Final Assignment: Logic Model

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Introduction

During the summer, temperature differences between outdoor and indoor environments, particularly in spaces with air conditioning (such as grocery stores), can affect how elderly individuals experience and respond to their surroundings. Perceptions of comfort, safety, and health risks associated with these temperature variations may influence their behavior, including decisions about when and how to shop during extreme summer days. Understanding and managing their shopping experience is important for the elderly to maintain their well-being and healthy routines during warmer days. Carried out in collaboration with the Gemeentelijke Gezondheidsdienst *(GGD)*, this project aims to better understand the perceptions and needs of elderly residents, to issue practical recommendations for promoting safe and health-conscious behavior during warmer summer days.

In order to address this problem, this research investigates two key questions: How do elderly individuals perceive the risk of differences in outdoor and indoor air temperatures due to air conditioning? And how can healthy shopping during hot days be promoted among the elderly? The study was conducted in the neighborhood of Ommoord, Rotterdam, specifically at the ‘Huis van de Wijk’. This community center serves as a local hub for social activities and support.

Methods

In this qualitative study semi-structured interviews were conducted in April 2025 with seven elderly participants residing in the Ommoord neighborhood in Rotterdam. All participants were attendees of a weekly community tea hour at the “Huis van de Wijk” center. Participation was voluntary, and verbal informed consent (Appendix A) was obtained from all individuals

after providing detailed information about the study's aim, the interview procedure, and participants' rights, including the right to withdraw from the study at any point.

The scope of participant recruitment was limited to the Ommoord neighbourhood, as this area was identified as a target site for the planned interventions. All interviews were conducted in Dutch to ensure participants could communicate freely and express their experiences in their native language. Interviews took place in a shared common room within the "Huis van de Wijk" center and lasted approximately 5-10 minutes.

A topic guide (Appendix B) was developed by the project team based on a literature review as well as identified knowledge gaps in understanding the behavior of elderly people. Interviews explored the following topics: current shopping behaviours, experiences during periods of extreme heat, behavioral changes in response to hot weather and sudden temperature change in the shops, perceived risk of sudden temperature changes in the shop, and determinants influencing the (non)adoption of preventative actions in shops during hot days.

Interviews were audio-recorded, transcribed verbatim using Good Tape software, and anonymised. Transcripts are available in Appendix C. Data were coded thematically, guided both by the literature and recurring patterns in the observed data. Themes emerging from the coded data were discussed within the team and by the joint decision mapped onto the logic model for health intervention development as proposed by Breuër & Hartman (2025). To ensure confidentiality, all identifying information was removed from the transcripts, and no participant names or personal details are included in the reporting of results.

Furthermore, the COM-B model has been applied to structure determinant patterns. This model assumes that in order to take a specific behavioural action, a person needs capability (C) to execute particular behaviour, opportunity (O) to take part in this behaviour and motivation

(M) to engage or change the current behavioural actions. Those three core components can be further split into: physical capability, psychological capability, physical opportunity, social opportunity, automatic motivation, and reflective motivation (Wadsworth et al. 2016). The model can provide useful insights into which of the provided determinants should be addressed in the intervention part in order to promote behavioral change.

Results

Health & Wellbeing and Risk factors

Entering a supermarket from ~30 °C outside to 19 or 20 °C inside the shop makes our skin and body's temperature drop by > 8 °C, immediately activating thermoregulatory organs (Balmain et al., 2018). The main regulating center in our brain - hypothalamus - has to switch in a short period of time from a heat-loss program to a heat-conservation one (see Figure 1) (Grodzinsky & Sund Levander, 2020). In elderly people of 60 years and up whose thermoregulation is impaired (An et al., 2025; Balmain et al., 2018; McKenna et al., 2023; Meade et al., 2020), this switch is slower, less precise and may cause additional risks.

