad, n.d.). According to the city of Malmö's statistics, the average income (age 20-64) in Malmö in 2020 was 392 895 kr (ibid). According to SCB, the average monthly earned income in Malmö in 2021 was 27 567 kr (SCB, 2020).

The three areas I decided to look at were Nya Bellevue/Västra Hamnen, Kirseberg and Rosengård. In Nya Bellevue, the average income was 715 704 kr in 2020, and in Västra Hamnen the average income was 495 436 kr. These two neighborhoods are considered to be high income neighborhoods. In Kirseberg the average income was 355 699 kr in 2020 and is considered to be a middle-income neighborhood. Lastly, Rosengård had an average income of 279 373 kr in 2020 and is considered to be a low-income neighborhood. Since the earned income does not include economic aid (socialbidrag), it is important to note that 0% of the inhabitants in Nya Bellevue received economic aid in 2020, 1% in Västra Hamnen, 5% in Kirseberg and 12% in Rosengård (15-17% in the sub-districts of Rosengård) (Malmö Stad, n.d.).

In order to differentiate between the income levels of the interviewees, I used SCB's definition of high- and low economic status. According to SCB a person with low economic status earns 60% of the average income, while a person with high economic status earns twice the average income (SCB, 2022b). In comparison to the average oncome of 27 567 kr (SCB, 2022a), low economic status is thus considered to be 16 540 kr and below, and high economic status 55 134 and above. Moreover, in order to make the interviewee feel more comfortable sharing their income, I asked them to place their income between 7 different spans of incomes (see appendix 1).

4.3.3 Consumption categories

The dependent variable is perceived ability to consume sustainably. In order to operationalize this, I studied the following three consumption categories: *transport, food and clothing*. These consumption categories were chosen since they are some of the biggest contributors to household's carbon emissions. In 2020 household consumption made up 60% of the total consumption-based emissions in Sweden. These 60% consisted of: 19% food, 16% transportation, 13% accommodation and 12% other consumption (Naturvårdsverket, n.d.-c). If one only considers households' emissions in Malmö in 2022, 40% came from transportation, 25% from food and restaurants, 18% from accommodation and furniture, 7% from culture, sport and hobbies, 4% from clothing and 6% from other consumption (Stockholm Environmental Institute, 2022).

Secondly, in this thesis I wanted to study "everyday" consumption that everyone has the ability to decide over. Considering that everyone for example cannot decide over the heating of their home (particularly for individuals living in apartments), I chose not to include accommodation. Furthermore, the decision to include clothing as well is because it is something everyone needs and uses daily, and secondly contributes to a large amount of the CO2e emissions globally (European Parliament, 2020; Naturvårdsverket, n.d.)

Furthermore, I had to operationalize what sustainable alternatives were for each consumption category. Within each category, the focus was on which alternatives that emitted the least amount of CO2e. For transports, sustainable options were considered to be public transport, biking/walking, trains and buying/renting/leasing EV:s or hybrid cars (Boberg, n.d.; European Parliament, 2020). For food, vegetarian and vegan diets were considered as sustainable diets (Poore & Nemecek, 2018; Springmann et al. 2021). These were specified as plantbased alternatives for dairy and meat, vegetables, legumes and fruits. Moreover, different eco-labeled products (Barkman, 2014) and local produce (fruit, vegetables, legumes but also including meats) were also considered as sustainable options (Naturvårdsverket, n.d.). For fashion, sustainable options were high quality apparel, apparel produced in Sweden/Europe and eco-label apparel (Blas Riesgo et al., 2022; European Parliament, 2020; Jacobs et al., 2018; Naturvårdsverket, n.d.-d). Secondhand clothing was not mentioned as a sustainable alternative since I only looked at new products in this thesis. During the rest of this thesis, these will only be referred to as "sustainable options of..." to simplify the reading.

4.4 Semi-structured interviews

One of the most common research techniques to gather primary data used in qualitative research is interviews (Lowndes et al., 2018, p.246). In comparison to surveys, interviews offer a better opportunity to study the perceptions of individuals and their thought processes. In this thesis I used semi-structured interviews, as it allowed me to follow a specific interview guide based on my research questions, theoretical framework and consumption categories. It also allowed me to ask open-ended and follow-up questions that were outside of the questionnaire when needed, which allowed the interviewees to elaborate on their perceptions freely (Bryman, 2012).

25 individuals were interviewed between the 1st-15th of December 2022. 24/25 of the interviews were done over the phone and lasted between 20-50 minutes. I asked all respondents for approval before recording and transcribing the interviews, and everyone had to accept the ethical principles I followed, which included anonymity and confidentiality (Vetenskapsrådet, 2017). Thereof, the interviewees are only referred to as interview person (IP) in the text, and in the references only neighborhood, gender, type of accommodation, and level of income is included. The interviews were held in Swedish in order to minimize the language barrier and will thus be translated to English in the text. The interviewees were not given the interview guide (see appendix 1) beforehand in order to allow for spontaneous answers. The interview guide was based on the research questions, on the theoretical framework and the three specific consumption categories mentioned above.

I used different approaches to find the interviewees. In Rosengård I contacted different organizations, housing cooperatives and senior homes. Seven people participated (three men and four women). Regarding incomes, four out of seven had incomes below average, two around average, and one highly above average (in comparison to Malmö). For Västra Hamnen/Nya Bellevue and Kirseberg, I found participants from specific Facebook groups for each neighborhood's inhabitants. Moreover, I used the "snowball-method", where interviewees recommended me

neighbors who could participate as well. In Kirseberg, six people were interviewed (all women) where one had an income below average, four around average and one high above average. Lastly in Västra Hamnen/Nya Bellevue I interviewed eleven individuals (three men and seven women). Seven individuals had incomes high above average, three around average and one below average.

4.5 Procedure of analysis

The empirical material of this thesis consisted of the transcribed interview material. I analyzed the material through a type of thematic analysis. According to (Bryman, 2012, p.580), a theme can be defined as a "category identified by the analyst through the data that relates to the research question, that builds on codes identified in transcript and that provides the researcher with the basis for a theoretical understanding of his or her data" (ibid, p.580). However, considering that I already had a clear structure in my interview guide based on three specific consumption categories (transport, food, clothing) and several barriers, I already had clear categories/themes that I could use to structure my analysis.

Once the material was transcribed, I divided the material into three sections based on the three consumption categories: transportation, food and clothing. Within each consumption category, I divided up the results based on each neighborhood, and lastly on each variable (main focus income). This material was presented in the results section. By dividing the material into clear categories based on consumption category, neighborhood and variables (barriers) I could systematically explore similarities and differences in the perceived abilities among the interviewees and connect these to my theoretical framework. These thoughts were presented in my discussions section.

4.6 Limitations

It is important to note that the purpose of this study is not to generalize the results. The interviewees were not selected randomly, their incomes were not double checked in a taxation registry and not enough individuals were chosen in order to generalize the results. Secondly, there is a risk for biases, where the individuals potentially could have stronger environmental beliefs and higher education than the average citizen in Malmö than the general in Malmö. Moreover, individual net income was studied in this thesis to simplify the process. The results could have been even stronger if the disposable income of the household was measured (where capital was included)

5 Results

The result chapter is divided into four parts where I will present how and to what degree individuals from each neighborhood perceive that their income (and others factors) impacts their ability to consume sustainably within each category - transportation, food and clothing. The first three parts are divided by each respective consumption category, and in the last part the perceived differences between the neighborhoods and main perceived barriers from each neighborhood were presented.

5.1 Perceived ability to consume sustainably – transportation

5.1.1 Rosengård transport

Regarding everyday transportation (i.e. commute to school/work/leisure activities), all interviewees had rather good knowledge of sustainable alternatives of transport, where everyone mentioned at least biking, walking and taking public transportation (IP 1,2,6,13,21,22,24). Most interviewees mentioned that they and most residents in Rosengård frequently take the bus, and none mentioned that their income hindered them from taking public transportation IP 22 even mentioned the city of Malmö giving pensioners free bus cards. The interviewees were generally positive towards the public transportation opportunities in Rosengård, as IP 24 highlighted: "I believe that Rosengård has the best preconditions to get into the city. We have the trains that go directly to Hylie, Copenhagen and Malmö, we have the super buss that only takes 10 minutes to the central, and we have good bicycle lanes". The only complaint was about the buss not running at night, which forced IP 1's colleague, who works night shifts, to purchase a car.

IP 6, who works at a small NGO in Rosengård, mentioned that the majority of her members are forced to take the bus since they received economic aid (försörjningsstöd) and are therefore not allowed to own a car. IP 1, who also occasionally volunteers at another NGO in Rosengård, said that: "people in disadvantaged areas cannot afford to have a car and do not have the ability to take a driving license, either because of the language barrier or because they cannot afford it. This was the case for both IP 22 and 24, who did not have driving licenses since they cannot afford it and do not have sufficient language skills to pass the exam.

