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Climate shaming & *Climate shame* among people showing pro-environmental behaviour: an exploratory research

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‘Shame opens the mind of people and remembers them their actions impact not only themselves but also others and the environment.’

- Woodward-Webster, 2019

‘It is true that I am perhaps more ashamed since I am a grandfather because I tell myself that it is their future I engage so … It’s true that I feel a little ashamed for the world I leave them.’

- Anonym interview respondent

'I am sorry to see that there are a lot of people who are not paying attention to the problem of climate change because we are digging our own grave.’

- Anonym interview respondent

‘I think we all have positive actions and others less positive and that we are all inconsistent in a certain way. The most important thing is to be aware of it and communicate, share with others.’

- Anonym interview respondent

‘Shame is the master emotion of everyday life but is usually invisible in modern societies because of taboo.’

- Scheff, 2003

Résumé

Les marches et grèves pour le climat expriment une attention et préoccupation croissante à l'égard du changement climatique. Elles génèrent un débat sociétal et des discussions sur l'action climatique et les mesures d'atténuation à prendre ainsi que confrontent les gens à l'impact climatique de leurs propres actions. Des individus davantage observent, jugent et s'expriment sur les comportements peu respectueux du climat que peuvent avoir d'autres personnes. Les situations de *climate shaming* dans lesquelles une personne fait publiquement honte à une autre personne pour avoir contribué au changement climatique deviennent plus évidentes. De plus en plus de personnes ressentent de la honte pour l'impact climatique de leur comportement. Au fur et à mesure que de telles situations et sentiments se développent, des dynamiques sociétales changent, le bien-être individuel est affecté et les actions ciblant le changement climatique impactées. Si la société dans son ensemble lutte contre le changement climatique, comprendre les dynamiques sociétales et en particulier la façon dont des individus parlent du et abordent le changement climatique est crucial et essentiel.

Cette recherche de nature **exploratoire** contribue à la compréhension de dynamiques sociétales, du changement climatique et de la façon dont ceux-ci sont entrelacés et liés par (1) la **conceptualisation**, la conception et la compréhension du ***climate shaming*** et ***shame*** parmi les individus ayant un comportement **pro-environnemental** et en (2) intégrant ces phénomènes dans le **contexte** plus large et les conditions posées par la société contemporaine. Pour ce faire elle utilise une **revue de la littérature** ainsi que l'esprit de 'l'approche théorique à base empirique' (***grounded theory)*** comme méthodologies de recherche et des **enquêtes** et **entretiens** comme techniques de recherche pour permettre une compréhension approfondie des expériences personnelles de *climate shaming*. Les **principales conclusions** sont (1) les caractéristiques distinctes du *climate shaming* et *shame* comme (1) perturbateur (2) prévoyant et (3) associé au sentiment d'impuissance et (2) sa faible efficacité à modifier les normes courantes et les comportements peu respectueux du climat en raison de son caractère conditionnel.

Abstract

Climate marches and strikes articulate growing attention for and concern with climate change. They generate societal debate and discussion about climate action and mitigation measures as well as confront people with the climate impact of their actions. Individuals increasingly watch, judge and speak upon others' climate-unfriendly behaviour. Climate shaming situations in which a person publicly shames another person for contributing to climate change are becoming more apparent. More and more people experience feelings of shame for the climate impact of their behaviour. As such situations and feelings unfold, societal dynamics alter, individual well-being is affected and climate change (actions) impacted. If society as a whole is to tackle climate change, then understanding the dynamics at play in society and particularly the way individuals talk and approach climate change (action) is crucial and essential.

This **exploratory** research contributes to the comprehension of societal dynamics, climate change and how both are intertwined and linked by (1) **conceptualising**, conceiving and understanding **climate shaming** and **shame** among **pro-environmentally** behaving individuals and by (2) **embedding** the phenomena in the larger context and conditions posed by contemporary society. It therefore uses a **literature review** and **grounded theory** as research methodologies and **surveys** and **interviews** as research techniques to allow for in-depth understanding of personal climate shaming experiences. The **main findings** are (1) the distinct features of climate shaming and shame as (1) disruptive, (2) anticipating and (3) associated with a feeling of powerlessness and (2) its poor effectiveness in altering prevalent norms and climate-unfriendly behaviour due to its conditional character.

Preface

Writing this thesis has been a long-term process and exercise, but it has been a pleasure.

I would like to thank my promoter Pr. Tom Bauler for guiding me as well as the survey and especially interview respondents for their time and interesting talks.

A special thought and thank you goes to my grandfather who helped me all along this process, from wherever he might rest.

Good reading.

Kimberley Vandenhole

Brussels, June 10, 2020

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List of abbreviations

CO2	Carbon dioxide
GHG	greenhouse gases
NGO	non-governmental organisation
PEB	Pro-environmental behaviour
(s)he	she or he

Introduction

Climate change increasingly gained attention over the past three decennia. This is not surprising, given the enormous consequences of increasing greenhouse gas concentrations in the atmosphere on global ecosystems and human communities (IPCC, 2014). Last year's mass demonstrations and climate strikes augmented attention to climate change even more, spreading among large parts of society, generating societal debate, and bringing the topic into living rooms.

Just as large-scale climate change debates shift away from the core questions (debating the justification of the means, *i.e.* striking, instead of debating mitigation measures), smaller-scale discussions turn into blaming and shaming games. Society divides as people taking actions to limit their climate impact blame others for not doing so, when the latter accuse the former of being inconsistent and not completely climate neutral. As human activity is the main source of increased greenhouse gas (GHG) emissions, it is also to humanity to handle the climate problem, which justifies questions of responsibility among humans: who is responsible for climate change, who is responsible for handling it?

Given Europe's (historical) responsibility in generating climate change, it is not strange to find individuals experiencing strong feelings of responsibility and redress. These feelings may, among other motivations and due to a general increase of awareness and recognition of the dangers posed by climate change (Leiserowitz *et al*., 2019), drive individuals to take all sort of action to limit climate change, *i.e.* to show pro-environmental behaviour (PEB). As this group of individuals grow, interactions with each other and with others become an increasingly important feature of today's society. These pro-environmentally behaving individuals are particularly involved in climate change discussions, thus in shaming games. They may shame others or be shamed themselves for enhancing climate change, an act referred to as *climate shaming*, and by consequence experience *climate shame*. As such shaming situations and emotions unfold, societal dynamics alter, individual well-being is affected and climate change (actions) too impacted.

The importance of climate shaming as a societal dynamic, the impact of climate shame on individual and collective well-being and the pressing character of climate change mitigation measures call for a meticulous study of the phenomena of climate shaming and climate shame. A context of fresh emergence of and poor literature on climate shaming/shame makes the research naturally of exploratory nature. The principal aim of this thesis is to answer following main research question:

How to conceptualise, conceive and understand climate shaming and climate shame among people with pro-environmental behaviour?

It therefore proceeds in two steps. First, it focuses on discover the nature, exposing the characteristics and revealing the distinctiveness of climate shaming/shame. It checks for patterns in climate shaming situations and analyses the drivers, motivations as well as reactions and consequences. Second, it embeds climate shaming/shame in the broader context and conditions posed by contemporary society.

The research draws on a literature review and grounded theory as research methodologies and surveys and interviews as research techniques. It values personal climate shaming/shame experiences for their rich contribution to the understanding of and insights into these phenomena.

If society as a whole is to tackle climate change, then understanding the dynamics at play in society and particularly the way individuals who make up society talk and approach climate change (action) seems crucial and essential. Looking at climate shaming is a good starting point and may turn out to (dis)approve its potential as an instrument for mitigating climate change as well as reveal societal rifts and dilemmas. As such, this research advances the comprehension of societal dynamics and social phenomena such as shame and climate change.

The structure of the thesis follows the research framework. A first part lays out the research context, defines the problem and research questions and describes the methodologies used. A second part discusses the results and answers the research questions. The thesis concludes with a general conclusion, limitations of the research and suggestions for further research.

PART 1: RESEARCH FRAMEWORK

1.1 State of the art

1.1.1 Climate shaming defined

To grasp the full meaning of this concept, one may look at the parts of which it is composed. First, *climate* is 'the synthesis of the day-to-day weather conditions in a given area. The actual climate is characterised by long-term statistics of the state of the atmosphere in that area, or of the meteorological elements in that area' (Dictionary of Global Climate Change, 1992). In the concept of climate shaming, 'climate' mainly refers to *anthropogenic climate change*, which 'is the change of climate directly or indirectly induced by human activities and causing significant environmental, economic or social effects' (Dictionary of Global Climate Change, 1992). Second, *shaming* 'is the act of publicly criticizing and drawing attention to someone' (The Cambridge English Dictionary, 2020). Climate shaming implies climate shame, for there is no shaming without feeling shame. Therefore, *shame* 'is the self-awareness of the deviant, inappropriate, or morally problematic nature of one's conduct. It refers to both an emotional state and a form or mechanism of social control' (The Cambridge dictionary of sociology, 2006) and/or 'the emotion of personal appraisal of a situation as having violated moral or social norms and thus arises from both a concern for self-image as for public image. Shame is also an instrument to enhance prosocial and societal beneficial behaviour' (Fessler, 2004).

Combined, *climate shaming* is the act of publicly criticizing and drawing attention to someone because of his/her impact on changing the climate, which generates significant environmental, economic or social effects. Concretely, one's impact on changing the climate may consist of contributing to climate change or failing to reduce its contribution. By consequence, that person experiences *climate shame*, *i.e.* (s)he feels concerned for his/her public and self-image as (s)he is aware of his/her conduct which is judged inappropriate or problematic. Put differently, ***climate shaming* is the use of someone's contribution to climate change as a reason for putting the person publicly to shame, so that, in consequence, that person feels concerned for his/her image, *i.e.* experiences *climate shame***. A person's contribution may consist of climate-unfriendly behaviour or of a lack of climate-friendly behaviour.

1.1.2 Climate shaming redefined

Climate shaming and shame gained attention since *flygskam* took off in 2018 in Sweden. A campaign aimed at generating 'flight shame' among air travelers for their contribution to climate change quickly spread around Europe. It all began as an expression of personal guilt over one's carbon air trail but rapidly

transformed into collective culpability (The Economist, 2019). ‘Flight shamers’ decided to cease flying for it is a reprehensible act in the face of climate change and encouraged others to do the same. Flight shame generated behavioural and societal consequences. The number of air passengers in Sweden considerably declined while a hype of train holidays with massive sharing of pictures on social media lifted off (Hoikkala & Magnusson, 2019). It instigated public debate on better train services, cheaper train tickets and more extensive railway networks but also on climate justice and consumer responsibility (Abend, 2019; Asia News Monitor, 2019; Reals, 2019). It inspired millions of people to rethink their habits and reflect upon their practices (Malo & Elks, 2019). New words have emerged, showing a change in societal dynamics. *Tagskryt* means the proudness of avoiding airplanes and *smygflyga* refers to secret flying activities. Soon, flight shame went over in ‘fast-fashion shame’ and ‘meat shame’ (Hoikkala, 2019; The Economist, 2019).