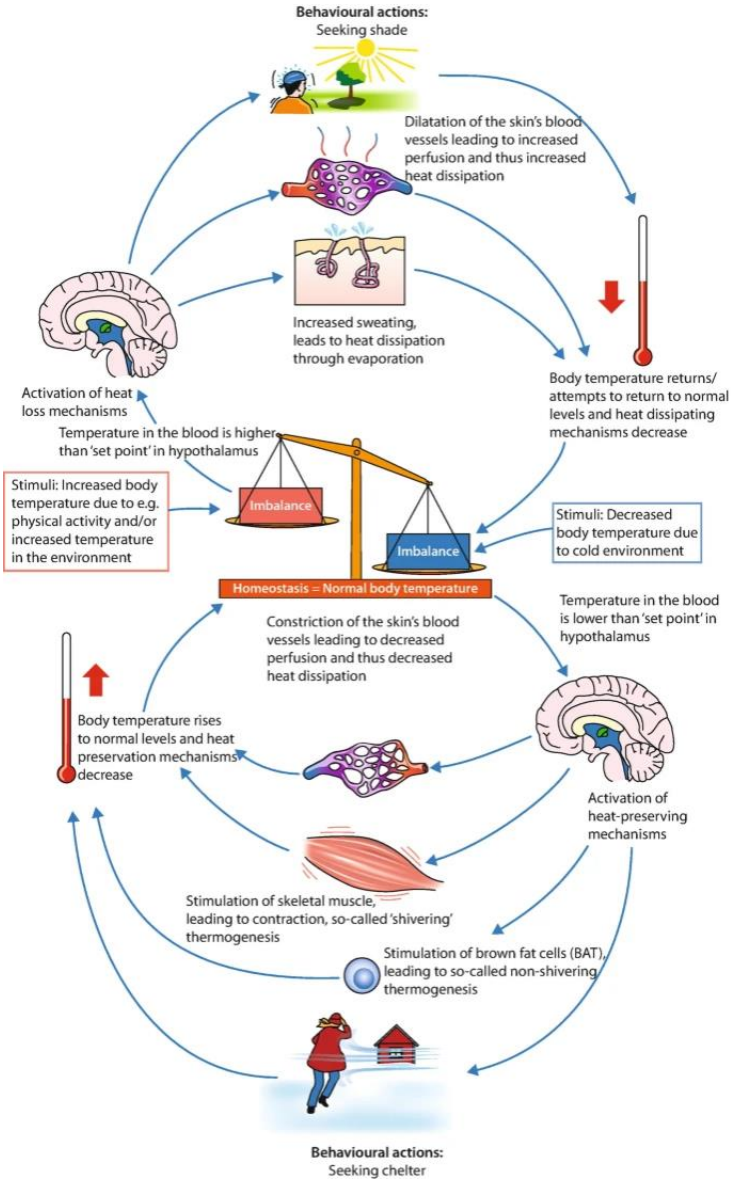


Figure 1. *Thermoregulation process in our body involving hypothalamus.*

Upper part of the figure shows adaptation to heat involving sweat glands, vasodilation and behavioral actions. Lower part represents adaptation to a cold environment, which involves vasoconstriction, muscle shivering, stimulation of fat burning and beharoval changes to seek shelter. Adapted from Grodzinsky and Sund Levander (2020).

Sudden shift in blood delivery

Outdoor heat keeps subcutaneous blood vessels dilated to move metabolic heat from core body to skin (Meade et al., 2020). Cold receptors in air-conditioned shops instantly trigger vasoconstriction, returning blood from the skin to the central circulation (An et al., 2025; Grodzinsky & Sund Levander, 2020). This causes a physiological switch that raises the heart's preload, the amount of blood that is being pushed out of the heart to the body, as well as an increase in arterial pressure. Good and adaptable systemic vascular resistance is required to regulate such an increase in blood pressure in our body. However, age-related arterial stiffness and reduced sensitivity to changing arterial pressures (sensed through baro-receptors) (Madden et al., 2010), limit cardiovascular adaptation to swings in arterial pressure, allowing it to peak higher and stay elevated longer, risking hypertension and dizziness as a consequence (An et al., 2025).

Delayed subcutaneous response

In addition, aging skin expresses fewer temperature-sensitive TRVP receptors that are usually found on our skin, delaying its reaction to cold (Martin et al., 2024). This means that all adaptation processes described in Figure 1 start later (An et al., 2025), allowing for the core temperature to drop low enough to threaten vital organs in our core, and possibly causing mild hypothermia without a person noticing it.