Regarding cars, only 2/7 of the interviewees perceived that they had the economic ability to purchase an EV or hybrid car (IP 13,21), with the rest not

perceiving to have the economic ability (IP 1,2,6,22,24). The reason why IP 13, who also partly works for a NGO focusing on social development, did not purchase an EV was due to his political beliefs:

EV:s and the production of the batteries are produced with cheap labor and the workers are exposed to cancerous substances. They say that the EV:s are sustainable, when the production looks like that in reality. I rather pay for the unsustainable cars that have their system in place, than for the sustainable options where we don't know what the production looks like. (IP 13)

IP 13 argued that many people in Rosengård value not wasting money, which is why he and many others purchase the Toyota gasoline hybrids, since those cars are cheap both when purchasing and in operation. It would however be complicated for the residents in Rosengård to purchase plug-in hybrids or EV:s, due to the absence of EV-charging stations in Rosengård (IP 1,2,6,24). There are only a few charging stations - that most often are private. Thus, even if the participants hypothetically would have had the economic ability to purchase an EV, they would not have been able due to the lack of charging infrastructure (IP 1,13,24). Moreover, IP 1 and 6 argued that residents in these areas also need to consider the larger risk of the EV getting stolen.

IP 24 works for a housing society (Brf) in Rosengård and is working on several social development projects in the area. One project concern attracting carpools to the area, which has proven to be difficult to impossible: "I have talked to several carpool companies, and none want to place their carpool in Rosengård. Why? Because it's not a part of their business model and their target audience does not live there" (IP 24). He thus decided to create his own inexpensive carpool service in the area which will be available for everyone. He will do this by leasing a car and finding sponsors, with the hope that fewer people will use his carpool and stop purchasing new cars.

Regarding holiday transportation, all interviewees agreed that flying was the cheapest alternative. Four of the interviewees said that the time aspect and comfort was the main barrier - entailing that it was too time consuming to travel in Europe by train or bus (IP 2,21,22,24). The husband of IP 2 however always takes the bus to North Makedonia due to his fear of flights. Only two said that they chose to fly instead of taking the train due to the larger price difference: "I can barely afford to bring luggage with me when I am flying. This fall I visited my family in Hungary, and the option to climate compensate the flight ticket was not even an option, considering that it cost 3 times the ticket" (IP 1). IP 13 perceived that trains are more expensive than the flights but argued that the reason why he flies is because of the time and comfort, and that he never considers the environment when traveling and does not trust the sincerity of the climate-friendly options. IP 13 was the only one who had these thoughts out of the interviewees in Rosengård, since he believes that: "consuming sustainably has become a political question. The only reason why I do not consume sustainably is because they only speak about carbon footprint and not the social factors, which means they have missed 90% of the sustainability".

5.1.2 Kirseberg transport

In regard to everyday transportation, all interviewees had a good understanding of sustainable alternatives, where everyone mentioned walking, biking or taking public transportation (IP 3,5,7,8,12). All interviewees were positive towards the possibilities to bike inside Malmö. IP7, who also is a climate activist, said that her family has taken an active choice not to own a car, since they do not need it. If they need to go somewhere by car they use carpools, otherwise they use bikes (which has saved them a lot of money). Regarding public transportation, everyone did not perceive to have the ability to use public transportation.

It is really bad, I should go more often with public transportation. But either I drive by myself or I codrive with my neighbor (...) When my children were younger I couldn't go by public transportation. But now I can't blame them anymore unfortunately (..) It just goes so much quicker with a car instead of train and it really becomes a question of time and comfort. (IP5)

IP8, who also lives in Kirseberg and works in Lund, said that she wants to take the bus/train to work, but cannot due to the bad connections between her home and workplace. IP5 mentioned that while it is expensive to both purchase and maintain a car, it is a lot cheaper per trip to go by car than it is to go by train to Lund. While she did not perceive her income as hindering her from purchasing the train ticket, the expensive price of the ticket does sometimes play into her decision to take the car instead. None of the interviewees perceived that their income hindered them from taking public transportation (IP 3,5,7,8,12,19).

The scenario was different regarding purchasing or leasing an EV or hybrid car. Out of the interviewees who had cars, only one owned a hybrid car (IP3). The reason why the rest did not own an EV or hybrid car was mainly due to their incomes. IP12 said that she could possibly purchase an EV, but then she would have to make cutdowns somewhere else. IP 8 did not believe she could purchase one, as she had just taken a loan to purchase an apartment. Only IP 5 raised the factor of distrust towards the EV as a factor hindering her:

We have talked about purchasing an EV and it would be great. I know it's a lot better than burning a lot of petrol. But I'm not sure about the electricity, since we need to decrease the consumption of electricity. Also, where does the electricity come from and how sustainable are the battery factories that we are building everywhere? (P5)

The car owner however had the EV in or close to their homes if they were to buy one. Either they could charge it in their garage (IP3), with an extension cord from their house (IP5), or in the community parking house in their housing society's private garage (IP8). Furthermore, there are several carpools in the area, which enables IP7 to not own a personal car.

Regarding holiday transportation, the interviewees did not generally perceive that their income directly hindered them from purchasing train tickets. While many perceived that train tickets were more expensive than flight tickets, their income and the price of the ticket was not the major hindering factor (IP5, 8,12). While IP5 does not go on vacation abroad often due to her environmental beliefs, she felt that she could afford to go by train instead of flying if she wanted to, in comparison to IP19, who has not gone on a vacation abroad from many years, both as a result of the pandemic and her weak economic situation.

What all interviewees who went for vacations abroad mentioned was time and comfort being the reasons why they decided to fly instead of taking the train (IP3, 12), especially for destinations south of Germany/Austria (IP 8). Furthermore, both IP 3 and 12 stressed that they as employees only have a limited amount of vacation days, and cannot therefore afford, time and money wise, to take the train to their vacation. Thus, income indirectly impacts the ability to take a train, since they could not economically afford to take extra vacation days off. Both IP12 and IP3 expressed that they wished it was easier and cheaper to go by train to destinations in Europe, where IP3 blamed the politics for the bad infrastructure "The current system only favors the motoring and air industry. The political responsibility is really heavy when it comes to transportation. It is too expensive to go by train, they are bad and they don't develop the high-speed train rails"(IP3)

5.1.3 Nya Bellevue/Västra Hamnen transport

Similar to the two other districts, the interviewees had a good understanding of sustainable transport alternatives, where everyone mentioned walking, biking and taking public transportation, with only one mentioning carpooling (IP14). Only IP16, a single mother whose only income is sickness benefit (sjukersättning) believed that her income impacted her ability to choose sustainable transportation alternatives in her everyday life, as she sometimes does not have money for the bus. This however resulted in her walking instead (IP16), which is the most sustainable option. The other residents however perceived that their income enabled them to choose sustainable transport alternatives (IP 4,9,11,14,15,18).

Regarding public transportation, a majority could take public transportation to their workplaces and did not mention any price barrier (IP 4,10,17,14,15,18). IP 14 lives in Västra Hamnen and works by the central station in Lund and found it easy to use public transportation to work, which is one of the reasons for why he has not purchased a car. While IP 11, who works in the outskirts of Lund, found it too time consuming to go by public transportation and thus always commuted by car, IP10 bikes from Malmö to Lund to go to work. She however stressed that she only does this twice a week and always takes the train back home (IP10).

Three interviewees did not perceive to the ability to purchase or lease an EV or hybrid car (IP 10, 16, 20). On the other hand, while five respondents believed that

they had the economic ability to purchase or lease an EV or hybrid car (IP4, 11,17,14,15), only one owned an EV (IP 18) and two owned hybrid cars (IP 9,23). While some believed they had the economic ability to a certain degree, they still believed that they would have to cutdowns somewhere else if they were to purchase an EV (IP 4,11,17,15). Some even perceived it to be more sustainable keeping their old car rather than purchasing a new EV (IP 11,15). Moreover, everyone who mentioned EV:s had the opportunity to charge their it in or close to their accommodation (IP 9,11,14,17,18). Furthermore, IP 14 can rely on only using carpools and not owning a car, thanks to the rich supply of carpools in Västra Hamnen. What was hindering people's perceived ability to purchase EV:s was more the lack of trust towards the dependence on electricity (IP 4,11,14,15). IP 11 even referenced to the Russian invasion of Ukraine, stating that:

I'm not sure if I would have purchased an EV today even though I could have. Partly because of the ongoing electricity crisis, but also with the insecurity in the world caused by the wars. I will always be able to access petrol rather easily, I could even have a dunk at home. But electricity can go away, which makes me feel safer with my petrol car. My best crisis preparation is to make sure that my car always has at least half a tank full, which I would not be able to do with an EV. (P11)

IP15 argued that part of the reason why he has not purchased an EV is because he perceives that we are getting fooled by a total calculation, meaning that if we consider the lifetime of the battery and the effects of the production of the EV, are they more sustainable in the end? More importantly, can he trust them in the long run? IP14 reasoned along the same lines, feeling a large sense of insecurity regarding where the electricity came from and whether it is the best alternative. IP4 had an equal thought process regarding transportation to vacation abroad, stressing that:

We always choose to fly to our vacation destinations. I do not even know which alternatives are good. Trains are not that much better than flying since it is coal energy that generates the electricity normally. I think there is an excessive amount of faith in how sustainable the trains really are (IP4).