These recent shaming practices all target individuals whose activities foster climate change and therefore represent a new understanding of climate shaming. They are distinct from previous uses of climate shaming in their target mainly (individuals and no longer multinationals or countries).

Indeed, shaming businesses and governments is a main technique used by several NGOs. However, whereas big companies and industries were traditionally publicly convicted for their violations of human rights, they now have to face increasing public exposure for their environmental impacts and contributions to global climate change. Activist groups, journalists and even celebrities publicly denounce businesses and governments with the aim of harming their reputation and pushing towards change of their unsustainable practices (*e.g.* Fallon, 2015) (Bloomfield, 2014; Safari & Taebi, 2017). These climate shaming campaigns are accompanied of divestment movements which spurs institutions, investment funds and governments to sell off their shares in fossil fuel companies. They aim to create money shortage but also to stigmatise and pressure the fossil fuel industry (Sawaya, 2014). Using a range of strategies based on shaming, persuasion and empowerment, divestment movements seem effective in bringing economic and political change in favour of climate change mitigation (Ayling & Gunningham, 2017). Oil companies are not the only target, so are the meat industry (Majot & Kuyek, 2018) and several countries. Journals talk about ‘Australia's climate change shame’, ‘Canada’s climate shame’ and ‘New Zealand’s climate shame’ (Lynas, 2006; Saxe, 2007; Young, 2017).

‘Climate shaming’ also refers to the naming and shaming approach introduced in the Paris Agreement (UN, 2015). The approach was originally developed in the human rights field but later applied on climate change issues and is based on public indignation and peer pressure (Falkner, 2016; Friman, 2015). Countries may take voluntary measures to reduce their GHG emissions, consequently boosting their (international)

reputation and embarrassing others. Climate shame may design negotiation outcomes by threatening a government's legitimacy and popular image (Lee & Tjernshaugen, 2004).

Climate shaming as a strategy to make business and governments reduce GHG emissions is not only used by activists but now also has formal recognition in the Paris Agreement. But where corporations and countries were to blame, individuals too are now increasingly shamed. Climate marches and increased awareness of the consequences of climate change give climate shaming new content and **new understanding**. It refers to the act of shaming individuals for their climate-unfriendly behaviour or their failure to increase climate-friendly actions. In parallel, a growing number of people experience climate shame. While interpersonal forms of climate shaming and the in consequence felt climate shame are spreading, the academic literature on it remains poor. Only Doherty & Clayton noticed in 2011 that 'some people may experience self-blame in thinking of the anthropogenic nature of climate change' but without coining it the term climate shaming. Understanding and conceptualising **interpersonal climate shaming/shame** is therefore the core of this research.

1.2 Problem definition

1.2.1 Climate shaming as a societal dynamic

Climate demonstrations and especially school strikes generated large debate among society, even if not always centered on scaling up climate action or mitigation measures, they brought climate change into classrooms, work floors and living rooms. Climate change is more than ever present in society, in the form of its noticeable consequences but also as a topic for discussion and as an element of interaction between people. Climate change has generated dynamics of its own, of which climate shaming is an important one, between people and in society. As climate change is at the heart of societies and individuals with PEB make out an increasing part of these societies, it seems logic and necessary to investigate how climate change navigates in society and especially among these individuals with PEB. Climate shaming seems to be an important way of ventilating, exchanging and talking climate change issues, just as climate shame seems to guide climate action as well as act upon interactions between individuals.

1.2.2 Research questions

1.2.2.1 Climate shaming: conceptualisation

Climate shaming has, despite its relevance, importance and potential, not been studied so far. The **first** step in investigating this phenomenon must then obviously be to **conceive** climate shaming/shame, to discover its nature, to expose its characteristics, and to reveal its distinctiveness. A **second** step then consists of

checking for **patterns** in climate shaming situations. In a **third** step, **drivers or motivations** to climate shaming as well as **reactions and consequences** to it are analysed. The **overall goal** of this research, which is reflected in the main research question, is of **exploratory** nature. As studied for the first time, climate shaming should be well defined and conceptualised before engaging with more complex questions about it (*e.g.* causal relationships between climate shaming and climate action).

While it may be interesting to see if and how climate shaming exists among different groups of society and if and how it differs between groups, the scope of this research does not allow such extensive investigation. Rather, this research focuses on the principal target group of climate shaming, *i.e.* **pro-environmentally behaving individuals**. This group came to the forefront with the climate demonstrations and may be thought to grow as climate awareness and attention are rising. Recognising the pernicious impact of one's behaviour on climate change is a precondition to experiencing shame, therefore climate deniers and climate skeptics are excluded in this study. The principal research question of this study thus is:

How to conceptualise, conceive and understand climate shaming and climate shame among people with pro-environmental behaviour?

First and foremost, this research thus aims to conceptualise and understand climate shaming and climate shame as they exist among people showing PEB in today's society. It aims at drawing a basic picture of the phenomenon. Concretely, it wants to know:

What is climate shaming precisely?
Who climate shames who?
When does climate shaming take place?
What triggers climate shaming to happen or not to happen?
Why does climate shaming happen?
Where does climate shaming happen?
How does climate shaming take place?
How is climate shaming experienced by individuals with PEB?
To which extent is climate shaming experienced by individuals with PEB?
How and to which extent do people experience climate shame?
How do individuals react to being climate shamed?
How does climate shame differentiate from other emotions?
To which extent and how does climate shame facilitate climate action?
To which extent and how does climate shaming influence thinking about climate change?
Is it possible to identify, and if, which patterns in 'standard climate shaming situations'?

…

In order to draw the picture of climate shaming and climate shame, many questions must be answered. This multitude of sub-questions is not too much, but just the necessary color pencils needed to draw a correct picture.

1.2.2.2 Climate shaming: embedded in society

While the first part of this research focuses on understanding climate shaming in itself, the second part aims at apprehending the concept in its broader **context**, as it cannot be seen in isolation from the people who engage with in and the society with which it is intertwined and linked. The second research path thus sheds light on climate shaming as **embedded in society**. Sociology, cultural studies, anthropology, … focus on society and its dynamics and will therefore serve as references to answer the following sub-questions:

How does climate shaming/shame relate to the individualistic character of society?
How do climate shamers perceive themselves?
How do individuals feeling climate shamed perceive themselves?
How does climate shaming situate vis-à-vis the classic sociological structure-agency debate?
…

This second part of research also is of **exploratory** nature. It does not pretend to identify causal relationships, nor to compare *e.g.* cultures with each other or look for straight answers. It may, however, provide interesting insights in the entanglement of climate shaming within the society it englobes.

1.2.3 Contribution

This research emerges out of societal concern and personal experience with climate shame and therefore strongly aims to be of meaning and utility to others and to society in general. The interview respondents in particular contribute to this goal. In the meantime, it focuses on adding value to the scientific understanding of the interactions between climate change and shaming practices in society, which in turn sheds light on possible paths for fixing climate change, a societal goal.

1.2.3.1 Societal

This research is rooted in social experience and curiosity, thus aims at being relevant to society and aspires to two goals in particular. A **first goal** consists of contributing to the identification of possible paths for society to deal with and eventually fix climate change. How individuals in society talk about and exchange

climate change nowadays, *i.a.* through climate shaming, may present or generate ways to deal with climate change now and in the future. A **second goal** intends to expose and expand the understanding of social phenomena with potentially negative effects on society such as those which create rifts in society, divide or turn people against each other. Equally, phenomena with positive effects such as those increasing cohesion may be revealed. The question is whether climate shaming belongs more to the former or the latter category of social phenomena. Exposing climate shaming may expose other societal problems and dysfunctions, highlight positive human interaction and societal dynamics or warn for potential pitfalls in society.

1.2.3.2 Scientific

Literature on 'climate shaming' does not exist which gives this research meaning and value. Besides, it advances literature in other domains. The 'super-wicked' problem of climate change calls for input and insights from the social sciences to get fixed. By investigating climate shaming, this research exposes how individuals deal with climate change and how they exchange about it with each other. By doing so, it contributes to a growing literature about climate change in social sciences, however, from a different perspective. Simultaneously, this research contributes to the abundant literature on shame and shaming practices, but here again, from a different angle. Shame is studied in itself, but often in relation to other phenomena such as poverty, femininity etc. (Chase & Bantebya-Kyomuhendo, 2014; Moran & Johnson, 2013). Climate shame, however, may represent a whole new kind of shame and may significantly contradict existing theories. Furthermore, this research approaches shaming/shame on the meso-level, thus contributing to fill the gap on this level of analysis in the literature on shaming (Cath, 2011; Scambler, 2020).

1.3 Research design

1.3.1 Two research methodologies

Following the questions, the research is composed of two parts:

(1) Conceptualise climate shaming/shame
(2) Embed climate shaming/shame in society

As the parts naturally aspire different but related research goals, they share the overall research methodologies but distinctive research techniques. Also, they mark different time schemes, given that the second part builds on outcomes and results of the first part. **Two methodologies** make up the research design: (1) literature review and (2) grounded theory.

The main objective of the literature review (1) in this research is to well understand the concepts and theories underpinning the research object, *i.e.* climate shaming/shame, as well as the (sociological) elements to which it is linked by the second part of research questions. The literature review thus also contributes to formulate answers to the research questions. As a methodology issued from the social sciences, grounded theory (2) may use a lot of different techniques. To the specific ends of this research, **two techniques** of data collection are judged most appropriate:

(1) **Online surveys**: directed at answering the first part of research questions and identifying interesting cases for the second part (interviews). Therefore, the focus is on a sufficient large number of respondents (the survey is available in French, Dutch and English) and the type of questions mixed (*i.e.* closed, semi-open, open) to address both quantitative and qualitative aspects. For the model English survey, please refer to annex 1.

(2) **Semi-structured in-depth interviews**: directed at complementing the first part and answering the second part of research questions. Semi-structured interviews allow for deeper understanding, thought flows and elaboration of answers contexts through the use of several question types, *i.e.* picture association, brainstorming, situational identification, open-ended questions. For the model English interview questionnaire, please refer to annex 2.

1.3.2 Operationalisation

The research framework encompasses methodologies and techniques which cannot be correctly applied before the main research question has been operationalised. Concretely, **two main elements** in 'how to conceptualise, conceive and understand climate shaming and climate shame among people with pro-environmental behaviour?' need clarification for how they can be put in research practice.