Trapped core heat

Sweat evaporation is the main heat-loss mechanism (Meade et al., 2020) during a hot summer. However, a study shows that elderly people produce less sweat per gland (Balmain et al., 2018). As a consequence heat accumulates which requires intense sweating to cool. Imagine, if the body - still containing trapped heat inside the core - enters the cold air-conditioned shop,

this subsequently creates a mixed stimulus for the regulatory hypothalamus center. While the core is still in the heat-adaption process, the skin reacts quicker to cold and constricts peripheral vessels. The result of such an inconsistent skin-to-core temperature gradient: central thermoreceptors keep cardiac output elevated to lose the heat, while peripheral skin begins vasoconstriction, blocking the heat's exit pathway (Grodzinsky & Sund Levander, 2020). Such mismatch can precipitate cardiac events, or possible arrhythmias.

Chronic conditions and medication

Comorbid cardio-respiratory disease in elderly amplifies every step of extreme temperature regulation and already existing risk factors (An et al., 2025; Balmain et al., 2018; Layton et al., 2020). Beta blockers or psychotropics blunt the hypothalamus' ability to respond to temperature, while diuretics can also alter volume status in the body or impair sweating, magnifying blood-pressure and delay adaptation to ambient temperature (Layton et al., 2020).

Behaviour & Environmental risk factors

Certain behaviours and environmental factors have a greater influence on specific health and well-being issues than others. In this section, we explain the behavioral risks that may increase elderly people's vulnerability to sudden temperature changes caused by exposure to air-conditioning in the shops. The risk factors described in this section reflect the existing knowledge in the academic literature. However, the actual findings on behaviour patterns collected through the interviews will be presented in the later section on behavioural determinants.

Timing of shopping

According to Malmquist et al. (2021), despite the increased heat during peak daytime hours, many elderly continue to shop during the peak hot hours rather than choosing cooler

periods such as early mornings or late evenings. Failing to adjust the timing of outdoor activities, including shopping, increases vulnerability to heat-related discomfort and potential health issues such as dehydration or heat exhaustion.

Checking weather forecasts

Awareness of the day's weather conditions plays a crucial role in how individuals plan their outdoor activities. Cool et al. (2013) show that the likelihood of behavioral adjustments, such as deciding when to go shopping, significantly depends on the information provided by weather forecasts. However, many elderly individuals may not routinely check weather updates before leaving their homes. This lack of preparation means they might go shopping without adequate hydration, appropriate clothing, or contingency plans for extreme heat, therefore increasing their risk of sudden temperature change in the shop.

Bringing an extra layer

Some seniors may not think over the extra clothing layers during a very hot summer day, which could actually help to prevent them from discomfort or health risks caused by transitioning between air-conditioned indoor environments and warmer outdoor temperatures. This oversight can result in thermal stress, especially if the individual is exposed to varying temperatures for extended periods (Malquist et al., 2021).

Inefficient shopping habits

Many seniors tend to shop on a daily basis rather than purchasing food for multiple days or the entire week, which increases the frequency of trips and, consequently, their exposure to temperature variations (Green et al., 2012). Additionally, failure to freeze their perishable items limits their ability to store food safely for longer periods, forcing more frequent shopping. Dellaert et al. (1998) further describe tendencies among elderly shoppers to separate their

grocery trips by product categories, such as buying fruits one day and dairy products another, rather than consolidating purchases into fewer trips. These shopping habits not only increase the physical strain and potential heat exposure but can also impact nutritional health due to irregular meal planning.

While many older adults believed they were well-informed about heat stress, their behavior often remained inconsistent (Tetzlaff et al., 2025). However, 88% reported responding to heat alerts, indicating that clearly communicated external cues like weather warnings can effectively prompt behavioral change.

This literature formed the basis of our interviews; however, the outcomes contradicted the previous findings (see Table 1). Important to mention that even though only one participant mentioned checking the weather forecast, this was not a part of the official questions, so it remains unclear whether the other participants do the same.

Table 1. The table below summarizes behaviors that older adults have already adopted to cope with temperature-related challenges during shopping, as identified in our interviews. The table ranks behaviors based on their reported frequency among participants (n = 7), along with a subjective evaluation of each behavior's potential impact and ease of implementation for others.

Ranking	**Behavior already in place**	**Frequency (n of participants)**	**Impact**	**Implementation (for others)**
1	Go early/ late to shop	5/7	Promising	Easy
2	Stay inside	4/7	Promising	Difficult
3	Stock food	4/7	Promising	Easy
4	Bring extra layer	4/7	Not always promising	Could cause some difficulties
5	Check weather conditions	1/7	Promising	Easy

Target behaviours

Although many behavioral risk factors are already being addressed through preventative actions, we believe it is essential that these actions are adopted more widely by all elderly individuals in Ommoord. It is important that older adults not only perform these behaviours but also understand the reason behind them – to protect themselves from the effects of sudden temperature changes. Furthermore, encouraging the adoption of multiple preventive strategies simultaneously (ex.:: going late/ early to shop and stocking food) may offer better protection. Such combined approach can help ensure that elderly individuals are protected from sudden temperature changes but also maintain their daily routines.