Regarding transportation to vacation, a majority did not think that their income hindered them from choosing sustainable transportation options (IP 4,10,11,14,15,18,20). Two had taken the train to their vacations in Berlin and Åre (IP 15,20). The reason why IP 15's family went by train was because the train ride was part of the experience, but they noted that the prices of the trains were at least 35% more expensive than the flight tickets. IP9 admitted driving her family to Stockholm instead of taking the train this summer, since driving was considerably cheaper than the 4000kr train tickets.

Moreover, a couple argued that they could consider going by train to destinations in Scandinavia, Germany and Austria, but not further than that (IP 9,14,15). Regarding perceived barriers, two mentioned the complexity of booking

train tickets to go abroad as hindering them to certain degrees (IP 11,15), where IP 15 argued: "The train network in Europe is complicated and it's not like one can just go into Skånetrafiken and get a tailored trip and price suggested". Some perceived that there simply were no opportunities to go by train to the south of Europe (IP 14,15). What hindered most of the interviewees to take the train was the time and comfort aspect (IP 4,9,11,14,15,23). Some mentioned that they did not have enough vacation days to spend on going by train (IP 11,15,17), while most simply did not want to spend that time on the train, even when it came to trips between Malmö and Stockholm (IP 17,20). The feelings towards flying also differed among the interviewees. While IP14 felt no shame for flying, IP 10 felt ashamed when flying to Paris once. Both IP 11 and 9 mentioned having changed their flying habits over the last years, where they try to be more restrictive.

5.2 Perceived ability to consume sustainably – food

5.2.1 Rosengård food

The general knowledge about sustainable food options varied between the interviewees, and it was not something many considered often (IP 2,6,13,22,24). The interviewees mentioned vegetarian food (IP 21,22,24), growing your own food (IP 22,24), eco labeled foods (IP 21,22,24), and IP 16 bread, vegetables, fruit, fish and cereal. IP22 wanted to purchase more sustainable food but felt that her lack of knowledge hindered her:

My friend buys food at a food bank in Mobilia, where they sell food that otherwise would have been thrown away. We wonder if that is sustainable and good for the environment? I have heard that meat and milk is bad for the environment, but I can't explain why it's bad because I do not understand it. I just know that vegetables are good for me. But when it comes to food, I do not know what is good and not good for the environment. (IP22)

Many perceived that they themselves and many in their neighborhood generally lacked knowledge of sustainable food options (IP 2,6,21,22,24), which IP 6 believe was the biggest barrier for everyone. An example of this was IP2 considering lactose and gluten free options to be more sustainable. A couple of interviews believed that sustainable consumption of food meant consuming less (IP 1,13,22). IP 13 and 22 argued that we used to consume more sustainably before in history, and that the overconsumption is the most harming factor. Both also mentioned the strong norm of not wasting food (or other products) in the era, since they need to live economically.

Everyone (except IP13) believed that their income hindered their ability to purchase sustainable food options. IP6 argued that considering that the economic aid (socialbidrag) has not been raised after the inflation, many people cannot afford to purchase eco labeled or local foods. IP1 feels like he can barely afford to purchase 'normal food', let alone sustainable food. IP24 argued along the same line, stating that: "For people in Rosengård, if they do not have the best economic abilities, they will not purchase the locally produced tomatoes if they can find another kind that is cheaper". Consequently, most interviewees argued that they always end up purchasing the cheapest product (IP 1,2,6,21,22,24), and considering that their perceptions of sustainable food most often being more expensive, it usually is not an alternative for them. IP 1,21,22,24 all mentioned a will to purchase eco-labeled food if it is on sale and that they purchase the alternatives that they can, such as onion, potato and apples (IP22).

IP 24 searches for and tries to purchase fairtrade products, since he cares about workers' rights and labor standards (IP24). What both IP22 and IP24 mentioned was the lack of sustainable food options in the supermarkets in Rosengård, especially concerning different eco-labeled food and locally produced food. Therefore, IP24 has started a project with city farms, where the members of his housing society can grow their own food. Lastly, IP13 was the only one who argued that his lack of motivation and lack of trust hindered him from purchasing sustainable food options. He feels as if many companies are greenwashing and only producing fake marketing to gain popularity. He could go to a local farm and purchase their meat or milk, but he will never purchase from Oatly since he does not trust their intentions (IP13)

5.2.2 Kirseberg food

Most interviewees had a good general awareness and knowledge of sustainable food options (IP 3,7,8,12,19). Only two perceived that a sustainable diet was about wasting less food (IP 5,19) and IP7 believed that the over consumption is the biggest problem:

This unsustainable lifestyle that we have doesn't only hurt the planet, it hurts ourselves. We suffer from welfare diseases. We eat unhealthy and too much, we work and stress too much and it makes us sick. My view on sustainable consumption is that I go to a secondhand store and I look for what I need and take what's available. I save time by not having to make decisions. Freedom of choice is a capitalistic construction (...) With dumpster diving I get what I find and I have to make the most of what I got, which allows me to be more creative. I want to hang out with people and have fun. That does not include consuming and choosing tons of options. (IP7)

Five out of seven considered local produce and eco-labeled food to be sustainable options (IP 3,5,8,12,19) and IP 3 and 5 stressed that purchasing locally is the most sustainable thing to do: "I purchase as much as I can from the smaller producers, such as Reko-ring, where there are no intermediaries, since I believe

micro producers are a lot more sustainable than the big producers" (IP 3). Both IP 3 and 7 stressed the importance of eating food that is in season. While only one mentioned a vegetarian diet as being more sustainable (IP19), some mentioned eating less meat (especially red meat) and consuming more vegetables (IP 8,12,19).

Only IP 19 perceived that her income hindered her ability to purchase sustainable food options: "Now when I am between jobs I always pick the cheapest alternative without checking an extra time. If I wouldn't always consider my economy, I could have made other choices like purchasing eco-labeled food that is a bit more expensive". She also perceived a vegetarian diet, both vegetables and vegan substitutes, to be more expensive. The rest of the interviewees believed that their incomes on the contrary enabled them to purchase sustainable options (IP 3,5,7,12), with IP7 arguing that the price difference between eco-labeled food and 'normal' options is just marginal. IP3 believes that she always has been eating sustainably independently of her income, and IP5 and 7 even considered that they were even more sustainable when they had less money as students and single mothers, arguing that they had to eat in relation to their resources.

IP3 argued that it was easier and cheaper to eat sustainably before in Malmö: "I used to always buy cheap local produce at the farmers market at Möllevångstorget. That was a great alternative, and it has changed. Today Möllevångstorget only offers imported produce, which is not as sustainable". Both IP 12 and 19 believed that there was a lack of local produce and eco-labeled food in the supermarket. Since IP19 does not have a driving license and considers it too time consuming to take the bus to other stores, she is forced to shop in the local supermarket and is thus hindered by their lack of supply. IP3 however argues that even though there is a lack of local produce in the stores in Kirseberg, she takes the time to purchase local produce from Eko-ring, who distribute their food on certain pick-up points once a week.

Further factors that hindered the interviewees from purchasing more sustainable food options was the difficulty to break away from old habits (IP8), a feeling of not always being able to make the right choice (IP7), the selfish motivation of eating the unsustainable option (dairy, meat, imported vegetables) since it tastes better (IP 3,5,12). A sense of distrust also affected certain interviewees. While IP3 does not trust large producers and thus tries to purchase from local farmers more often, others felt hindered by their sense of distrust. Both IP 3 and 12 felt a lack of trust towards the vegan options to meat and milk, considering them to be artificial. IP3 further argued that: "I stopped buying from Oatly the day they got bought up by the world's most disgusting venture capital corporation. I can consume based on principle and if I don't trust a company, I won't purchase anything from them" (IP3). In a similar line, both IP 5 and 12 had difficulties understanding where the emissions occur throughout the production and supply of food alternatives, which results in them not always knowing which option to pick. Lastly IP 19 admits that while she lacks knowledge about the different carbon impact of different foods, she does not seek the information since she does not want to feel worse about her consumption.

5.2.3 Nya Bellevue/Västra Hamnen food

The interviewees in Västra Hamnen and Nya Bellevue had a good general knowledge of sustainable food options. Many mentioned eating more local produce (IP 4,9,11,14,15,18,20,23), eco-labeled foods (IP 4,9,11,14,16,17,18) and less meat (IP 4,11,10,15,17). Many mentioned eating more fruit and vegetables (IP 5,18,23) with some even being ashamed of occasionally eating avocado (IP 4,10,14,15). IP9 and 10 mentioned purchasing the importance of purchasing eco-labeled coffee, milk, cacao, bananas and grape.

The interviewees did generally not perceive that their income hindered their ability to buy sustainable food options. On the contrary, many perceived that their income enabled them to choose sustainable alternatives (IP 4,9,10,11,14,1517,18). Many however still felt the effects of the inflation and rising food costs (IP 9,15,20). Both IP 14 and 16 have decreased their consumption of meat after the inflation. Some however admitted to still have a cheap side and if the price differences are absurd, they will abstain from purchasing eco-labeled or local products (IP 4,9,11,14,18). Regarding a sustainable diet (vegetarian and in season, IP 15 and 18 even found it to be cheaper than a 'normal diet': "One should eat more in season, since it is a lot cheaper. People could have been so much smarter if they just weren't so snobby with their food preferences" (IP15).