The first notion is the object of research itself, *i.e.* climate shaming/shame. As conceptualising and defining this object is precisely the aim of this research, a two-step approach reduces the risk of guiding respondents into a certain definition or interpretation of climate shaming. Moreover, the research must assure to analyse climate shame and not eco-guilt, which is a closely related emotion. Concretely, the steps follow a parallel to the research techniques:

(1) Survey: climate shaming as 'making/receiving remarks/comments on the climate impact of actions and behaviour'.

(2) Interviews: climate shaming as ‘shaming others/ being shamed for the climate impact of an action or behaviour’, which is a more narrow and straightforward formulation.

The second notion to operationalize is ‘people with pro-environmental behaviour’. PEB refers to a class of behaviours which benefit the natural environment through the commission of acts which serve the environment or through the omission of acts which harm the environment (Lange & Dewitte, 2019). PEB include both intent-oriented and impact-oriented behaviours and may be context-dependent or latent characteristics of the behaving person (Stern, 2000). This research approaches PEB as the **general intention** of an individual to ameliorate the natural environment. Concretely, PEB is assessed as **taking part in climate marches, demonstrations or strikes** in **2019-2020** (intent-oriented). To assure PEB adherence of the respondents, it is **additionally** assessed by **two questions** in the survey, respectively based on Whitmarsh (2009):

(1) ‘Have you ever taken, or do you take, any action out of concern for climate change?’
(2) If yes: ‘What did you do/are you doing?’

Only those respondents having taken part in climate marches, demonstrations or strikes and answering ‘yes’ to the first question belong to the subjects of this research.

1.3.3 Level of analysis

Social phenomena are often complex as they are about humans and their interactions with each other. They include several individual and social aspects such as plural identities which fluently mingle. An individual is simultaneously defined and influenced through biological characteristics, gender, ethnicity, nationality, social class, job, … Complex social phenomena such as (climate) shaming are shaped through a set of elements from different ‘levels’ which, although jointly playing out, can be analysed separately. The social sciences distinguish between three levels of analysis:

(1) The micro-level: the study of individuals (or families) in a given social setting. The focus is on individual characteristics, personal experiences, interpretations by the self.
(2) The meso-level or middle-range level: the study of groups of individuals who share a particular identity such as communities, cities, formal organisations.
(3) The macro-level: the study of large population groups in which interaction between individuals take place such as nations, civilisations and the global population.

A complete analysis of climate shaming should integrate all three levels of analysis. However, this thesis does not pretend to an integral or holistic analysis, for which more time, means and writing space would be required. Rather, this research focuses on the **meso-level** by studying climate shaming practices among a **specific group of individuals**, *i.e.* people showing PEB. Using grounded theory methodology, meso-level articulations can be discovered through the analysis of multiple individual experiences.

1.3.4 Interdisciplinarity

The climate(s), and climate change, is the main research object of climatology in the field of Earth sciences. It draws on observations (using *e.g.* ocean cores, satellites) to describe and explain the climate in the past and today and uses statistical modelling to predict the future climate. Climate change is a global 'super-wicked problem' for which no single detailed solution is at hand, instead possible and partial solutions can be good or bad, but never true or false (Levin *et al.*, 2012; Peters, 2018). There is only one planet Earth, which makes every 'solution' a one-shot trial that creates unintended consequences and modifies the problem. Solving climate change thus requires a lot of different knowledge, massive involvement and transboundary thinking and cooperation (Brown, Harris & Russell, 2010). It appeals to post-normal science to deal with high stakes, uncertainties and risks, such as the IPCC does (Funtowicz & Ravetz, 1991, 1992; Saloranta, 2001). Climate change is, therefore, especially due to the magnitude and importance of its consequences, studied from a lot of academic disciplines even beyond the natural sciences, from biology, sociology and philosophy to political science.

Whereas climatology studies the mechanism by which human activity impacts and influences the climate, *i.e.* anthropogenic climate change, social sciences look at human activity itself, human interactions with the natural world, and human responses to climate change. Climate change is not only about increasing GHG in the atmosphere, it is also about equity (inter- and intragenerational), responsibility, the future, … As climate scientists warn for the consequences of climate change, social scientists try to understand individual and collective human responses as well to deconstruct climate change (Hackmann, Moser, & Clair, 2014; Weaver *et al.*, 2014; Yearley, 2009). Climate change today moves out from the scientific community to the societal and political sphere. The IPCC informs policy makers. To solve the 'super-wicked' problem of climate change is to understand it by its physical characteristics and mechanisms, but also by its understandings and framings by society, by how it exists among society. Studying climate shaming, a societal dynamic driven by the aspiration to solve climate change, seems necessary then.

Shame is often studied within the disciplines of sociology and psychology, however, a wide variety of other approaches to shame include phenomenology, anthropology (*e.g.* Lindisfarne, 1998), theology and psychoanalysis (Karlsson & Sjöberg, 2009). While the latter are beyond the scope of this research, they show the multitude of perspectives on and the complexity of the concept. Shame is often studied in relation to a specific phenomenon such as poverty, femininity etc. (Chase & Bantebya-Kyomuhendo, 2014; Moran & Johnson, 2013).

This research explores the **climate (change)-shame nexus**, **bridging** natural and social sciences. It investigates how phenomena from the natural sciences find their way into human-organised settings, how these are understood by individuals, how these are dealt with in society. Sapience from climatology is put into a framework drawing on social psychology (sociology, psychology) and accompanied by insights from the behavioural sciences to help understand human conduct. Understanding how a topic as climate change exists among individuals, how it plays out and orientates society requires broad thinking and extended analysis, transgressing traditional scientific disciplines boundaries. Using interview technique demands for an open mindset of the researcher as respondents evoke various issues, going from politics and governance to technology as well as touching upon societal dynamics, morality and philosophy. It is the aim of this research to take up the issues seriously without on the one hand, drowning in vagueness or on the other hand, pretending to study it all with a high degree of detail.

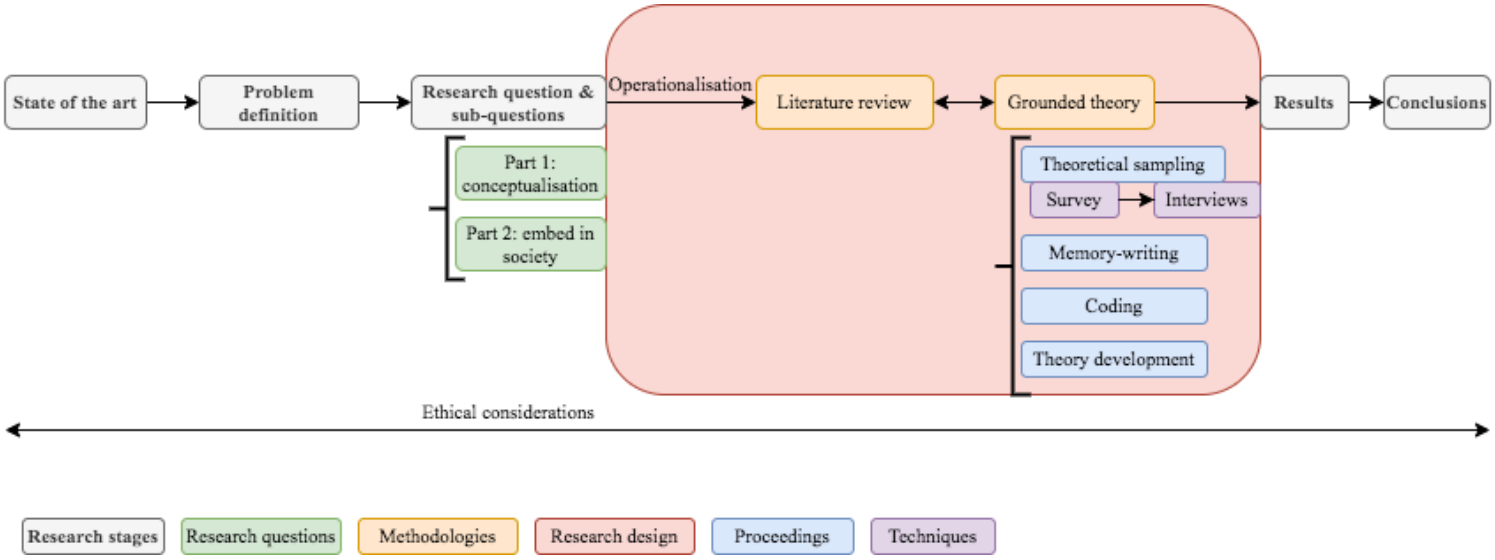
1.3.5 Ethical considerations

This research fully adheres to the principles of academic research ethics. Therefore, it is based on good practice and maximal transparency. Special attention goes to the research subjects, *i.e.* the survey and interview respondents, who deserve respect and to whom no harm may be done. The use of polite, inoffensive and acceptable language in the surveys and interviews endorses their dignity. The participants' privacy is guaranteed through confidential data and anonymisation in accordance with the General Data Protection Regulation (European Parliament and the Council, 2016). All respondents voluntary participate in the surveys and interviews without remuneration. Invitations to take part in the survey and the interview are sent only once, so there is no insisting or pressure. Participants all sign an informed consent (model annex 3) prior to the interview in which their rights are stipulated such as the right to withdraw at any moment and to refuse to answer any question. Participants are proposed a copy of the research.

1.3.6 Research framework

The research framework encompasses all steps and procedures from the start of the study to the end.

Figure 1: Research framework.



1.4 Methodology

1.4.1 Literature review

Preliminary to the empirical research parts, a review of the literature on essential concepts is needed. It is impossible to (1) understand climate shaming/shame without *e.g.* well grasping the meaning of shaming/shame as well as their uses, just as it is impossible to (2) situate climate shaming *e.g.* in the broader structure-agency debate without understanding the dispute itself. Crucial concepts to figure in the literature review include shaming/shame and the structure-agency debate.

1.4.2 Grounded theory

Climate shaming is grounded in **social interaction** but **lacks** further **theoretical foundation**, which requires specific and appropriate methodology to research (Vollstedt & Rezat, 2019). **Grounded theory**, an **inductive** (*i.e.* theory is developed from empirical data), qualitative research technique and tradition within narrative analysis ideally fits the research aims of conceptualising, portraying and embedding climate shaming into society (Bernard & Ryan, 2010). Grounded theory's embracement of pragmatism and

symbolic interactionism allows the analysis of interactions between people, societal dynamics, social behaviour and social and behavioural patterns using personal experiences (Charmaz, 2001).