Therefore, one of our targeted behaviors still remains to encourage elderly individuals in Ommoord to shop during the cooler hours of the day, specifically in the early morning or late afternoon/evening. This behavior aims to reduce their exposure to temperature differences between the hot outdoor environment and air-conditioned indoor spaces during summer months. Focusing on this behavior is justified as it already has a moderate level of adoption among elderly residents. Moreover, shopping during cooler hours is both promising in terms of its positive health impact, by minimizing heat exposure, and relatively easy to implement without requiring drastic lifestyle changes.

In addition to this, bringing an extra clothing layer to manage temperature transitions between outdoor heat and cooler indoor air conditioning can also help to minimize physiological side effects, though it may present minor practical difficulties. Many may forget to bring an additional layer, especially if it is not part of their habitual routine or if they are preoccupied with other tasks. Carrying extra clothing can also be physically burdensome, particularly for those

who already manage shopping bags or mobility aids, making it inconvenient to juggle multiple items.

Furthermore, stocking food to reduce frequent shopping trips is another behavior already somewhat common and relatively easy to promote, as it decreases repeated exposure to heat. But it could also be seen as difficult to implement, if people do not have knowledge on how to store or which foods are the best for that.

Importantly, checking weather conditions before going out and increasing awareness about temperature-related risks have been identified as critical but underutilized behaviors. Improving awareness and habitually consulting weather information can empower elderly individuals to plan their shopping trips more safely, choosing appropriate times and preparation methods.

These behaviours would be targeted to a group of elderly residents living in the Ommoord neighborhood of Rotterdam. The objective is for them to adopt at least one shopping behavior that would be targeted specifically to reduce or prevent physiological risks caused by abrupt temperature changes. Such behaviours should be implemented as the temperature rises above 26C, as the temperature in the shops during such days stays around 17-19C, therefore 8C changes.

Behavioural Determinants

Physical Capability - Physical effort & burden of grocery shopping

The majority of participants indicated that they were physically able to walk to the shop and carry their regular groceries without much difficulty. However, some noted that carrying extra groceries was burdensome, particularly for those with mobility impairments. These practical concerns may prevent them from shopping less frequently or preparing adequately for

hotter days by stocking up on food: *"Because I have neuropathy I can't lift a lot of groceries. (...) It's a kind of wear and tear in your arms and legs. Your nerves slowly stop working. (...) I try not to carry heavy bags and such."* (female participant, shops weekly with spouse)

This observation aligns with findings from Huang et al. (2012), who noted that older adults with mobility disabilities often face challenges in accessing food due to physical limitations, including difficulties in carrying groceries and navigating store environments. Additionally, a study by Breeden et al. (2019) highlighted that older adults encountered obstacles such as reaching for items on high shelves and transporting groceries, which impacted their ability to shop efficiently and safely. These studies underscore the importance of considering physical limitations when developing strategies to support older adults in maintaining adequate food supplies, especially during periods of extreme heat.

Psychological Capability - Knowledge of temperature associated risk

Most participants demonstrated a general understanding of what to do on hot days, such as avoiding direct sun exposure, staying indoors during the hottest hours and going out early in the morning or later in the evening. This suggests a basic level of practical knowledge regarding how to cope with high temperatures. As one participant explained, *"You adjust your behaviour. (...) By not going out during the hottest part of the day. Staying in the shade, of course."*

However, although participants did not explicitly lack knowledge, their perceptions and attitude toward heat related risk suggest that their understanding of these risks may be incomplete or disconnected from their behaviours. This aligns with research showing that older adults often underestimate their vulnerability to heat (Ratwatte et al., 2022; Beckmann & Hiete, 2020). Although their behaviours imply some practical knowledge, the absence of clear risk

awareness points to a gap in psychological capability that could be addressed through targeted education.