This is something that IP16 lives by. She cannot work due to her disease and has instead dedicated her time to creating groups on focusing circular economy and sustainability in Västra Hamnen. Even though she has such a low income, she does not perceive that her income hinders her ability to purchase sustainable food options - since she needs to eat well for her health. She has a cultivation lot in a park close by and can also grow certain vegetables at home. Secondly, since she eats such a simple diet consisting of eggs, oats, spinach, tomatoes, lentils and milk, she does not believe that her income impacts her ability. On the contrary she argues that:

I'm very well read up on the impact of food. Eco-labeled foods do not cost much more, particularly not in relation to the quality of the products, like non sprayed lentils that cost 1 kr more (..) While eco-labeled milk and eggs cost more, I still buy it since my heart takes over and I know the effects of not choosing the eco-labeled options. (IP16)

Regarding other factors, several brought up the difficulty of knowing which products truly are sustainable and which eco-labels to choose, considering the large number of certifications (IP14), which IP15 elaborated on further: "When it comes to food it's truly messy with different certificates and other aspects. There is no true overview. It is a combination between that there is so much to consider and that everything is rather complex. Even though I am interested it takes an enormous amount of time to be as good of a consumer as possible" (IP15).

Further, while IP9 perceived it to be easy to understand the ecological footprint of food options, many however raised a big lack of trust towards how sustainable the food options truly are, in particular concerning different eco-labeled foods and certifications (IP 11,15,14,16,20). IP 16 felt a distrust towards eco-labeled farms, as she doubted that they were recontroled once given their certification. IP 20, who even works in the food industry, perceived to have difficulties understanding the entire supply chain of products, and mistrusted the suppliers and subsidiaries. While some mentioned time hindering them from choosing sustainable options (IP 15,17,18,20), it was more so due to the time aspect of finding information about which products are better, as IP15 again said: "I would want a skull on the options that are bad, like with nicotine and smoking. If you buy this avocado, fine enjoy it, but you should feel bad. When you are in a store you are faced with micro decisions and thus need the information available in front of you". (IP15)

The interviewees generally did not complain about the supply of eco-labeled foods and vegetarian alternatives in their local supermarkets. What both IP10 and 16 mentioned however was the lack of local produce in the supermarkets and both mentioned a lack of knowledge of where to find good local produce. Lastly, while IP11 and 17 mentioned not choosing eco-labeled food because of its quality, IP 4 and 14 said that they did not stop eating meat and dairy products simply because of selfish reasons, which IP 11 elaborated on:

I want to be a conscious consumer based on my own preconditions. Now we're supposed to save electricity and I think it's positive that we are saving electricity, it's even good for my private economy. But that doesn't mean I want to walk around and be cold. The same applies to food. I know I could live a lot more sustainably, but I still want to enjoy life. And yes, it is quite unsympathetic, but now I'm being honest. (IP11)

5.3 Perceived ability to consume sustainably – clothing

5.3.1 Rosengård clothing

The general knowledge of what constitutes sustainable clothing options varied between the interviewees. IP 6,13 and 24 mentioned secondhand or inherited clothing and IP21 considered clothing made of natural materials. Otherwise, the knowledge of other sustainable alternatives was rather limited. To showcase this, IP 2 asked: "I buy clothes at Kappahl and H&M, is that good or not for the environment"? , while IP22 said: "I know clothes from secondhand are good, but I don't know anything more than that. I want to know what is good and not good, but I don't understand". This seemed to be a recurrent problem in Rosengård according to IP 1,6 and 22. IP 6 argued that both she and the members of her organization knowledge of how their clothes impact the environment. Both IP1 and 6 argued that

while lack of knowledge hinders them and others to consume sustainably in Rosengård, what hinders them the most is their incomes.

IP 1,2 and 22 all perceived that their income hindered their ability to purchase sustainable clothes (not including second hand) and that they always choose the cheapest alternative. If IP1, 21 and 22 would purchase something of high quality, it would have to be on sale and cannot happen often. IP 24 did not believe that his income hindered him, but that was also partly because he does not purchase clothing often. Furthermore, IP 24 argued that there was a lack of availability of sustainable clothing and secondhand stores (including furniture and equipment) in Rosengård:

When I've spoken to actors about secondhand stores in Rosengård and it's stigmatized. In areas like Rosengård people don't want to have secondhand, here you just purchase new things. But have the actors even tried to open stores here? No. I think it could work in the long run and inspire others (...) I think second hand sounds negative. There are stores called 'swipe shop' where one can exchange products, and I think this sounds a lot better for vulnerable areas. If you put a secondhand store in an economically vulnerable area it can have a bad impact. If you put a secondhand store in Möllan it is different." (IP24)

IP 22 partly agreed with this, arguing that there is a bit of a closed mentality in the area. Even though she and her friend have no problems buying secondhand and inheriting clothes, "people want to hide that they have little money and they are embarrassed to buy second hand. Children are ashamed to buy secondhand clothes and some adults refuse to inherit clothes, they are embarrassed" (IP22). These two perceptions are however contradictory to IP13 perceptions of it being shameful to waste money in the area. Lastly, both IP 13 and 14 mentioned considering social sustainability more and caring about "not giving money to dirty pockets" (IP13) and making sure that no one has suffered during the production (IP 24).

5.3.2 Kirseberg clothing

All respondents in Kirseberg second hand as the most sustainable option (IP 3,5,7,8,12,19). Only IP 12 mentioned purchasing clothing made of natural material such as wool and clothing of high quality. IP 5 and 12 perceived that their income enabled them to purchase sustainable clothing, however IP12 stressed that this was the case since she does not purchase clothes often. IP 3 felt that her income sometimes hinders her from purchasing sustainable clothing: "If one doesn't have much money one is forced to go to that damn H&M or Lindex, which isn't sustainable". While IP3 then chooses to purchase second hand instead, IP 19 turns to H&M and Shien, as she perceives that she cannot purchase eco-labeled clothing or high quality clothing.

While the incomes hindered a couple of respondents, a lack of knowledge of what constitutes 'sustainable clothing' hindered IP 5,7,12 and 19. Many felt a

want to make the correct decisions but simply did not know where to turn. IP5 argued that while it is easier to imagine transport chains of food production, it's more complicated for clothing:

Even when it comes to high quality clothing, how do you know it's better? What is the difference between the ecological cotton that Acne Studio and H&M are using? It's hard to get a good insight into what I am choosing when I think I'm choosing a 'good option'. (IP5)

IP12 was motivated to purchase sustainable clothing and tried to find information about what was correct, but simply found it to be too complicated. IP19 was aware that she lacked knowledge but made a conscious decision not to search for information since she did not want to know the impact of her clothing purchases. Consequently, IP19 mentioned Zara and Lindex as examples of sustainable options (two well-known fast-fashion brands). Moreover, many respondents felt a large sense of distrust towards the fashion industry. IP3, 5 and 7 were critical to ecolabeled clothing and the fashion industry's sustainability rapports, as they perceive it to only be false marketing.

Lastly, both IP5 and 19 felt that the time aspect hindered them to certain extents, as IP19 cannot find her sizes in second hand and thus must search for a long time for find something that fits, while IP5 feels that she would like to have more time to sew her own clothes. However, what they both mention hindered them the most is their motivation: "There is this irrational side that I can afford to purchase exactly what I want, that's connected to this inner desire and selfish side, even though I try to be an empathetic person. I have to work the most with this desire within clothing. (IP5)

5.3.3 Nya Bellevue/Västra Hamnen clothing

All respondents in Västra Hamnen/Nya Bellevue perceived secondhand clothing to be the most sustainable clothing option (IP4,9,10,11,15,16,17,18,20,23). A couple noted that purchasing high quality clothes that last a long time (IP 4,15,18,23), and eco-labeled clothing (IP 11, 20). IP 4,9,15 and 20 also mentioned clothing from companies branding themselves as 'sustainable' with a transparent chain of production, such as Patagonia or Nudie.

In general, the interviewees did not perceive their income to hinder them. IP 4,15,18 and 23 did not perceive their income to hinder from purchasing sustainable clothing at all. IP 11,14,17 and 20 did not perceive their income to hinder them to a large degree, but still felt that they could not purchase high quality clothing as frequently and still had an economical side. The only one who felt that her income impacted her ability was IP16, which is why she mostly only buys secondhand.

Moreover, many perceived to lack knowledge and trust in the fashion industry. IP 9,10,11,14 and 15 felt that they lacked knowledge regarding what

constitutes sustainable clothing and which companies they should purchase from, which IP 14 summarized well: "Unfortunately I don't consider which clothing is sustainable, it becomes too big for me. There are too many aspects to consider in order to make an informative choice." (IP14).