Grounded theory methodology guides the gathering, synthesizing and analysing of qualitative data using flexible strategies which are based on **simultaneous** and **iterative processes**. Key to grounded theory is the emergent, intertwined and interdependent data selection, collection and analysis which contributes to the development of hypotheses and (middle-range) theories as ever-developing entities or processes, the ultimate objective of the methodology (Charmaz, 2006; Strauss & Corbin, 1990). Grounded theory proceeds in four ways (Charmaz, 2001; Glaser & Strauss, 1967):

(1) **Theoretical sampling**: a continuous case/data selection process based on relevancy to emerging hypotheses (and data analysis) which allows for precision, diversification and complexity in contrast to conventional representative case selection. Theoretical sampling stipulates early data selection to focus on discovering relevant codes and concepts and later case selection to focus on differentiating, elaborating and validating categories without dictating a specific selection practice.

(2) **Coding**: the assignment of codes, *i.e.* ideas and concepts, to singular incidences or episodes in the data to conceptualise basic processes, uncover and identify meaning.

(3) **Memo-writing**: allows to keep track of the proceedings and to develop ideas by identifying gaps and properties of codes, delineating codes, unveiling the conditions under which codes exist or change and exposing relations among codes.

(4) **Theory development**: significant theorizing in an open field of study through careful observation, issue picking and concept generation by a sensitive researcher. Flexible data selection, collection and analysis allows the researcher to cultivate insights through free association, literature consultation, personal and other people's experiences. Hypotheses and theory development result from an iterative process of going through the data several times, reflecting abundantly upon it and noticing both the presence and absence of relations and/or associations in the data.

1.4.2.1 Theoretical sampling

Grounded theory requires data collection and data analysis to happen simultaneously. At the very start, however, data collection precedes analysis. In first instance, exploring climate shaming/shame among individuals with PEB is done using an **online** developed **survey**, so to have a large base of respondents and possibly a broad variety of answers. Meanwhile collecting answers to the survey, analysis starts.

A **first group** of potential respondents to the survey consists of demonstrators who took part in an online survey leading to a Belgian contribution in a study across Europe (De Vydt, 2020). These demonstrators were selected using the protest survey method as developed by Van Aelst and Walgrave (2001). All demonstrators who left their email address to De Vydt are kindly invited to take part in another online survey about a similar topic (*i.e.* climate change) in order to contribute to this research. A **second group** of respondents to the same survey is not selected using a specific method, rather forms through spontaneous participation on social media. While this group, to the contrary of the first, does not have any representative basis, it allows diversification, comparison with the first and enlarging the selection pool for interview candidates. It adheres to grounded theory practice. In a **third time**, a number of respondents to the survey are invited (through email) to an interview. These respondents are **selected** on the basis of their **positive answers**, and the integrity of their answers to particularly two questions of the survey that touch upon the core of the research goals:

(1) Do you make remarks on others regarding the climate impact of their actions and behaviour?
(2) Do other people make comments or remarks on the climate impact of your actions or behaviour?

1.4.2.2 Data analysis

Data analysis happens simultaneously to data collection, because data selection is guided by previous data results (interview participants are selected on the basis of their answers to the survey). Survey data mainly aims at developing answers to the first part of research questions, interview data to the second part.

Survey data analysis starts with importing the Microsoft Excel spreadsheet, which contains the collected answers, into **NVivo 12**. Then, as respondents fill in the survey in French, Dutch or English, new attributes are made to correct for language, *i.e.* answers to closed questions are aggregated into one English attribute to make statistical analysis possible. Such aggregation is not necessary for answers to open questions given the different nature, interpretation and way of analysis (*i.e.* non-statistical). Consequently, statistical analysis on the attributes is done in NVivo 12, complemented by other calculations and the designing of graphs in **Microsoft Excel** so to finally interpret the results. In a third time, answers to open questions are coded into thematic categories along an iterative process. The same thematic categories and codes may be used across several questions, which may improve consistency and make comparisons possible. Consequently, the codes and categories are analysed, again relying on Microsoft Excel for the graphs.

Interview analysis starts with transcribing the interviews, then followed by **iterative coding**. Depending on the type of question, analysis takes several forms. Answers to semi-closed questions are more easily

comparable, while the open nature of other questions may incite respondents to give a range of very diverse answers, thus needing a rigorous coding process. Relying on the codes, interpretations are made and hypotheses developed.

1.4.2.3 Coding procedure

Coding, as a technique to analyse data, is at the heart of grounded theory methodology. It consists of breaking up data into smaller pieces and to analyse these in depth. Correct and good coding implies going through the data several times, line-by-line and incident-by-incident. Coding is an iterative and rigorous process. Strauss & Corbin (1990) identified three ways to work with data, *i.e.* coding procedures, which are accordingly used in this research. The procedures do not follow a linear time horizon but **mingle** over the course of the data analysis (annex 4).

(1) **open coding** maximizes interpretation of the data by focusing on sensitizing questions (*e.g.* what, who, when, why, how). Therefore codes, *i.e.* pieces of text or data with a proper idea, and their frequency need to be identified. Similar ideas are labelled with the same code and then grouped into analytic, sensitizing concepts.

(2) **axial coding** focuses on the relations between concepts and integrate these into categories and subcategories. Incidences are placed within a certain context, specific circumstances, strategies, results, consequences, general and causal conditions. Links between sub- and categories are developed.

(3) **Selective coding** happens on the most abstract level and integrates categories into a cohesive hypothesis or theory.

1.4.2.4 Representativeness, reliability and validity

Grounded theory perfectly fits exploratory research as it stimulates differentiation and variation rather than dictating strictly delineated steps or moves. However, this does not mean it favours random research. Representativeness, reliability and validity have important value, perhaps different than in much other research.

Representativeness in grounded theory is mainly assured through simultaneous data collection and analysis and diversification of cases (Glaser & Strauss, 1967). Cases and data are selected based on former gathered data, *i.e.* cases are selected on their potential to complement former data, provide new insight, … rather than in order to represent several population groups adequately in the research. The more, this research

bases its first case selection on a representative sample of individuals. Validity and reliability in grounded theory is secured by methodological transparency, of which is meticulously taken care of in this research (Amsteus, 2014; Brink, 1993). Additionally, triangulation, *i.e.* diverging data sources, methods, techniques, increases validity and reliability in this research. Finally, regular reflecting and active search for disconfirming evidence is done with the aim of achieving even more validity and reliability.

PART 2: THE RESEARCH

2.1 Literature review

2.1.1 Shame

2.1.1.1 The emotion shame

Several definitions of shame exist, each highlighting different aspects of its emotional nature. The most simple one dates back to 1891 where James defines shame as 'the displeasure which a person experiences upon realising that he does not measure up to the values he embraces'. Shame is thus understood as a negative feeling resulting from an individual's failure to live up to his values. More than a century later, Karlsson & Sjöberg (2009) define shame in a similar way but with an important twist as 'shame is experienced when one feels that *someone else's* negative constitution of oneself is revealing an undesired self' [emphasis added]. Dissatisfaction with the self no longer results from self-reflection but from a confrontation with the other. This other is essential because shame naturally is an interpersonal emotion. It only exists as individuals interact with each other and make up a society.

In a given society, individuals behave according to moral norms and social values. When an individual transgresses this shared body of norms, (s)he may generate public disapproval, which in turn triggers an affective reaction of the individual, which is called shame (Tangney, Miller, Flicker & Barlow, 1996). The individual experiences public exposure of his/her self-focused, negative feeling of failure to live up to a moral ideal (Lazarus, 1991). While the individual may not be surprised about his/her deficit, (s)he regrets that it is so openly disclosed (Karlsson & Sjöberg, 2009). Shame must thus involve a public or audience (Taylor, 1985). Shame's complexity is that an ashamed person is concerned both with the evaluation of him/herself by him/herself and by others (Tangney, 1994). The self is thus both agent and object of observation and consequently disapproval (Tangney *et al.*, 1996).

Shame thus arises when one's negative self-evaluation is publicly exposed (Schmidt, Webster, Parrot & Eyre, 2002). This self-evaluation comes from the transgression of norms which are seen as the reflection of a person's defective and objectionable self. An ashamed person leaves to others the impression of a

fundamentally flawed and complete deficient self, be it actual or imagined (Fessler, 2004; Haidt, 2003; Lewis, 1971). One's entire self, not a certain action, is considered faulty and at risk. Feeling ashamed consists of a painful self-scrutiny and makes up a totalizing, intense experience which is therefore particularly powerful, painful and enduring (Gilbert, 1997; Miller & Tangney, 1994; Nussbaum, 2004; Tangney *et al.*, 1996; Wicker, Payne & Morgan, 1983). It is permanent in that it may lead past experiences to resurge and influence future experiences. Shame may thus be felt before, during and after the shame-inducing situation (Karlsson & Sjöberg, 2009).

Shame's double mirror as reflecting one's flawed self to the self and to the public makes it a quintessential emotion which needs higher-order cognitive abilities to experience. In contrast to basic emotions, shame requires self-conscious thoughts (self-recognition, self-representation, self-respect, self-evaluation) as well as the capability to see oneself through the eyes of the other (public self-consciousness) (Buss, Iscoe & Buss, 1979; Cooley, 1922; Lewis, Sullivan, Stanger & Weiss, 1989; Tangney, 1994; Tangney, Stuewig & Mashek, 2007, 2007b; Taylor, 1985; Tracey & Robins, 2007). The public somehow constitutes the self, which is undesired but the center of attention (Bybee, 1998; Smith *et al.*, 2002; Lewis, 2003). Shame is not inherent to a person but arises from his/her self-reflection upon public rejection and his/her awareness of the public's knowledge that (s)he feels ashamed (Karlsson & Sjöberg, 2009).

Shame constitutes a psychological and social pressure upon individuals in society. It often comes as a daily, minor experience but it may become a psychological and social barrier to living. It takes many forms in that it can be experienced consciously or unconsciously, privately or collectively (Karlsson & Sjöberg, 2009). However, it always implies feeling unpleasant which may be accompanied by feeling inferior, shrinking, worthless, powerless, exposed, excluded, all of which is expressed through a collapsed bodily posture (Fontaine *et al.*, 2006; Lewis, 2003; Smith *et al.*, 2002).

Individual experiences of shame are influenced through personal traits and cultural features. One of these personal traits is disposition to feeling ashamed. Shame-prone individuals tend to more rapidly feel ashamed but also to soften the anticipation of shame-inducing situations (Tangney *et al.*, 2007). A second personal trait has to do with sociality. Pro-social oriented individuals tend to encounter less shame-inducing situations than more selfish oriented individuals (de Hooge, Breugelmans & Zeelenberg, 2008). Cultural features then refer to the larger and smaller cultural contexts in which individuals experience shame. Across the globe, various cultural traditions accord different places to shame in society. Collectivistic cultures such as found in many Asian countries tend to function on the aversive experience of shame and its social consequences, leading to individual subordinate behaviour or shame. In contrast, individualistic cultures

such as found in North America and in Europe tend to function on the aversive experience of morally problematic conduct that is internalised, leading guilt to overshadow shame (Bierbrauer, 1992; Fessler, 2004; Turner, 2006). Smaller cultural contexts also influence personal shame experiences as a self is evaluated against a standard that is culturally tied and taught by society and the immediate social context (Lewis, 2000; Niedenthal, Krauth-Gruber & Ric, 2006).