Reflective Motivation - Perceived threat & attitudes toward temperature changes

Several participants expressed a preference for warm weather and did not view extreme heat as a personal health risk. As one noted, *"I love it (the heat)! I'm almost always cold. So I really enjoy it."* Others echoed this sentiment, stating they *"seek out the warmth"* or *"don't lose sleep over it."* These responses suggest limited awareness of the health risks associated with heat exposure and indoor–outdoor temperature shifts.

This finding aligns with Ratwatte et al. (2022), who reported that older adults who enjoy heat tend to perceive themselves as being at low risk. Similarly, Beckmann and Hiete (2020) found that older adults consistently show the lowest levels of heat risk perception. Such beliefs reduce the urgency to change behaviours, such as adjusting shopping times or stocking up in advance.

Yet, this low perceived threat does not mean participants were entirely passive. Some reported avoiding going out during peak heat, showing a general sensitivity to discomfort, even if not linked to health reasoning. This misalignment between behaviour and motivation presents an opportunity: since some habits already align with protective strategies, interventions can build on them by reinforcing the health rationale. As Lefevre et al. (2015) argue, perceived efficacy is key; individuals are more likely to adopt behaviours when they believe these will meaningfully protect their health.

Automatic Motivation - Set shopping days & commuting

For several participants, shopping behaviour was driven by strong habits and emotional associations rather than conscious risk assessment. Fixed routines, such as shopping on the same

day each week, were deeply ingrained. One participant noted, *"If it's Thursday, we go anyway. (...) We don't let weather stop us – groceries must be done,"* illustrating how routine can override environmental considerations like extreme heat. Another participant shared, *"We basically go shopping every day, because I just enjoy taking a little walk,"* indicating that the activity not only serves a practical function but also a social and physical one. These examples suggest that automatic motivation - shaped by routine, enjoyment and emotional attachment - may limit flexibility and the willingness to adjust behaviour in response to heat related health risks. For this reason, our intervention on automatic motivation will specifically target habitual same-day shopping routines, aiming to encourage more flexible planning that aligns with safer times of day and weather conditions.

Physical Opportunity – Shop location, opening hours & transportation

All of the participants reported having good access to local shops, which were typically within a short walking distance, preventing prolonged heat exposure. In addition, early opening hours were seen as helpful in avoiding the heat, with one participant explaining: "I can go to the store in the morning or late in the evening. The store opens at 8 or 9 in the morning. Or in the evening, when it's cooled down. But on a really hot day, we never go outside." This indicates that the physical environment generally supports the target behaviour, offering both temporal and spatial flexibility.

For those shopping less frequently or buying in bulk, transportation by car was a practical facilitator: "Yes, it's walkable, but we don't walk. Because we shop for the whole week, we have a lot of bags. So we take the car, then we can put the bags in the back.(...) And in the car there's air conditioning, so it's a quick transition." This highlights how access to transport with air

conditioning enables safer temperature transitions and reduces physical strain, particularly when transporting heavier loads.

Overall these factors demonstrate that physical opportunity is relatively high in this population, though individual choices and routines (walking vs. driving, bulk shopping vs. frequent trips) shape how effectively these opportunities are used to reduce heat exposure.

Social Opportunity – Community living & shared households

Social context played an important role in shaping how participants cope with hot days. Those living with a spouse often shared responsibilities, such as grocery shopping, which allowed them to divide the task

Living with others also appeared to reduce the emotional burden of staying indoors during hot weather. One participant reflected: *"Just stay home. It's easy because we're together. For people who are alone, that's more difficult."* They described how they had recently visited a neighbor who lives alone and struggles more during hot days, saying, *"She complains about everything. (...)For her, it's really difficult."* These accounts suggest that social support and companionship act as facilitators, both in practical behaviour (e.g., sharing shopping tasks) and in coping with isolation during periods of extreme heat. Conversely, being alone may increase vulnerability and limit behavioural flexibility, particularly in older adults without a strong support network.

By increasing awareness and understanding, individuals are more likely to feel motivated and capable of taking appropriate action. This aligns with the Information-Motivation-Behavior (IMB) model, which suggests that behavior change is more likely when individuals are well-informed, personally motivated, and perceive themselves as capable of enacting the behavior.

Health intervention

In order to address the selected determinants of psychological capability, reflective motivation, and automatic motivation, we have chosen three intervention functions: education, training, and enablement. In the COM-B model, intervention functions are broad categories of strategies that help target specific behaviours by facilitating change in their determinants.