IP 9 compares her level of knowledge with the heating of the house: "My lack of knowledge hinders me mostly when buying clothes. We have an electricity company where you can see each month where the electricity comes from, and that feels good. It is not as easy with clothes". IP 10 argues that she does not know where the clothes are produced, and even if companies would say that they are using ecological cotton, she does not trust them. IP 16 elaborated on this, putting in question the company's statement of using ecological cotton. She does not believe that they have grown ecological cotton on soil that needs to be free from PFAS for at least 5-10 years, which according to her is what is needed to be given that certification. IP 14 and 17 agreed, as they raised a concern about companies 'greenwashing', which IP 14 elaborate on: "In the end companies are usually not as good as you thought. It's a big industry which I can't impact. I am a political scientist and I know a lot, but I'm also cynical and I'm unsure about my ability to impact."

Some of the interviewees were however aware that their lack of knowledge partly is based on their lack of motivation to seek more information. Both IP 11 and 14 argued that if they wanted to gather information about how to consume clothes sustainably, they would know where to turn. However, they are not motivated. IP 15 and 20 however are more interested and have found companies and stores which sell eco-labeled clothing, where they often go. Lastly, a couple of interviewees mentioned time and lack of availability to hinder them. Many perceived that the availability of sustainable clothing options was rather weak, meaning that if one had to make a quick purchase, they would turn to a fast fashion chain where they could find what they needed quickly (IP 4,9,11,15,17,18), especially when it came to purchasing clothes for their children (IP 4,15). While IP 20 complained about the lack of physical stores selling eco-labeled clothing produced in Europe, IP 11 and 18 complained about the difficulties finding something of their taste in a secondhand store, and IP 11 even complained about not finding her sizes in many eco-labeled collections.

5.4 Perceived ability in comparison to other neighborhoods and main barriers

The respondents were asked to reflect how they perceived that their ability to consume sustainably differed from citizens living in other neighborhoods in Malmö. In Rosengård, the answers varied. IP 13 believed that in Rosengård there is a larger focus on not wasting anything and consuming less, as a result both of

many citizens' religion and economic situation (IP13). IP 24 believed that there is a lack of carpools, secondhand stores and eco-labeled products in Rosengård, which he did not perceive was a problem in other areas in the city of Malmö. IP 6 and 21 believed that there is a large lack of knowledge which hinders a lot of the citizens, while IP 1 and 22 believe that citizens living in other areas have higher incomes and thus better abilities to purchase eco-labeled products.

In Kirseberg a majority of the respondents believed to have an advantage in comparison to many others (IP 3,5,7,12). IP 5 and 7 believed that they had high enough incomes to purchase sustainable options and enough knowledge to make conscious decisions:

My household has an income above average in Malmö. I have all the knowledge one needs about consuming sustainably, I know where to turn to consume sustainably and I have the time for it. Thus I have better opportunities than many in Malmö. (IP 7)

What IP 12 and 19 agreed on was that there is a lack of eco-labeled food and local produce in the area.

Lastly, in Västra Hamnen/Nya Bellevue many respondents mentioned their advantage of having quite a lot of knowledge and the ability to find information (IP 9,10,15,17). IP 9 and 16 mentioned having access to cultivation plots in or close to their home, which everyone does not have. IP 4 and 9 also mentioned the ability for their families to bike to work and school, and IP 14 the ability to use carpools. IP 4,10,11,15,17,18 all were aware that their incomes gave them better abilities than many others in Malmö as well. Lastly, IP 10 and 15 raised the importance of the norms in the neighborhood and among their friend groups, where there generally is a large focus on being sustainable. There are many Teslas in the neighborhood and being sustainable has become prestigious. IP 15 was also aware that he could decide over his consumption of electricity, since he can charge his EV and could install solar cells, which everyone in Malmö cannot.

6 Analysis and discussion

In this chapter I will answer my three research questions: How and to what degree does income impact one's perceived ability to become a sustainable consumer? What other factors impact people's perceived abilities and how did the perceived abilities differ between the three neighborhoods? I will do this by analyzing and discussing the results based on the theory and previous research presented above.

6.1 How and to what degree does income impact one's perceived ability to become a sustainable consumer?

The degree to which income hindered the respondents perceived ability to become sustainable consumers varied between the sustainable consumption categories. Joshi & Rahman (2011, p.134) argued that if the price of a sustainable product is more expensive than expected, it will most likely negatively affect the purchase intention. One goal of Malmö's Environmental Programme is that all citizens should have access to public transportation, which includes pricing the tickets in a way that all citizens can afford it (Miljöförvaltningen, 2021, p.22). This can partly explain why most respondents did not perceive that their income hindered their ability to use public transportation (only IP 16 perceived her income as hindering her). However, regarding EV:s many respondents (especially low and middle income takers) did perceive that their incomes hindered their ability to purchase or lease EV:s, and only a few respondents felt that their incomes enabled them. This is a clear example of when the price acts as the biggest barrier (Joshi & Rahman, 2015, p.134; Nath & Agrawal, 2022). This however is not a surprising result, since EV:s tends to be expensive.

Concerning transportation to vacation only a few respondents from all neighborhoods perceived that their income hindered them from choosing sustainable transportation alternatives. In those cases, the respondents decided to fly instead of taking the train since it was the cheapest alternative. There examples are a result of the prices being more expensive than expected (Joshi & Rahman, 2011, p.134). Many respondents noted that trains were more expensive than flights, but the main reason why they chose to fly was not because of their income, but because of time and comfort (this will be elaborate on further down). Two interviewees (IP 3, 12) mentioned time being related to income - as it would be too expensive to take extra vacation days off in order to take the train.

Regarding food, it was clear that, generally, the individuals with lower incomes perceived that their incomes hindered their ability to consume sustainably. Most of the respondents in Rosengård perceived that their incomes hindered their abilities, while it only hindered one in Kirseberg and none in Nya Bellevue/Västra Hamnen. While some raised a desire to purchase more eco-labeled alternatives, they could only do it if it was on sale. These results are in line with Diekmann & Franzen's (1999) argument that individuals who do not adopt a sustainable behavior does not have to be a result of lack of environmental concern but is a result of scarce economic resources. It was clear that income acted as the biggest barrier for food in comparison to the other consumption categories. This can be the case since food is continuous expenses where one as a consumer is forced to consume and thus is more sensitive to the prices. On the contrary, clothing is not something one has to purchase as often, which might be one of the reasons why people did not perceive that their income hindered them to the same extent.

In comparison, most of the individuals in Kirseberg and Västra Hamnen/Nya Bellevue perceived that their incomes enabled them to consume sustainable food, which is not surprising as individuals with higher income should not consider the price of sustainable products as high as others with lower incomes, and thus should not be as affected by the price (Barkman, 2014, p.70). It can also potentially be a result of the respondents perceiving that the prices were in line with their expectations (Joshi & Rahman, 2015, p.134), which also can explain why the respondents argued that once the prices were absurd (not expected) then the price acts as a major barrier, independent of the level of income.

Lastly, regarding sustainable clothing a majority in Rosengård perceived that their income was their main barrier, while half of the respondents felt hindered by their income in Kirseberg and only a few in Nya Bellevue/Västra Hamnen.

Most low-income takers perceived that their incomes hindered their abilities to purchase sustainable clothing due to the prices, and instead they always chose the cheapest clothing alternative, no matter the impact of the product, which is in line with Barkman's (2014) and Nath & Agrawal's (2022) predictions. However, since one does not need to purchase clothing as often, many respondents (some from Rosengård, many from the other neighborhoods) did not perceive that their income hindered them to a large degree, since they could save up and only purchase sustainable options occasionally.

As we can see, income did certainly hinder people's perceived abilities to become sustainable consumers in the sense that people did not perceive to afford the sustainable alternatives. It was clear that, generally, the lower incomes the respondents had, the more their income hindered them. However, considering the large portion of respondents who did not find that their income hindered them which other factors then hindered them and did they relate to income or not?

6.2 What other factors hinder people's perceived abilities?

6.2.1 Infrastructure and availability of sustainable alternatives

Middlemiss (2010) argued that infrastructural capacity is a central capacity that individual needs to consume sustainably, and many researchers argue that a lot of sustainable consumption can only take place if the necessary infrastructure is available (Kollmuss & Agyeman, 2002, p.249; Stockholm Environmental Institute, 2022), like public transportation, recycling or EV-charging stations (Nath & Agrawal, 2022). The public transportation and bicycle infrastructure were good example of when the widespread availability of infrastructure enabled all respondents to use the sustainable services and where all respondents, independent of the level of income or neighborhood, perceived to have equally good access to the infrastructure and where the lack of availability did not hinder them (important to note that all neighborhoods are located in the city of Malmö and not in the countryside, which would most likely have changed the answers). While some found it easy to commute by public transportation to Lund, others found it too time consuming, which resulted in them taking the car instead. None however mentioned this being a result of faulting public transportation infrastructure and the problem was not related to a certain neighborhood or income. Instead, they felt hindered by their time and comfort (elaborated on in motivation section).

There were however several examples of when lack of infrastructure negatively impacted the perceived ability to access sustainable options (Middlemiss, 2010). In all examples it was clear than more affluent neighborhoods had better perceived availability of infrastructure and sustainable alternatives in comparison to the less affluent neighborhoods, which is in line with Khan et al. (2020, p.4) and Bibri & Krogstie's (2020) findings that affluent neighborhoods usually are offered more green infrastructure.