2.1.1.2 Behavioural responses to shame

Shame is a cognitively complex emotion which has consequences beyond mental well-being. It guides thoughts, stimulates feelings and regulates behaviour, even before shame has really appeared (Tracy & Robins, 2004). Individuals may anticipate shame-inducing situations and accordingly align their behaviour by avoiding nonmoral or asocial conduct. Past experiences of shame-inducing situation also influence people's behaviour (Tangney *et al.*, 2007). More often however, individuals alter their behaviour directly after feeling ashamed. These behavioural responses to shame are largely theorized while actual empirical research remains insufficient.

According to most theoretical frameworks, shame induces submission, withdrawal, social avoidance, disengagement and rejection. Shame is incapacitating as it makes people to annihilate, hide, deny, appease or escape the shame-inducing situation. These primitive reactions are responses to feeling restricted and imprisoned but promote defensiveness and distance to signal that one will not fight back but conform to the norms (de Hooge, Zeelenberg & Breugelmans 2011; Gilbert, 1997; Gruenewald, Dickerson & Kemeny, 2007; Smith *et al.*, 2002). A few empirical studies support this hypothesis (Karlsson & Sjöberg, 2009; Scherer & Wallbott, 1994). The pressure felt and the wish to annihilate the shame-inducing situation are proportional to the degree of feeling revealed and the hardship of covering up the situation (*e.g.* by justifying). However, a bunch of other studies refute the theoretical scheme, instead finding shame to promote approach behaviour (*e.g.* prosocial behaviour) (Fessler, 2004; Frijda, Kuipers & ter Schure, 1989; Tangney *et al.*, 1996; Wicker *et al.*, 1983). A possible explanation for these conflicting empirical findings is that shame foremost induces approach behaviour as the self wants to restore its image but when this seems to be impossible or too risky, turns to avoidance behaviour to protect the self (de Hooge *et al.*, 2011).

2.1.2 Shaming

Shaming is the act of **publicly** making **stigmatising judgements** about an actor or group for their failure to adhere to a **shared norm or ideal** (Nussbaum, 2004). Shaming consists of **criticizing** and drawing public attention to an actor or group because they exceed a communal norm (The Cambridge English Dictionary,

2020). Shaming is a hybrid, ethical act of complex interaction between **four parties**: the shamer, the actor being shamed, the audience, and an assumed larger community in whose name the shamer shames. The shamer condemns an actor or group because they do not live up to the expectations of a larger community and not because they do not live up to the personal expectations of the shamer. Shaming has a democratic character because it is free and echoes a community's values (Etzioni, 2001). Shaming always happens in front of an audience or is publicized in some way. This public character of shaming forms an integral part of it, for without public apprehension, there is no shaming (Nussbaum, 2004). Shaming depends upon its reception by the actors or groups being shamed. They need to share the norm, agree upon the violation and be open to being shamed for shaming to be effective (Adkins, 2019). Shaming is the **public denunciation** of actors or groups who violate shared norms. It is a **technique of informal social correction** which reduces norm violation in a certain community. Shaming results in a **permanent loss** of reputation, credibility, honour and authority of the actor being shamed. It is therefore totalizing, endangering an actor's entire public figure (Adkin, 2019; Jacquet, 2015; Nussbaum, 2004).

Shaming practices are diverse and take many forms (Jacquet, 2015). Not all shaming proceedings are desirable or appropriate. Physical shaming for example is not likely to be accepted by many Belgian citizens, contrary to constructive shaming. Constructive shaming, as introduced by Nussbaum, focuses on the pedagogical potential of shaming rather than on its punitive character. It applies to social issues but not exclusively. Jacquet, who's personal experience of consumer guilt led her search for possibilities to create broader system change, introduced the concept of shaming-up (*cf.* disruptive shaming).

Shaming entails some risks, the biggest is **shaming backlashes**. In such backlashes, shame is redirected towards the person who attempted to shame. The power of shame is turned in the opposite direction. Consequences of shame backlashes can be serious, so that the initial shamer ends up seeing his/her own reputation and authority diminished. Shame backlashes may aggressively undermine the initial shamer's public credibility. Shame backlashes are more than simple refusals of judgement of shame (Adkins, 2019). They seem to be correlated with the audience (not friendly nor open) and the relation between status and credibility (low status and credibility). Disruptive or critical shaming, *i.e.* when an actor from a dominant group is put ashamed by someone from a marginalized position, has low chances of social and epistemic agreement (sharing), consequently undermines friendly reception and increases the risk of shaming backlashes.

2.1.2.1 A means of social control

Turner (2006) defines shame as 'the self-awareness of the deviant, inappropriate, or morally problematic nature of one's conduct. It refers to both an emotional state and a form or mechanism of social control.' This **social control** results from the fact that shame is about social and moral norms and that shaming is a highly social enterprise.

Moral and social norms guide the coexistence of individuals and make living in community possible. They give structure to society and define the social order. Anyone who transgresses these norms poses a threat to the living together but also to the social order and must therefore be sanctioned. This is often done through the **informal means of shaming** because it is fast and has low costs. It signals to others how conformity and compliance with the norms guarantee the stability of the social order and reproduces the status quo (Scambler, 2020). Shaming arises as a means of public sanctioning when shame as a moral emotion does not function well to deter individuals from transgressing societal norms.

The deterring function of shame stems from its moral nature, which results from an individual's awareness and consciousness of personal and societal norms and standards (Niedenthal *et al.,* 2006; Tangney *et al.,* 2007; Taylor, 1985). Shame signals an evaluation of the self in front of others against these standards while the act of shaming signals the public's evaluation of a person against these standards (Beer, 2007; Tangney *et al*, 2007b). Ideally, moral emotions compel individuals to factor in societal interests and to contribute not only to personal well-being but also to that of society as a whole (Haidt, 2003). They stimulate people to act in a morally appropriate way even though this could be contrary to their immediate (economic) interests. Moral emotions such as shame are negatively valenced and aimed at making people refrain from activities which have a detrimental impact on society. They may however also be positively valenced (*e.g.* pride) and aimed at rewarding behaviour which is good to society (Kroll & Egan, 2004). Moral emotions stimulate prosocial behaviour by making immediate selfish options less attractive. They function as commitment devices and make people to choose options that are best for society and for themselves in the long run (de Hooge *et al.,* 2011). Moral emotions and norms are taught through education, society and personal experience. Through shaming, an individual receives immediate feedback on the social and moral acceptability of his/her behaviour. Individuals continuously receive social feedback in the form of public (dis)approval to guide their behaviour and orientate their actions through the lens of the 'socially desirable' and the 'socially undesirable'. This feedback is social because it happens by peers and without resorting to laws, coercion or repression (Scambler, 2020).

Shaming thus functions as a **social, moral and emotional barometer** to **convey and enforce social norms**. It is one of the principal **mechanisms** to regulate individual behaviour in a collectivity and make human coexistence possible (Fessler, 2004; Scheff, 1990, 2003; Swim & Bloodhart, 2015; Tangney *et al.*, 2007b; Turner, 2006).

2.1.2.2 A driver of social change

Society is made up of individuals who are entangled in various power and dependency relations. These are controlled through social and moral norms. In such complex societies with multiple social interdependences, socially harmful behaviour is increasingly controlled, and most effectively through informal means (Elias, 2000). Shaming is one of these powerful informal social control mechanisms which historically served to consolidate the social order and promote the interests of certain dominant groups (Link & Phelan, 2001; Parker & Aggleton, 2003; Scambler, 2009, 2020).

However, shaming may not only be a tool for identifying and pointing out non-conformative behaviour, it may also be a tool for **fostering societal change** (Adkins, 2019). It does not only stigmatise behaviour which does not align with the norms but also challenges the applicable norms, in particular the inconsistent or hypocritical ones (Jacquet, 2015). As such, it may **alter the applicable standards** and **create or introduce new** ones (Swim & Bloodhart, 2013). Shaming that consist of challenging the conventional and widespread norms is called **disruptive or critical**. Such form of shaming fosters societal change instead of enforcing conservative practices. Shaming confirms, alters or creates norms which surpass the interpersonal level and drive action and change at higher levels of governance. It may thus bring about **larger** political and economic **change**. Arendt even considered shame crucial to the development of political consciousness and an existential condition to political action and experience (Samnotra, 2014). Shame as a driver of change and action is particularly powerful.

2.1.2.3 Effectivity

Scholars are clearly divided about the role and consequences of shaming. But analysing the potential of shaming in motivating people to engage in more climate-friendly behaviour is perhaps better done through the identification of the **conditions** under which shaming may be (in)effective (annex 5). For a situation to have shaming happening, **four actors** must be present. These are an actor who shames another actor in name of a larger community under the auspices of the public eye. By consequence, the effectiveness of shaming depends on all four actors and the interactions between them.

First, the **status** and **competence** of the shaming actor are key factors in making a situation of shaming successful. When a shamer enjoys lower social status and/or social capital than the shamed actor, *i.e.* (s)he is a bottom-up shamer, then (s)he must at least (implicitly) assert epistemic and/or social competence to shame (Adkins, 2019). When this is not the case, chances of a shaming backlash are high.

Second, the larger **community** to which the shaming refers plays a crucial role in determining the type of shaming. When this group represents a minority, the shaming is disruptive or critical (Adkins, 2019; Jacquet, 2015). A minority group challenging established values or norms of a majority group encounters more difficulties in shaming than a majority simply pointing out on already established norms.

Third, the **audience** or public must acknowledge the shaming situation for it to be effective. The public must agree on both norms and transgression. It must also recognise and legitimise the shamer in both epistemic and social way (Adkins, 2019). In other words, the public judges a shamer to be able and reliable to shame and accept this. The shamer then enjoys sufficient credibility from the public. It is vital for a shamer to feel epistemically and socially empowered.

Fourth, the actor put to shame is a decisive player. For shaming to be happening, all actors must **share** certain **norms** and **agree** on the **transgression** of these values, especially the person put to shame. In other words, the shamed person must acknowledge his/her failure. (S)he also decides about whether or not to receive the shaming in a friendly manner (Adkins, 2019).

Once shaming is effectively taking place, *i.e.* there is no shaming backlash, shaming effectivity is evaluated against its potential of altering the behaviour and changing the practices of the shamed person. Besides the actors, other conditions thus also influence the effectiveness of shaming.