Training and education to target psychological capability

According to Michie et al. (2011), psychological capability such as knowledge can be effectively enhanced through education and training. While education provides essential knowledge, training equips targeted groups with the skills needed to act upon their knowledge. In our case, this involves informing elderly people about the health risks associated with sudden temperature changes encountered during shopping, and afterwards providing them with practical tools - possible behavioural changes - to manage those risks. Combining these two intervention functions not only enables to make informed decision about one's own prevention and behaviour, but also helps to reduce unnecessary stress: if elderly individuals are made aware of this risk without being given practical strategies to cope with them, this could lead to increased anxiety and thus even bigger resistance in actual behavioral change.

A specific example of educational intervention would be a workshop focused on risk perception. In the first part of the session, participants would assess their own perceived vulnerability to temperature-related health issues and receive evidence based feedback comparing their perception with actual risk. In the second part, the workshop would introduce concrete behavioral change strategies - such as adjusting shopping time, bringing extra layers, stocking food - demonstrating how such preventive actions can effectively reduce or completely

prevent risk discussed previously in the workshop. In addition, training would also help change their behaviour through the targeting of reflective motivation.

Training to target reflective motivation

To address reflective motivation in elderly individuals – particularly their perception of risk – persuasion can be an effective intervention strategy. Persuasion aims to evoke emotional responses, both positive and negative, to motivate specific behavioral changes (Michie et al., 2011). In our case, we can see that low-risk perception is closely linked to precautionary behaviors.

Initial communication in persuasion intervention should aim to alert and engage elderly with their risks. For example, placing attention-grabbing posters or stickers with warning or slightly shocking messages near apartment entrances could help draw attention to the issues. As with educational interventions, persuasive materials should not only present the health risks but also clearly outline specific and achievable preventive actions.

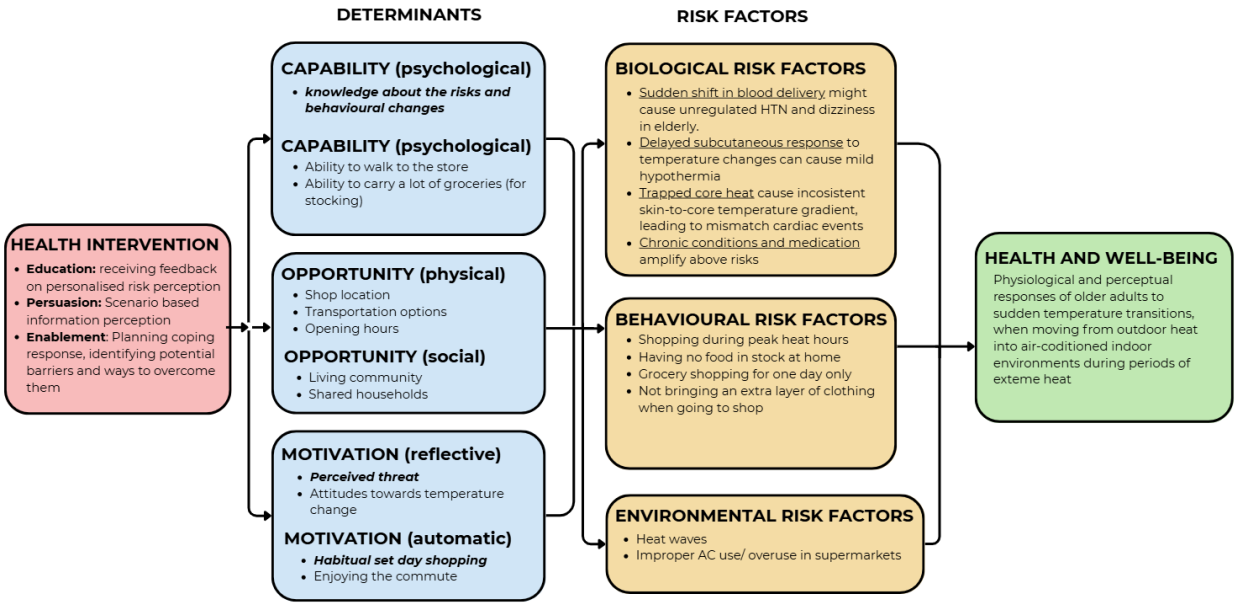
Enablement to target automatic motivation