For example, the perceived supply of EV-charging stations differed a lot between the neighborhoods. While the respondents in Nya Bellevue/Västra Hamnen and Kirseberg mentioned having a rich supply of EV-charging stations, the opposite was the case for the respondents in Rosengård. Moreover, while the respondents living in houses in Nya Bellevue/Västra Hamnen and Kirseberg had the opportunity to charge their EV:s on their property, this was not the case for the respondents in Rosengård, who all lived in apartments and whose housing society did not provide charging stations (IP 1,13,24). For the one respondent in Rosengård whose income allowed him to purchase an EV (IP 13), a why he did not was because of the lack of charging stations in the area, which emphasizes the impact that lack of infrastructure can have on the intended purchase behavior (Nath & Agrawal, 2022).

The same applied to the supply of carpools. While certain respondents in Nya Bellevue/Västra Hamnen and Kirseberg had the opportunity to not own a car and

only rely on carpools (IP 7,14) this was not the case in Rosengård due to the lack of carpools in the (IP 24). Therefore, none of the respondents in Rosengård used carpools – emphasizing infrastructural barrier.

IP 1,13 and 24 believed that no companies wanted to place carpools or EVcharging stations in Rosengård because of its low socioeconomic. One could argue that income indirectly impacted the respondents perceived abilities to consume sustainably (IP 1,13,24) through the infrastructure. Income often dictates in which socio-economic neighborhood one lives in - and therefore if there is a lack of infrastructure or availability of sustainable alternatives in poor socio-economic neighborhoods but not in affluent neighborhoods - then income does in fact impact the respondents indirectly through infrastructure.

Regarding transportation to vacation, a couple of respondents in Kirseberg and Nya Bellevue/Västra Hamnen perceived the faulting European train system as being a bigger barrier than their income, as it not only was complicated to purchase train tickets, it was also too time consuming due to the bad connections and slow trains. However, in this case the lack of sufficient infrastructure was not impacting one socioeconomic group's perceived ability harder than the other. Once again it is clear that if there is a lack of infrastructure, it can outweigh most barriers and motivations (Sheoran & Kumar, 2020).

There were also inequalities in perceived distributions of sustainable food alternatives between the neighborhoods, where there were more sustainable options in the more affluent the areas. I however believe that this more is to blame on the market rather than the municipality, since private grocery stores can establish themselves wherever they want to independent of the municipality, thus in this case the differences in supply of sustainable alternatives were not the fault of the municipality (Khan et al., 2020, p.4).

There are many ways in which this inequality of sustainable food supply can relate to income. For example, the respondents with the lowest incomes did not have driving licenses (IP 2,16,22) and both IP 1 and 6 mentioned that many individuals in Rosengård have difficulties getting a driving license due to the cost and the language requirements. Consequently, there is a bigger risk that these individuals cannot access specific supermarkets further away and instead are dependent on the supply in their local supermarkets - which according to the respondents were insufficient (similar for IP 19 in Kirseberg). Thus, in this regard, income can impact the perceived ability to purchase sustainable food options. However, while several respondents perceived that there was a lack of sustainable food options in their neighborhood, only IP 19 and 24 raised the perceived inequality aspect. When it came to local produce however, respondents from all neighborhoods complained about the lack of supply, both in their local supermarkets and in markets across the city and perceived it to be one of the biggest barriers to their ability to purchase local produce, which is in line with Barkman's (2014:68) emphasize on the importance of available infrastructure.

Concerning the availability of sustainable clothing alternatives, IP 24 mentioned that there were no secondhand stores in Rosengård, which he believed was a result of the stigmatization of the concept of second hand in the area. IP 24 however was the only respondent in Rosengård who perceived this. No respondents

in the other neighborhoods mentioned a lack of sustainable clothing alternatives in their neighborhood as hindering them. In comparison to the other two consumption categories, there seemed to be the least amount of inequality of supply of sustainable products between the neighborhoods when it came to clothing. One could argue that this was the case since many people purchase clothing online or in the city center, independent of where they live. However, a couple of respondents in Kirseberg and several respondents in Västra Hamnen/Nya Bellevue felt that the lack of availability of sustainable clothing options in general was a major barrier for their abilities to purchase those products. Many times, the difficulty to find sustainable options in combination with lack of time hindered the respondents (IP 4,9,11,15,17,18), which ones again shows the hindering impact that lack of supply can have (Barkman, 2014; Middlemiss, 2010; Joshi & Rahman (2015, p.134; Nath & Agrawal, 2022; Sheoran & Kumar, 2020; Tan et al., 2016).

6.2.2 Knowledge

As seen in previous research and as shown in the results, lack of sufficient income, infrastructure and availability of sustainable alternatives can act as barriers in different circumstances. What is even more clear is that lack of basic environmental awareness is the biggest barrier of them all. As Kollmuss & Agyeman (2002, p.250) argued, "people have to have basic knowledge about environmental issues and the behaviors that cause them in order to act pro-environmentally in a conscious way".

Concerning transportation, the general knowledge of sustainable transport alternatives was rather good in all three neighborhoods and it was clear that transportation was the one consumption category where people believed to have the most knowledge and where the knowledge did not hinder them. The only times it hindered people was when they had a lack of trust in how sustainable electricity (for EV:s and trains) really are (IP 4,11,15). However, regarding food, respondents from all three neighborhoods felt that their lack of knowledge hindered them however the way in which it hindered the respondents varied. In Rosengård, the general problem was lack of basic knowledge of what sustainable food options exist and how the food production impacts the environment. IP 6 and 24 argued that they themselves lack knowledge and that many in the neighborhood lacked knowledge, which was shown by IP 2 and 22, but also IP 19 living in Kirseberg. For the rest of the respondents, especially in Kirseberg and Västra Hamnen/Nya Bellevue, lack of knowledge was more about difficulties in knowing which sustainable options were the most climate friendly out of all the alternatives, as well as having difficulties sorting between different eco-labels and feeling a lack of trust to the sustainability claims.

What was clear was that those who had the most motivation to purchase ecolabeled food and local produce did not perceive to lack knowledge to the same extent. Instead, they had gathered knowledge of how to eat and where to access sustainable food options - like IP 3 finding Reko-ring. Moreover, neither IP 3, 7 nor 16 perceived the sustainable food options to be much more expensive either. This was particular interesting in the case of IP 16 who had the lowest incomes of all, and still did not perceive that her income hindered her in regards to food, in comparison to the rest of the low income takers who all perceived that their income was the main barrier. Here it then became evident that even though sustainable vegetarian and vegan diets are said to be 22-34% cheaper than our current diets (Springmann et al., 2021), since the respondents did not perceive the opportunity as open (Mcadam et al., 2001), they did act upon it. In this case it showed that if one had a low income but enough knowledge about sustainable food options, income was not a hindrance (IP 16), but if one did not have enough knowledge, then income could be one of the biggest barriers (1,2,6,22), especially within food consumption.

However, it is important to note that many eco-labeled options as well as meat and dairy products produced in Sweden most often are more expensive (Jordbruksverket, n.d.). Since both IP 3 and 16 eat more food in season and adjust their diet depending on what eco-labeled food is available at good prices, then the level of motivation also plays a big role. As IP 15 argued, if we were not so "snobby" with our food preferences, it would not be as expensive.

In Kirseberg and Västra Hamnen/Nya Bellevue many citizens felt that the combination of lack of trust, knowledge and information hindered them. At least one respondent from each neighborhood felt a lack of trust and a sense of greenwashing hindering them, as they questioned how sustainable options truly were (IP 3,13,12). This shows the negative impact greenwashing can have on intended sustainable purchase behavior (Sheoran & Kumar, 2020, p.14; Joshi & Rahman, 2015).

Out of all three consumption categories, the lack of knowledge was the biggest barrier for clothing. Again, the level of knowledge varied between the neighborhoods and the way it expressed itself differed between the neighborhoods and income takers. In Rosengård four of the respondents did not know which sustainable alternatives existed (except for second hand) and the environmental impact of fast fashion (IP 2,6,21,22). While there were respondents in Kirseberg and Nya Bellevue and Västra Hamnen that also lacked basic knowledge of what sustainable clothing means (IP 14,19), many felt that it was difficult to truly know what sustainable clothing consisted of, where to find the information and which brands to trust (IP 5,7,12,19, 9,10,11,14 and 15). Many perceived that it was too complicated to understand the production chain and grasp its environmental impact (IP 5,12,14). A sense of lack of trust also hindered individuals in both Kirseberg and Västra Hamnen/Nya Bellevue, where many questioned companies' eco-labeled clothing (IP 3,5,7, 10,14,16,17). Once again, this shows the negative impact that greenwashing and lack of trust can have on intended purchase behavior (Joshi & Rahman, 2015).