Fifth, the effectiveness of shaming in altering behaviour may depend on the a**vailable alternatives**. As such, where multiple alternative behaviour are obvious, shaming is likely to be successful (*e.g.* taking the car for short distances can easily be replaced by walking, cycling). However, in situations where certain behaviour does not have apparent alternatives, shaming will probably not achieve its goal (*e.g.* taking a plane to faraway destinations).

Sixth, it may depend on the **costs and efforts** needed to switch to an alternative. When switching demands only light additional effort and the costs are limited, shaming is likely to be successful (*e.g.* taking the stairs instead of the elevator). On the contrary, when switching to an alternative induces a considerable burden, shaming is likely to fail in altering the behaviour (*e.g.* making a home more energy efficient may induce construction works and high costs).

Seventh, the impact of shaming may depend on the **mindset** and **personality** of the individual. Several studies have shown political preference both to be linked with climate-related behaviour and to with how shaming is perceived, received. Whether one shows PEB or not influences the impact of climate shaming.

Eight, the influence that shaming may have on individuals may be dependent on **personal characteristics** such as age and education. One can easily imagine that an old man will not be eager to change his sixty years-old habits just because he has been shamed on it by a young person. The more importance an individual attaches to norms and social image, the more impact the mechanism of shaming is likely to have.

Ninth, the effectiveness of shaming as a social driver of moral conduct depends of the place and role of shame in a certain society. According to the societal structure and organisation, shame may play a different role. Individualistic societies such as those in Western Europe and North America tend to hold responsible the consumer for his/her acts and purchases. Even when the context and the broader system drive an individual into a certain direction, he or she is thought free to choose and therefore responsible.

To conclude, the effectiveness of (interpersonal) shaming in altering behaviour into a more climate sound way is not straightforward and complex. It depends on a set of variables, some of which are identified above. Climate shaming can be done in various ways, targeting different kind of behaviours and with different outcomes. The conditions under which it is effective remain open to further research.

2.1.3 Climate shaming and the climate crisis

Legal systems traditionally guarantee the continuity and stability of society, *i.e.* specific forms of social organisation, by criminalising behaviour which is harmful to society. However, they fall short in protecting and assuring society's future when behaviour that induces climate change is not criminalised even though people and ecosystems suffer irreversible damage (Kotzé & Muzangaza, 2018). Specific laws do only apply on the most severe forms of ecological pollution (European Parliament and the Council, 2008; Lavrysen, Billiet & Van den Berghe, 2015). Human activity undermining the stability and sustainability of the Earth does not figure as crime or violence in legislation due to several difficulties (Mares, 2010; Pease & Farrell, 2011). Culpability of individuals, organisations or industries is often not straightforward or manifest. Also, may people be held responsible for simply doing what they have been taught to do (*e.g.* driving a car)? When exactly does an activity become harmful to society and the planet (*e.g.* how much CO2 may be every person emit?). Finally, the drivers and damages of climate change are too many and too complex for legislation to handle.

Fostering individual and societal mitigation behaviour and actions is thus less likely to happen through legislation. Rather, stirring individual and collective responsibility in containing climate change through **informal behavioural social control** is promising (Mares, 2010). One way of informal social control is social status distinction and upper-class habit (Bourdieu, 1984). In society, lower status groups aspire to climb the social status ladder by adopting socially distinctive behaviour they copy from the upper status groups. If social elites abandon polluting cars, soon lower status groups will follow. In some upper circles of society, bicycles become a status symbol while cars are devaluated and no longer a means of social distinction. Ideas on status and habits are currently shifting, although slowly (Griskevicius, Tybur & Van den Bergh, 2010). A second way of informal social control is **shaming**. As a nonviolent, political tool, shaming has the potential of controlling socially harmful behaviour (*i.e* climate-unfriendly behaviour) as well as urging public action in favour of climate change mitigation measures.

For shaming to take place, shared norms between four parties must exist. An individual may only feel ashamed when (s)he is self-conscious and agrees with the transgressed norms. For climate shaming to happen, parties must thus share norms about the desirability of climate sound behaviour and the undesirability of climate-unfriendly behaviour. But the presence of such climate norms in today's society may not be taken for granted. The dominant anthropocentric and a-historical view in the Western world today prevents ecologically and climate harmful behaviour from being considered a crime. The Earth is seen as something with little intrinsic value to be used for gain and the environment as an infinite source of means and materials to be exploited (Elias 2000; Wilson 2002). Ecologically harmful behaviour is considered an economic issue only (White, 2009). In this context, climate norms are a far cry. Social control on climate-related behaviour through shaming thus primarily requires a cultural shift in thinking about the environment. Without shared norms, shaming is not.

A civilising offensive or civilizing spurt, however, could rapidly change thinking about the Earth and by consequence, make people wish for a healthy environment. A civilising offensive seeks to alter or introduce new norms instead of confirming existing standards. In this case, the civilising spurt consists of a large and fast dispersion of climate respectful norms. This rests on the mechanisms of punishment and reward. Individuals who do not behave climate-friendly encounter a pollution of their social status through shaming (punishment) while individuals who clearly behave climate-friendly see an upgrade of their social status (reward). Public disapproval and appraisal are important in changing climate harmful behaviour and stimulating climate beneficial behaviour (Geller, 1992; Griskevicius *et al.*, 2010). A small pioneering group launches the civilising offensive by spreading climate norms through *i.a.* shaming, which are gradually internalised by others. When social order is highly threatened, the civilising spurt accelerates a civilising process that would otherwise be slow.

Is the social order in Belgium or Europe highly threatened at this moment? According to the latest IPCC report (2014), climate change threatens social order worldwide. It is not surprising then to notice, the latest years, a climate-related civilising offensive. Attitudes on environmentally harmful behaviour are changing and living with respect for the environment is increasingly accepted as a social norm rather than considered an alternative way of life (Barclay & Bartel, 2015; Thornton, 2009). The Swedish *flyskam* campaign is exemplary of this civilising spurt. Ensued from a small group of individuals who refused to take airplanes any more, a new norm emerged which praises train travels and refutes air travels. Individuals behaving against the new norm are publicly shamed for it. The civilising offensive, however, aims at a more comprehensive adaptation of norms and by consequence behaviour. In the end, people should be dissuaded from taking any climate harmful act simply because it will have become distasteful to their morality. Will the ongoing civilising offensive in Western Europe change moral conduct and norms fast enough to reduce detrimental behaviour on the climate and induce climate sound behaviour? As civilising processes primarily draw on the emotion of shame as they are propelled by those already having internalised the new morality and eventually enjoying high status in society, analysing the state and dispersion of shaming practices around a new climate-friendly behaviour norm among the individuals with PEB may indicate the current state of a civilising spurt.

In most cases, shaming aims at conforming actors to existing norms. A member of a majority group points out a member of a minority group. Also, the shaming actor often enjoys a higher social status and capital than the actor being shamed. However, the opposite way of shaming, in which the shaming actor finds him/herself in a more vulnerable position than the shamed actor, also exists. Such disruptive or critical shaming breaks with conventional, widespread norms. It wants to draw attention to the fact that some claimed values are not being honored, that standards are outdated or no longer accepted by a certain community (Adkins, 2019). Disruptive forms of shaming encounter more challenges and risks, such as shaming backlashes. Actually, **climate shaming is likely to be disruptive or critical** as climate sound norms may not be mainstream but rather go against the conventional standards (*e.g.* taking a car is more standard than using public transport). However, this may be changing (fast). Climate shamers are likely to be part of the minority in society as they fight against more powerful and social capital-rich industries. As such, climate shaming might represent a challenge to the classical theories of shame and shaming by introducing new norms and less powerful actors in the shaming position instead of aiming at maintaining group integrity through finger-pointing the less powerful (Taylor, 1985). While risky, Jacquet (2015) promotes critical or disruptive shaming as a strategy to foster societal change among powerless groups and for less publicized issues such as environmental problems and climate change. Shaming draws attention to certain causes and pressures others to recognise that their actions have wider social effect. To avoid shaming

backlashes, actors must prepare to it, anticipate responses and use shaming as a reasoned, intentional strategy (Adkins, 2019).

To use shaming practices (and civilising spurts) to foster societal change not only depends on the agreement of norms. Transgression of norms should have a clear impact on broader society and formal routes to punishment must be absent, all of which is the case for climate-unfriendly behaviour (Jacquet, 2015). Shaming may thus be amenable to alter behaviour and actions with an impact on climate change.

Scholars also have analysed the link between shaming/shame and climate responsible behaviour through empirical studies. Ayling and Gunningham (2017) discovered the potential of shame in catalysing the energy and transport revolution which are key domains to mitigate climate change. Tingley and Tomz (2014) found citizens not only supportive of economic sanctions but also willing to shame polluters. Kantola and Syme (1984) registered a twenty percent decrease of household energy use after shaming practices, which was not noticed following information campaigns or economic gains. Powell (2019) also found shame to be effective in motivating environmentally sound behaviour. Based on similar logic as shaming, though different because of the impersonal character, comparative feedback systems are often proposed in the climate and energy debate. These systems compare behaviour to others' behaviour using impersonal means (*e.g.* energy monitors). While comparative feedback systems seem to stimulate climate change mitigation behaviour such as reduced energy consumption (Mallett, Melchiori & Strickroth 2013; Nolan, Schultz, Cialdini, Goldstein & Griskevicius, 2007; Schultz *et al*., 2008), they may not have the same effect as interpersonal feedback systems due to the absence of emotional factors and social consequences (public disapproval, feeling ashamed). The more, interpersonal feedback (shaming) is more naturally encountered in daily life and therefore more promising to have a widening impact than impersonal feedback mechanisms.

However, not all studies found a positive link between shaming and environmentally sound behaviour. As scholarship often focuses on the negative effects of shaming, it is not surprising to find experiments highlighting the negative impact of shaming on climate-friendly practices (Norlock, 2017). Scholars have several reasons why shaming may not be sufficient or adequate to change behaviour towards more climate-friendly conduct. They find difficulties in identifying responsibilities for climate change or they only see a minor role for shaming, which then takes means and time away from other measures to tackle climate change (Hoffmaier, 2016; Polsky, 2018). They argue that reflecting on one's own behaviour and its impact on the climate may be more efficient than shaming others. The more, shame is likely to make a person hide from a shame-inducing situation rather than to make him or her adapting the shame-inducing behaviour (Lazarus, 1991). Similarly, shame may make a person to reject climate action on the thought that change is

impossible (Tangney *et al.*, 2007). While shame may have a role in mitigating climate change, it is insufficient in preventing global destruction and responding to disaster (Tekayak, 2016). Bisschop (2010) has therefore argued to couple shame mechanisms with mandatory regulations.