To address habitual patterns of shopping behaviour, we propose using enablement strategies to facilitate and encourage behaviors and opportunities to take preventative action. One specific behavior we aim to target through his intervention is food stocking at home. By encouraging food stocking, we seek to reduce the need for frequent, habitual shopping, thereby disrupting automatic routines that may expose elderly individuals to sudden temperature changes in the shops. Our proposed method involved organizing a focus group where elderly participants who already practice food stocking would share their experiences and practical tips with others. This could include advice on what types of food are best to stock, how to store them, or how to often replenish supplies. We believe that peer-to-peer sharing within the similar age and lifestyle

group may be more effective and relatable than traditional educator led sessions, especially given that dietary habits and behaviours often vary by age.

Logic Model

Figure 2. *The Logic Model.*



The determinants targeted by interventions are highlighted in bold italics.

Final reflection

This study identified the primary target behaviors as encouraging elderly individuals in Ommoord, Rotterdam: 1) shop during the cooler parts of the day to reduce exposure to extreme heat and sudden temperature transitions; 2) wear an extra layer to the shop; 3) stock the food at home. These behaviors occurs in familiar locations such as local supermarkets and involves older adults aged 60 and over, living independently (often with a spouse) and maintaining a degree of

autonomy in their daily routines. Among the COM-B components, the most relevant and changeable determinants, along with their corresponding intervention strategies, were found in:

- Reflective motivation: particularly low perceived risk and low perceived efficacy of protective behaviours, which can be addressed through persuasion intervention: posters aiming to attract attention.
- Automatic motivation: habitual shopping everyday day or the same day every week could be changed through enablement intervention, specifically focus group where peers would share their advice about food stocking at home.
- Psychological opportunity, specifically education, should be tackled through education about the risk perception and training on skills to take preventative behaviour.

There are several limitations to our research project and its resulting logic model. First, the limited availability of the specific health risks of sudden temperature changes in the elderly population limited our understanding of the issue. While we were able to find studies discussing physiological responses to extreme heat or cold, none of the papers directly discussed the response to sudden change due to the air-conditioned environment in the supermarkets. Interestingly, most papers focused on the generally positive effects of air-conditioning use at home during heatwaves. Therefore, we would highly recommend conducting more in-depth analysis on actual health risks associated with temperature fluctuations in elderly cohort.

Second, the scope of our interviews was limited to a single neighborhood – Ommoord – and included small sample size, which restricts the generalizability of our findings and proposed interventions. Our results are thus at most applicable to the visitors of the “Huis van de Wijk” community center, rather than the broader elderly population.

Third, although the semi-structured interviews provided valuable insights into current behaviors and their underlying determinants in elderly population, future interviews could be refined. Specifically, including more targeted questions on risk perception, knowledge gap, and specific facilitators or barriers to protective behaviors, already performed by some elderly, could enrich the understanding of the topic.

Despite these limitations, our logic model offers a systematic and structured framework for understanding the issue of temperature change-related health risk in elderly. It clearly outlines the progression from identified problem to potential health intervention, specifying determinants and behavioral, health and environmental risks that could be tackled via specific forms of education, training or persuasion intervention functions.

Future research should further explore the specific health impacts of rapid temperature changes, particularly the transition from outdoor heat to air-conditioned environments, which remains underrepresented in current literature. Longitudinal or physiological studies in elderly populations could provide a clearer picture of the risks and help tailor more medically grounded interventions. Collaboration with caregivers, volunteers, and local organizations may also strengthen both the reach and sustainability of future interventions.

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Appendix A

Toestemmingsformulier voor Deelname aan Onderzoek

Onderzoek naar de waargenomen gezondheidsrisico's van temperatuurverschillen tussen binnen- en buitenomgevingen tijdens hete zomerdagen

Onderzoekers:

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Doel van het interview:

U wordt uitgenodigd om deel te nemen aan een interview als onderdeel van onze opdracht voor het vak Gezondheidspsychologie. Het doel van dit onderzoek is om te begrijpen hoe oudere mensen het risico ervaren van verschillen tussen binnen- en buitentemperatuur als gevolg van airconditioning, en om na te denken over manieren waarop dit risico tijdens warme dagen verminderd of zelfs volledig voorkomen kan worden.

Procedure:

- Een één-op-één interview (maximaal 30 minuten), ingepland op een moment dat voor u uitkomt
- Het interview bestaat uit vragen over uw ervaringen en meningen tijdens warme zomerdagen
- Met uw toestemming wordt het interview opgenomen en later uitgetypt.