6.2.3 Motivation

As Barkman (2014, p.60) argued, the relationship between motivation and resources is not clear. While some argue that resources first become relevant once one has the motivation to engage (and if one does not have the resources the opportunities are not even acknowledged), others argue that high motivation can outweigh lack of resources, as one seeks the resources necessary for engagement no matter the cost. In the results we saw both examples. As discussed previously, while IP 16 had scarce economic resources, she still did not perceive her income as a hindrance (especially regarding food) as she found the resources necessary to engage. The same applied to IP 3 who found alternative ways to purchase local produce despite the lack of availability in the area. However, it was also evident that for the respondents who believed that their income swere their biggest barrier to consume sustainably, other barriers apart from income and lack of knowledge were not mentioned or perceived - showing that lack of resources can result in opportunities not being acknowledged (Barkman, 2014, p.60).

Kollmuss & Agyeman (2002, p.250) argued that selective motives (e.g., drive to work) usually outweigh primary motives (e.g., desire to live sustainably). This was usually the case for the respondents who argued that their motivation hindered them. It was most evident for transport, especially vacation abroad, where individuals desire for comfort and time outweighed their environmental beliefs. However due to the low cost (time and money wise) for public transportation in Malmö, selective motives did not hinder the individuals to the same degree in that category. Selective motives usually also hindered individuals' perceived abilities within food and clothing, as their desire to fulfill personal needs (taste of food or clothing) and the lack of motivation to spend time on finding sustainable alternatives, usually outweighed their environmental beliefs, which shows individuals not being ready to prioritize sustainable development over their personal pleasure (Wijekoon & Sabri, 2021). Here the factor of time also comes in. Generally, while many complained that lack of time hindered them, one could argue that desire to save time can be a selective motive, and if the primary motive was large enough, time was not considered as a barrier. We saw examples of this for IP 3 who took the time to drive to pick up points every week to purchase local produce, IP 24 who spent time trying to create carpools and cultivation lots in Rosengård, and IP 10 who biked from Malmö to Lund, in comparison to IP 5, 8 and 11 who all argued that they did not even have time to go by public transportation to Lund.

There were however a few cases where the primary motivations outweighed the selective motivations (IP7,13,16). IP 13's primary motive is to work with social sustainability and human rights. He however strongly believed that the focus of environmental sustainability had taken over, and as a reaction to that, he decided not to purchase anything that was only eco-labeled but not fair-trade. In his case, his primary motive overruled all other selective motives. For IP 7 and 16 their primary motive (desire to live a sustainable life) outweighed their selective motives, and IP 7 did not perceive that anything hindered her ability to consume sustainably. Lastly, it was clear that lack of motivation, generally, was a bigger barrier for high-and middle-income takers than it was for low-income takers As Barkman (2014,

p.60) argued, if one does not have sufficient resources, the opportunities and motivations might not even appear. However again, if the motivation is strong enough, it can outweigh weak economic and infrastructural resources (if the price differences are not absurd).

6.3 How does the perceived ability differ between the neighborhoods?

There were clear differences in perceived ability to consume sustainably between the three different socioeconomic neighborhoods. This can be explained by Middlemiss' (2010) contextual footprint - where she emphasizes people's different abilities (and responsibilities) to consume sustainably based on their organizational, cultural, infrastructural and personal capacities.

In Rosengård, most respondents perceived to have less ability to consume sustainably in comparison to other neighborhoods in Malmö. While the answers varied to certain extents, most respondents perceived that their neighborhood generally lacked sufficient environmental knowledge and financial resources (personal capacity), as well as availability of sustainable products/services such as EV-charging stations, food options and carpools (infrastructural capacity), in comparison to other neighborhoods. There were however few complaints about public transport, bicycle lanes or recycling stations, which shows that Malmö Municipality and Region Skåne has succeeded in providing green infrastructure, while the market has not.

Moreover, IP 13 was the only one who mentioned that there is a different mentality in Rosengård (cultural capacity) where there is a larger focus on not wasting in Rosengård. On the contrary in Kirseberg and Västra Hamnen/Nya Bellevue most of the respondents believed that they had sufficient abilities to become sustainable consumers if they wanted to (income, knowledge, availability) and there were only a few complaints about availability of products.

All main perceived barriers to sustainable consumption were based on personal capacities. In Rosengård 4/6 perceived that their income was the biggest general barrier, while motivation was the main hindrance for the other two (who had the highest incomes in the neighborhood). In Kirseberg and Västra Hamnen/Nya Bellevue only one respondent from each neighborhood mentioned their income as the main barrier (IP 16,19) while the rest mainly felt hindered by time/motivation, and some nothing at all.

7 Concluding remarks

To conclude, how and to what degree does income impact one's perceived ability to become a sustainable consumer? Generally, the lower level of income an individual had, the more the income hindered their perceived abilities to become a sustainable consumer. The low level of income became a barrier in the sense that the individuals did not perceive that they could afford to purchase certain sustainable alternatives for transportation, food and clothing. The higher incomes the individuals had, the less their income hindered their perceived ability to become sustainable consumers, as they believed that they could afford to purchase the sustainable alternatives. Generally, the more expensive the sustainable alternative was, the more the level of income played a role in hindering the individuals, which is not surprising. The degree to which the income hindered individuals however differed between the three consumption categories (most within food), but also depending on the price of the product (public transportation vs EV) as well as on the frequency which one needs to purchase or use the product/service (e.g. food vs vacation abroad).

While this relationship seems quite simple, higher income \rightarrow larger perceived ability to consume sustainably, it proved to be more complex than that, especially once other variables were considered. This leads us to the second question: What other factors hinder people's perceived abilities to become sustainable consumers? The factor that is directly linked to income and that had a large impact on people's perceived abilities to become sustainable consumers was the availability of infrastructure and sustainable products and services. Here it was clear that the more affluent the neighborhood, the better the perceived supply of green infrastructure and products. Thus, in less affluent neighborhoods, individuals' incomes did not only impact their perceived ability to purchase sustainable products/services due to their low incomes, but there was also a perceived lack of sustainable products/services in the less affluent neighborhood. What was clear was that when the municipality or region controlled the infrastructure (public transportation, bicycle lanes, recycling), there were no significant perceived inequalities of supply between the neighborhoods. However, when the free market controlled the supply of infrastructure and products/services (EV-charging stations, supermarkets, clothing stores), there were large inequalities of supply between the different socioeconomic neighborhoods, where the least affluent neighborhood has the lowest perceived supply of sustainable options.

Another very strong barrier was the level of knowledge. If one is not aware of the sustainable alternatives or the negative impact of one's consumption, one cannot reach the stage where the level of income hinders one's perceived ability. Thus, if the level of knowledge is low enough, the level of income does not have any significance. However, it could also go the other way around. If one had a very high level of knowledge, it could undermine the hindering impact of low incomes on the perceived ability to consume sustainably. This relationship was clear in the results, especially regarding food. For low-income takers with weak levels of knowledge, income was the biggest barrier, in comparison to low-income takers with high levels of knowledge, where income was not the biggest barrier. It is however important to note that this can only be the case if the price differences are rather small (e.g. eco-labeled) and not where the price differences are big (e.g. public transport vs EV).

The same relationship existed between income, knowledge and availability of infrastructure and sustainable products/services. Firstly, if one did not have enough knowledge about the available services (e.g. carpool), the level of income did not impact the perceived ability. However, if one had a great level of knowledge about where and how to access the sustainable products and services, it outweighed the lack of supply of sustainable alternatives and the level of income did not impact the perceived ability to the same degree.

In the situations where knowledge overruled the level of income, motivation played a significant role. In order to gather a high level of knowledge, one needs to have a high level of motivation and desire to learn. Thus, if the level of motivation and knowledge was high enough, the level of income did not impact people's perceived ability to the same extent. At the same time, if the level of motivation was low enough, the level of income did not matter as well, as one would not have purchased the sustainable alternative either way. These were however the extreme cases. In many cases individuals had the motivation to become sustainable consumers, but not sufficient incomes nor availability of sustainable alternatives. In these cases, the level of income overruled the level of motivation, where lower incomes generally meant lower perceived ability to purchase sustainable alternatives. Lastly, for the individuals who had high levels of income and availability of sustainable products/services, it was most often a sense of lack of knowledge and trust, or selective motives that hindered their ability to become sustainable consumers.

Lastly, how does the perceived ability to consume sustainably differ between the neighborhoods? The less affluent the neighborhood, the more the level of income hindered the perceived ability to consume sustainably. In Rosengård the respondents felt that they had weaker capacities to become sustainable consumers in comparison to other neighborhoods in Malmö. Not surprisingly then, the respondents in Kirseberg and Västra Hamnen/Nya Bellevue perceived to have good capacities (both personal and infrastructural) in comparison to other neighborhoods (only complaint concerned about of eco-labeled food in Kirseberg). While income was perceived as the main hindering barrier in Rosengård, lack of trust, knowledge or motivation were the main perceived hindered barriers in Kirseberg and Västra Hamnen/Nya Bellevue.