2.1.4 Climate change and environmental problems

The Earth's global climate has changed over the course of its history so that today it allows for human life to exist. The global climate, and the diversity of regional climates, has not been built or formed by humans, for whom it is thus part of their natural habitat or natural environment (Collin, 2011). Water, animals, trees, … are also all part of the natural environment surrounding human life. This natural environment is today more than ever put under pressure through increasing human activity, which results in numerous environmental impacts, damages, degradations and pollutions. One of the most pressing and global environmental problems is the increasing concentration of GHG in the atmosphere, *i.e.* climate change (de Zeeuw, 2001). Other environmental problems include water pollution through plastics and heavy metals, trash, acid rain.

Climate change and other environmental issues are often mixed up (Zimmer, Stafford & Stafford, 1994). However, distinct environmental problems such as water pollution may have nothing to see with climate change (they do not increase GHG emissions). Other problems such as plastics may contribute (indirectly) to climate change (made from petroleum) or relate to it, but the risk situates in another domain (water pollution, animal and human health). The confusion stems from a limited understanding of the drivers and mechanisms of climate change, skewed newspaper and media framing, the idea that climate change can alter (aspects of) natural environments, and a general tendency in society to accommodate all issues touching upon the natural environment under one general term, *i.e.* 'green' (Cath, 2011; Major & Atwood, 2004). Furthermore, 'green' people tend to consider the environment as a whole, thereby mixing up different damages and their respective causes. In the end, components of the natural environment are related, intertwined and complex in ways we do not properly understand (Cath, 2011). But for now, it seems that reducing GHG emissions is the best way to 'solve' the climate crisis.

2.1.5 Eco-guilt

Climate shame, which is this research's object, must be differentiated from other emotions such as eco-anxiety and in particular eco-guilt to assure that the right emotion is investigated. Climate shame and eco-guilt differ in two ways: (1) the emotion at play and (2) their application scale.

2.1.5.1 Guilt

Guilt and shame are self-conscious moral emotions, social in nature and resulting from the transgression of socially approved moral norms and principles (Beer & Keltner, 2004; Trope & Liberman, 2010). They may arise from the same behavioural situations or contexts and may be experienced simultaneously (Niedenthal, Tangney & Gavanski 1994; Tangney *et al.*, 1996). Situational factors thus hardly account for the difference between guilt and shame (Smith *et al.*, 2002).

The experience of guilt differs from that of shame because (1) the person who makes the judgement, (2) the type of moral transgression and (3) by consequence the focus on the self are different.

(1) Guilt results from a judgement of the self, whereas shame primarily results from others' judgements (Rawls, 1963). The others, *i.e.* the public or audience, only play a marginal role to experiencing guilt, eventually as being the aggrieved others. The public however, plays an important role in experiencing shame because it constitutes the self, and so the self is more passive (Karlsson & Sjöberg, 2009).

(2) Guilt arises from the transgression of a specific moral standard while shame results from a failure of living up to an encompassing moral ideal (Lazarus, 1991). Guilt is experienced in relation to a concrete action whereas shame is experienced as a failure of the entire self (Lewis, 1971; Vallacher & Wegner, 1989). Guilt refers to one's mode of doing, shame to one's mode of being (Karlsson & Sjöberg, 2009). Guilt results from defective behaviour, shame from a defective self.

(3) Guilty persons are concerned with the effect of their behaviour on others while shameful persons are concerned with the evaluation of themselves by others (Tangney, 1994). As guilt relates to specific behaviour, it is other-oriented whereas shame relates to the self, thus is egocentric (Bybee, 1998; Lewis, 1993; Smith *et al.*, 2002). Guilt is related to other-oriented empathy whereas shame seems to disrupt the ability of empathic connection with others.

By consequence, guilt and shame are expressed through different (1) emotion intensities, (2) associated feelings and (3) reactions.

(1) Guilt develops by process and is subsequently experienced only temporarily. By contrast, shame comes in a now-centered moment but remains permanent. Shame may re-emerge several years after the original situation and awaken other identical experiences (Karlsson & Sjöberg, 2009). The more, guilt is a less painful feeling than shame, the latter being incapacitating because the entire self is at risk (Tangney *et al.*, 1996; Wicker *et al.*,1983).

(2) Guilt is associated with feelings of regret, remorse, self-reproach and repentance whereas shame is linked to humiliation and mortification (Smith *et al.*, 2002).

(3) In response, guilt triggers strong intention to make up for an action while shame triggers aspiration of well-doing (Lazarus, 1991). Guilt and shame shape different motivations, *i.e.* action tendencies. Guilt focuses on reparative actions (apologies, undoing the consequences) while shame corresponds with hiding, denying or escaping the shame-inducing situation and sinking into the floor (Karlsson & Sjöberg 2009; Ketelaar & Tung Au, 2003; Lewis, 1971). Guilt makes people to alter actions, shame makes people to alter the self (Smith *et al.*, 2002).

Finally, guilt is easier to discover and to study than shame (Karlsson & Sjöberg, 2009). This may explain why 'eco-guilt' proliferates to a bigger extent than 'climate shame'.

2.1.5.2 Guilt in relation to the environment

Eco-guilt refers to guilt which is experienced in consequence to having taken environmentally unfriendly actions or having failed to take environmentally friendly actions. It has in this sense a larger scale of application than climate shame, which only encompasses shame related to one environmental issue, *i.e.* climate change. Eco-guilt seems to have some specificity in that it differs from conventional guilt in several regards. It tends to be ever-present in environmentalists' lives (thus showing some permanent character) as well as be comprehensive (thus resulting from a failure to live up to an ideal) (Fredericks, 2014). It also seems to lead to apathy rather than action (Strunz, Marselle & Schroter, 2019), although some studies signal quite the opposite, *i.e.* eco-guilt would stimulate environmental activism (Ferguson & Branscombe, 2010; Mallett *et al.*, 2013; Swim & Bloodhart, 2015). If guilt towards the environment differs from guilt toward other issues, there is a chance that climate shame differs from shame towards other topics.

2.1.6 Structure-agency debate

In sociology, a major theoretical debate is the famous structure-agency question. The controversy is about what lens should be used to understand the nature of human action? Is human and social (inter)action shaped by individual agency or constrained by social structures and how do cultural elements interfere?

Agency refers to the capacity of individuals to act, individually and collectively, on their own behalf. Agency means being human and cannot be removed. It is liberating, encouraging. Structure, contrariwise, refers to elements which limit agencies' ability to act in an autonomous way. The structure is the context in which agencies operate. Structural elements are diverse as they include biological, genetic, climatic,

social, economic and systematic factors. Much studied structural elements in sociology are social class, gender, ethnicity, education and norms. These are often expressed through material means (Ritzer & Stepnisky, 2018). Culture then refers to the frameworks and modes of understanding, the views and interpretations of social phenomena, and the readings of social action that agencies use. Cultural elements of society are largely ideational: values, beliefs, paintings, attitudes, novels, … (Archer, 1996).

The debate on the role of agency, structure and culture in human (inter)action and how they connect to each other is of relevance to this research. Do shaming practices result from autonomous actions or from social structures constraints? What is the role of agencies or systematic factors in shaming experiences? Agents define situations according to their lifeworlds but, although they have validity and authenticity in their own, identifying and analysing the structural and cultural mechanisms at play may turn out to be equally important to construct societal understanding of shaming performances. Shaming performances are complex jigsaws made of lifeworlds (agencies and cultures) and structures. Discerning the pieces or mechanisms is a real intellectual challenge, especially when different levels of analysis enter the game.

2.2. Surveys

2.2.1 Data collection

Respondents to the survey are selected in two waves. A first wave encompasses a representative sample from the research of De Vydt (2020). Ninety-seven demonstrators received an invitation and thirty people filled in the online survey. A second wave encompasses a random sample of eighty-eight demonstrators who spontaneously participated through social media. Out of a total of hundred-eighteen respondents, eighty-two showed PEB behaviour and met the conditions to be a valid case. A sample's profile accommodates for differences between the two waves of respondent recruiting (annex 6).

2.2.2 Results[1]

2.2.2.1 Climate change

Climate change evokes a lot of emotions and reactions. Respondents almost exclusively mention negative emotions, even though they are free in mentioning whatever they feel like. Most respondents say that climate change makes them feel anxious and fearful. They are concerned about the future and express concerns for future generations. They share a strong sense of urgency. Respondents describe climate change as a shemozzle, a process in which humankind destroys the beautiful planet on which it lives. Respondents

1 For visualised results, please refer to annex 7 (all results confused).

articulate feelings of sadness, frustration, anger, desperation and loneliness. They feel alone in their struggle against climate change as other people do not seem to care about the Earth and future generations. Both youngsters and adults express feeling powerless in the light of climate change. Respondents not only mention emotions in the strict sense of the word, but also express their view about the causes of climate change and future outlooks. Respondents acknowledge climate change signals the (economic) system's failure as well as the politicians' inability to act upon it. Some respondents are rather cynical, admitting the Earth will survive but humankind will not. In their view, climate change expresses human and societal failure. While climate change is rarely associated with positive emotions, some respondents however commit themselves to be hopeful. They believe their actions have impact and they have faith in the younger generations. They may even consider climate change an opportunity to change the entire system. A hierarchy map of answers can be found in annex 8.

2.2.2.2 Climate action

Respondents spontaneously sum up a wide range of actions they take to diminish their impact on the climate (annex 9). Interestingly, they take most of these actions on a daily basis and by consequence have adapted their entire lifestyle. Respondents most often cite a change in their food regime as an action they take to reduce their climate-impact. Forty-two percent of them limit or abandon meat consumption, eventually also limiting consumption of other livestock products. They define themselves as vegetarian, flexitarian, pescatarian or vegan. Respondents (6%) also try to eat local, seasonal fruits and vegetables to reduce the emission of GHG associated with food transport. For example, they try not to eat avocadoes and bananas any longer. Respondents are thus vigilant when buying food or shopping goods. They do not only eat local, they also try to shop local (17%) and only buy biologically cultivated foods (11%). One-third limits packaging and plastics by buying foods in bulk or going to zero-waste stores. Respondents try to reduce their overall consumption of goods (7%) and may shop second-hand items such as clothes (11%). Respondents' living places and commuting are other sources of concern and action. One in ten respondents makes considerable changes to their residence mainly to reduce gas/electricity consumption (*e.g.* placing solar panels, pellets heating). One-fifth acknowledges to take public transport more regularly as they limit or abandon car use (29%) and reduce or stop flying (22%). Interestingly, respondents do not only change their own habits but they also try to persuade others to do so. They consider talking about climate change, informing and sensitizing others as a form of climate action. Respondents say to educate others about climate change (10%), influence decision-making through lobbying at several governmental levels, by chairing environmental councils or by guiding the industry they work for into a more climate-friendly direction (13%). Most of the cited actions result from small, daily choices such as cycling (instead of

driving) to the supermarket and picking seasonal and local fruits. These choices do impose a certain burden (financial, social, organisational, well-being) on the respondents. However, the efforts and costs are rather limited. A fewer number of respondents cite more costly actions such as placing solar panels and adapting their house or more effort-intensive actions such as lobbying and climate education.