Vertrouwelijkheid en Gebruik van Gegevens:

- Alle gegevens worden geanonimiseerd. Uw naam of andere identificerende informatie zal niet worden genoemd in het verslag.
- Opnames en transcripties worden veilig opgeslagen en zijn alleen toegankelijk voor de onderzoekers en hun begeleider.
- U kunt op elk moment verzoeken om uw antwoorden in te zien of te laten verwijderen.

Vrijwillige Deelname:

- Uw deelname is volledig vrijwillig.
- U mag elke vraag weigeren te beantwoorden.
- U kunt op elk moment stoppen met het interview of zich terugtrekken uit het onderzoek, zonder opgave van reden.

Risico's

Er zijn geen bekende risico's verbonden aan deelname aan dit interview. Het bespreken van ervaringen met warm weer of gezondheidsproblemen kan lichte ongemakken of vermoeidheid veroorzaken. U mag het interview op elk moment pauzeren of beëindigen als u zich ongemakkelijk voelt. Als u na afloop vragen of zorgen heeft, kunt u contact opnemen met de onderzoekers.

Voordelen

Hoewel er geen direct voordeel voor u persoonlijk is, draagt uw bijdrage bij aan een beter begrip van hoe ouderen gezondheidsrisico's van temperatuurverschillen ervaren. De informatie die u deelt helpt bij het ontwikkelen van mogelijke interventies om deze risico's te verminderen en het welzijn tijdens warme zomerdagen te verbeteren.

Contactgegevens:

Onderzoekers

Laziren Sumter

xxxx

xxxx

Contact tutor:

Marieke Hartman

xxxx

xxxx

Als u na het interview nog vragen heeft, aarzel dan niet om contact met ons op te nemen.

Hartelijk dank voor uw deelname aan dit onderzoek!

Toestemmingsverklaring

Ik bevestig dat:

☐ Ik de bovenstaande informatie heb gelezen en begrepen.

☐ Ik vrijwillig instem met deelname aan het interview.

☐ Ik akkoord ga met het opnemen van het interview.

☐ Ik begrijp dat ik op elk moment kan stoppen zonder gevolgen.

Appendix B

Interview vragen

1. Kunt u wat over uzelf vertellen?
    - Wie bent u?
    - Wat is uw leeftijd?
    - Wat doet u in uw dagelijks leven?
    - Waar woont u?
    - Woont u alleen of met anderen?
2. Wat is uw koopgedrag?
    - Hoe vaak winkelt u?
    - Welke tijd van de dag winkelt u meestal? What time of the day do you usually go?
    - In wat voor soort winkels winkelt u? Boodschappen, Kruidvat, Hema
    - Zijn deze winkels dicht bij uw huis?
    - Wie doet de boodschappen voor uw huishouden?
3. Herinnert u zich warme dagen van de laatste paar jaren?
    - Wat beschouwt u als een hete dag?
    - Hoe wist u dat de dag warm ging worden?
    - Hoe heeft dat impact gemaakt op uw gedrag die dag?
4. Als het een warme dag was, wie deed dan de boodschappen?
    a. Was er een specifieke tijd dat u of iemand anders boodschappen deed?
    b. Wat voor impact hadden warme dagen op de keuze voor welke supermarkt u naartoe ging?

5. Heeft u fysieke veranderingen opgemerkt wanneer u een supermarkt ingaat op een hete zomerdag?
    a. Zo ja, heeft u iets gedaan om dit te voorkomen?
        - Hoe gemakkelijk is het voor u om preventieve maatregelen te nemen?
        - Zijn er bepaalde mogelijkheden vanuit bijvoorbeeld de supermarkt die u helpen bij preventieve acties (zoals het aanbieden van dekens)?
        - Wat motiveert u om deze preventieve maatregelen te nemen?
    b. Bent u zich bewust van hoe deze veranderingen uw gezondheid beïnvloeden?

        Zo niet, vertellen wij de risico's.
6. Hoe haalbaar is het voor u om heel vroeg / laat op de dag te winkelen?
7. Hoe comfortabel is het voor u om een extra laag kleding (bijvoorbeeld een vest) mee te nemen en deze aan en uit te trekken?
8. Bent u bereid deze aanpassingen te maken? En zo niet, waarom niet?