To conclude, as Middlemiss (2010) argued, individuals with higher contextual capacities have a larger responsibility to reduce their carbon footprint than individuals with lower contextual capacities. As seen in the result, higher income takers living in affluent neighborhoods had higher perceived personal- and infrastructural capacities in comparison to other neighborhoods. The more affluent

the neighborhood, the better capacities they had to become sustainable consumers. Simultaneously, as shown by Ivanova & Wood (2020), Nässén (2014), Swedish Environmental Institute (2022) the most affluent individuals usually also had the highest levels of emissions. Therefore, generally, the most affluent individuals usually have the most capacities to consume sustainably, which often times is not the. Moreover, it shows the length in which purchasing sustainable products can take us – which is not sufficient. While it is essential to purchase products/services that do not harm the environment, what is most important is that we drastically reduce our consumption levels. Since high income-takers generally have the best capacities to reduce their emissions, while also being the ones who emit the most, they should carry the largest responsibility on the individual level.

Considering the limitations to the material and methods of the research, these results are not generalizable. However, the results still allowed for interesting insights to how income and other variables can impact the perceived ability to consume sustainably, and I strongly call for further research to study the relationship between these variables using different methodologies.

8 References

8.1 References: Literature

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8.2 References: Interviewees

Rosengård

Interviewee 1 – (1/12/22), Rosengård, male, rental apartment, low income) Interviewee 2 – (2/12/22), Rosengård, female, rental apartment, low income) Interviewee 6 – (5/12/22), Rosengård, female, lower middle income) Interviewee 13 – (7/12/22), Rosengård, male, rental apartment, high income) Interviewee 21 – (9/12/22), Rosengård, female, co-opt, lower middle income) Interviewee 22 – (13/12/22), Rosengård, female, rental apartment, lower income) Interviewee 24 – (16/12/22), Rosengård, male, co-opt apartment, middle income)

Kirseberg

Interviewee 3 – (1/12/22), Kirseberg, female, house, middle income) Interviewee 5 – (5/12/22), Kirseberg, female, house, high income) Interviewee 7 – (5/12/22), Kirseberg, female, house, middle income) Interviewee 8 – (5/12/22), Kirseberg, female, co-opt apartment, middle income) Interviewee 12 – (6/12/22), Kirseberg, female, co-opt apartment, middle income) Interviewee 19 – (9/12/22), Kirseberg, female, co-opt apartment, low income)

Nya Bellevue/Västra Hamnen

Interviewee 4 – (3/12/22), Nya Bellevue, male, house, high income) Interviewee 9 – (6/12/22), Nya Bellevue, female, house, high income) Interviewee 10 – (6/12/22), Nya Bellevue, female, house, middle income) Interviewee 11 – (7/12/22), Nya Bellevue, female, house, upper middle income)

- Interviewee 14 (7/12/22, Västra Hamnen, male, rental apartment, upper middle income)
- Interviewee 15 (7/12/22), Nya Bellevue, male, house, high income)
- Interviewee 16 (7/12/22), Västra Hamnen, female, rental apartment, low income)
- Interviewee 17 (7/12/22, Västra Hamnen, female, co-opt apartment, middle income)
- Interviewee 18 (8/12/22, Västra Hamnen, female, rental apartment, high income)
- Interviewee 20 (9/12/22), Nya Bellevue, female, house, middle income)
- Interviewee 23 (15/12/22 Västra Hamnen, female, co-opt apartment, high income)

9 Appendix 1: Interview guide in Swedish

Inledande frågor

- 1. Vilka 3 politiska frågor är viktigast för dig och varför?
- 2. Vad innebär miljömässigt hållbar konsumtion för dig?
- 3. Vilken faktor skulle du säga är den som hindrar din möjlighet mest från från att konsumera hållbart?
- 4. Hur upplever du att din inkomst generellt påverkar din möjlighet att konsumera hållbart?
- 5. Hur upplever du att dina möjligheter att konsumera hållbart skiljer sig från andra Malmöbors?

Transport

- 1. Vad tänker ni är exempel på hållbara transportval i er vardag?
- 2. Hur upplever du att din inkomst påverkar din möjlighet att välja miljösmarta transportalternativ i din vardag?
- 3. Upplever du att du har möjligheten att:
 - Köpa/leasa elbil
 - Åka kollektivt till skolan/jobbet om du vill?
 - Cykla eller gå till jobbet/skolan?
- 4. Hur upplever du att din inkomst påverkar din möjlighet att välja miljösmarta transportalternativ i din semester?
- 5. Kan du beskriva en situation där du valde mellan en icke miljövänlig/miljövänligt val av transport där du i slutändan valde det icke miljövänliga valet?

Livsmedel

- 1. Vad tänker ni är exempel hållbara livsmedelsval?
- 2. Vad tänker du är en hållbar diet?
- 3. Hur upplever du att din inkomst påverkar din möjlighet att välja miljövänliga livsmedel?
- 4. Upplever du att du har möjligheten att köpa:
 - Växtbaserade alternativ till mejeriprodukter?
 - Växtbaserade alternativ till kött?
 - Lokalproducerat mat (frukt, grönt, kött, etc)?
 - Kravmärkta och ekologisk certifierade varor?
- 5. Kan du beskriva en situation där du valde mellan en icke miljövänlig/miljövänligt matvara där du i slutändan valde den icke miljövänliga varan?

Kläder

1. Vad tänker ni är exempel på hållbara klädselalternativ?

- 2. Hur upplever du att din inkomst påverkar din möjlighet att välja miljövänliga kläder?
- 3. Upplever du att du har möjligheten att köpa:
 - Köpa kläder i butik istället för online?
 - Kläder av hög kvalitet?
 - Kläder tillverkade i Sverige/Europa?
 - Miljömärkta kläder?
- 4. Kan du beskriva en situation där du valde mellan ett icke miljövänligt/miljövänligt klädesplagg där du i slutändan valde det icke miljövänliga valet?

Andra faktorer

- 1. Till vilken grad (1-10) hindrar dessa faktorer dig från att konsumera hållbart?
 - Tid:
 - Kunskap:
 - Brist på förtroende:
 - Tillgänglighet av hållbara alternativ:
 - Infrastruktur:
- 2. Hur upplever du dessa faktorer i relation till inkomst? Är de mer eller mindre viktiga?

Avslutande frågor

- 1. För att summera, vilken faktor upplever du är det största hindret till hållbar konsumtion?
- 2. Var i Malmö bor du? Bor du i en hyresrätt, bostadsrätt eller hus?
- 3. Vart ligger din individuella förvärvsinkomst mellan?
 - 0 15 000
 - 15 000 30 000
 - 30 000 45 000
 - 45 000 60 000
 - $-60\ 000 75\ 000$
 - 75 000 90 000
 - 90 000 -100 000

10 Appendix 2: Interview guide in English

Introductory questions

- 1. Which three political questions are the most important for you and why?
- 2. What does sustainable consumption mean for you?
- 3. Which factor would say is the one that hinders you the most from consuming sustainably?
- 4. How do you perceive that your income generally impacts your ability to consume sustainably?
- 5. How do you perceive that your abilities to become a sustainable consumer differ to others living in Malmö?

Transportation

- 1. What do you think are examples of sustainable transportation alternatives for your everyday life?
- 2. How do you perceive that your income impacts your ability to choose sustainable transportation alternatives in your everyday life?
- 3. Do you perceive to have the ability to:
 - a. Buy or lease an EV or hybrid car?
 - b. Use public transportation to school/work/leisure activities?
 - c. Bike/walk to work/school/leisure activities?
- 4. How do you perceive that your income impacts your ability to chose sustainable transportation alternatives to your vacation?
- 5. Can you describe a situation where you chose between a sustainable and non-sustainable alternative of transport where you ended up not choosing the sustainable alternative?

Food

- 1. What do you think are examples of sustainable food products?
- 2. What do you think are examples of sustainable diets?
- 3. How do you perceive that your income impacts your ability to choose sustainable food alternatives?
- 4. Do you perceive to have the ability to purchase:
 - a. Plant-based alternatives to meat?
 - b. Plant-based alternatives to dairy?
 - c. Local produce (vegetables, fruits, meat, fish, etc.)
 - d. Eco-labeled products?
- 5. Can you describe a situation where you choose between a sustainable and non-sustainable alternative of food where you ended up not choosing the sustainable alternative?

Clothing

- 1. What do you think are examples of sustainable clothing alternatives?
- 2. How do you perceive that your income impacts your ability to choose sustainable clothing alternatives?
- 3. Do you perceive to have the ability to purchase:
 - a. Clothing of high quality?
 - b. Clothing ethically sourced in Sweden/Europe?
 - c. Eco-labeled clothing?
- 4. Can you describe a situation where you choose between a sustainable and non-sustainable alternative of clothing where you ended up not choosing the sustainable alternative?

Other factors

- 1. To what degree (1-10) do you perceive that these factors hinder you from consuming sustainably?
 - Time:
 - Knowledge:
 - Lack of faith:
 - Avaliability to sustainable products:
 - Infrastructure:
- 2. How do perceive these factors in relation to income? Are they more or less important?

Concluding questions

- 1. To conclude, which factor do you perceive hinders your ability the most from consuming sustainably?
- 2. Where in Malmö do you live? Do you live in an rental apartment, cooperative apartment or house?
- 3. In between which span is your individual net income per month?
 - 0 15 000
 - 15 000 30 000
 - 30 000 45 000
 - 45 000 60 000
 - 60 000 75 000
 - 75 000 90 000
 - 90 000 -100 000