Climate change is an environmental problem. However, not all environmental problems have to do with climate change. Respondents correctly mention a lot of actions which mitigate climate change. However, they also mention actions which rather reduce environmental degradation than contribute to limit climate change. Buying biologically cultivated food limits the use of pesticides and water pollution. Avoiding plastics limits the plastic soup in the ocean as well as fish mortality while avoiding an increase of human health problems. Of course, these environmental issues indirectly stimulate climate change (plastic is made from petroleum) but are generally not known by the public for their contribution to climate change.

2.2.2.3 Respondents make climate-related remarks

A majority of respondents (63%) admit to comment others. The remarks concern other people's behaviour or actions which have a negative impact on the climate (75%), people's inaction to take climate change mitigation measures (75%), people's behaviour regarding climate change (70%) and people's personality which exercises an impact on climate change (25%).

2.2.2.3.1 Shamers' profile

A majority of respondents admit to make remarks upon others. These 'shamers' differentiate from respondents who do not comment others on five variables: (1) political preference, (2) age, (3) feeling guilty for the climate impact of their actions or behaviour, (4) knowing what climate shaming is and (5) level of education.

First, among the respondents with a political preference for Groen, twice as much respondents make comments compared to those who do not make comments. Such a tendency is absent among groups with other political preferences. Second, the number of respondents who comment others are for each age category superior to the number of respondents who do not comment others. Commentators present age categories in accordance to the sample. Third and interestingly, five-teen times as many commentators feel guilty compared to the number of commentators who do not feel guilty. Among respondents who do not comment others, those feeling guilty are only three times as many as the ones not feeling guilty. Fourth, all

shamers acknowledge to know the meaning of climate shaming, although a large majority of respondents who do not comment others also know what climate shaming refers to. Fifth, variation in educational levels across shamers and no-shamers is not very pronounced. A majority of respondents with a professional bachelor's or master's degree tend to commentate others while only a minority of respondents with an academic bachelor's or high school degree does so.

2.2.2.3.2 Actions and behaviour commented

Interestingly, respondents do not only point fingers to individuals for behaving in a climate-unfriendly way (*e.g.* flying), they also rebuke individuals for not proactively taking mitigation measures (*e.g.* reducing the heating). Respondents clearly rather commentate people's actions and behaviour than people's personality.

When asked to describe a concrete situation in which they made remarks, respondents often refer to the 'irresponsible' and 'absurd' behaviour of their friends and family members. They are critical on car use for short distances, taking planes to go on holiday, 'energy waste' such as leaving lights or the heating on when a room is empty, eating meat or exotic fruits (avocadoes and coffee) and general overconsumption. They equally pronounce their aversion of incorrect or a lack of trash disposal, littering and plastic use. Respondents also speak on others about their ignorance or their incoherency between talks and actions.

2.2.2.3.3 No-shamers

A minority of respondents do not make remarks on others' actions or behaviour, the so-called 'no-shamers'. Four kinds of motivations or reasons seems to explain this. First, certain respondents think that remarks are not constructive nor effective in changing people's habits. Remarks may even have the opposite effect of confronting people with their failures or insulting them and by consequence create repulsion from climate rhetoric. Second, certain respondents do not like to teach others a lesson or to be moralising. Third, certain respondents consider remarks as an assault on individual choice and privacy. Fourth, certain respondents do not feel well giving others remarks when being aware of their own imperfections regarding the issue.

2.2.2.3.4 Frequency and timing

Almost half of the respondents (45%) now and then comment others' actions or behaviour regarding climate change. One in four respondents comment on a weekly basis and one in five on a monthly basis. Respondents often make remarks on the spot, *i.e.* when they see someone taking climate-unfriendly actions (82%) or when they notice someone's climate endangering future plans (78%). One in three respondents

comment people when they are giving climate-friendly advice to others but do not act climate-friendly themselves. Noteworthy is the low comment activity of respondents on social media (8%).

2.2.2.3.5 Shamed persons

Respondents essentially make comments to people they are close with such as family members (88%) and friends (90%) or people they know well (73%). Only a minority of respondents speak on people in the street (20%) or people they don't know (15%). While only a minority does, the fact that respondents talk to strangers about their actions or behaviour is remarkable given the Belgian societal identity. For each disposition, motivations can be advanced. People tend to comment relatives because it is an easy step from talking. They may know a person very well and thus not fear to ruin a relation by making a comment. Conversely, some people tend to more easily comment strangers because they have nothing to lose and will probably not meet the stranger again.

2.2.2.3.6 Emotional response

Giving climate-related remarks to others does not necessarily influence respondents' emotional state, and if it does, then it does so often in a positive way. Half of the shamers (49%) just feel equal before and after making a remark. One in three feel smarty (31%), sixteen percent feels good or/and careful, eighteen percent feels helpful and only ten percent feels bad.

2.2.2.4. Respondents receive climate-related remarks

Almost half of the respondents (46%) receive remarks regarding the climate impact of their actions or behaviour. Most of them (74%) are commented on climate-unfriendly actions they take, only half as much (37%) are commented for not proactively taking climate mitigation measures. Twenty-nine percent of the commented respondents receive comments on their behaviour, only three percent on the implications of their personality for the climate.

2.2.2.4.1 Shamed persons' profile

Almost half of the respondents affirm to receive remarks. These 'shamed persons' differentiate themselves from the respondents who do not receive remarks on five variables: (1) political preference, (2) age, (3) feeling guilty for the climate impact of their actions or behaviour, (4) knowing what is climate shaming and (5) level of education.

First, among the respondents with a political preference for Groen, more respondents receive comments compared to those who do not receive comments. Such a tendency is reversed among respondents with a preference for Ecolo. An almost equal number of respondents do receive and do not receive comments for all groups with other political preferences. Second, youngsters receive more comments than they give while elder people give more comments than they receive. Third, almost all shamed persons feel guilty, while less persons feel guilty among those not being shamed. Fourth, all shamed persons know what climate shaming is, although a large majority of the persons who are not shamed also know to what climate shaming refers. Fifth, variation in educational levels across shamed and not shamed persons is not very pronounced. A majority of respondents with a bachelor's (academic and professional) degree tend to receive comments while only a minority of respondents with a master's or high school degree does so.

2.2.2.4.2 Actions and behaviour commented

Interestingly, respondents are much more shamed for their actions which are known to be climate-unfriendly (*e.g.* flying) than they are for their potential failure to take even more climate-friendly actions (*e.g.* placing solar panels). Respondents are shamed on actions and behaviour more than on personality.

When asked to describe a concrete situation in which they received remarks, respondents often refer to parents, friends or colleagues who disapproved their participation in climate marches because they think respondents are not climate-friendly enough. Many respondents acknowledge this makes them feel frustrated. They are expected to cancel their air travel or shamed for past air travels. Respondents further receive remarks on car use and holidays, food choice (not being completely vegan although vegetarian or pescatarian, drinking coffee), smoking and shopping style (*e.g.* hypermarkets, buying too many clothes).

2.2.2.4.3 Not shamed persons

Almost as many respondents (44%) do not receive remarks as respondents who do receive remarks. Individuals who are not shamed identify four reasons for this. First, a majority thinks other people do not make remarks because they do not care about climate change. Their indifference explains why they do not even notice climate-unfriendly behaviour. Second, respondents notice that their efforts to limit climate change are also noticed by others, who by consequence do not comment them. Third, respondents say to have a more climate-friendly lifestyle than many other people and by consequence, these others think to

have no right in making remarks to them. Fourth, respondents who themselves tend not to make remarks to others, appreciate other people's respect for personal choices and privacy.

2.2.2.4.4 Frequency and timing

One in five commented respondents receive remarks on a basis equal to or shorter than a month (monthly 13%, weekly 5%, daily 3%). Half of the respondents (49%) however receives remarks now and then. One in ten (11%) respondents is commented a few times a year, one in five (19%) almost never. Half of the respondents are commented on the spot, *i.e.* on the moment they are acting climate-unfriendly. Many are commented in the moment they are giving climate-related advice to others (38%) or when they are making future plans which seem not climate-friendly (24%). One in three respondents (32%) receives remarks on past behaviour. Interestingly, only three percent of the respondents receives remarks through social media.

2.2.2.4.5 Shamers

Family members (56%) and friends (53%) most often comment respondents on their climate-unfriendly actions and behaviour. Students do this in one-third of the cases, colleagues in one-fourth of the cases (28%), just as people at sport activities or at events (25%).

2.2.2.4.6 Emotional response

A majority of respondents react positively to the comments they receive. Half of them (49%) feel happy to receive remarks because it proves others are also concerned with climate change. One-third (30%) of the respondents feel motivated to act or behave differently after receiving remarks, one-fifth (22%) feels motivated to try completely new ways of acting or behaving. However, remarks may also generate negative feelings. Thirty percent of the respondents feel bad after receiving remarks because they are aware their actions negatively affect climate change but they cannot change them. Similarly, twenty-seven percent feel bad because they realise their actions negatively affect climate change but changing these actions demand too much effort. One in four respondents say to feel ashamed when receiving remarks, sixteen percent say to feel ashamed *because* others had to point out the negative impact on the climate of their actions. Some respondents feel afraid to receive comments and some do not tell about certain of their (past) actions because they fear getting remarks on it.

2.2.2.4.7 Appropriateness

Only a small number of respondents (14%) judge others not to be right in commenting them. A majority (54%) of respondents think others are right in giving them remarks and find the comments appropriate, for two reasons mainly. First, they acknowledge certain of their actions or behaviour are indeed not very respectful of the climate. Respondents are however aware of the impact of their actions on the climate, only eight percent is aware only of the impact of some of their actions. Second, many of them use remarks to reflect upon their behaviour (76%) and improve the climate-friendliness of their actions (42%). Many (58%) take the remarks into account even if these do not seem to elucidate many unknown impacts. However, respondents do not welcome remarks from climate skeptics, climate denials and climate indifferent individuals. They feel attacked by remarks from individuals who enjoy a climate-unfriendly lifestyle. They are disappointed when others search for a small flaw in their climate-friendly lifestyle without considering the broader context and all efforts they take to limit climate change. Individuals may feel confronted with the climate impact of their own behaviour when encountering respondents and as a reaction search for climate-unfriendly actions in respondents' lifestyles. Respondents mention the ease of making remarks but a difficulty or impossibility of living a perfect climate neutral life. Respondents differentiate between well-intentioned, constructive remarks and offensive, hateful remarks. They more easily accept remarks from other pro-environmentally oriented peers than from couldn't-care-less persons.

2.2.2.5. Shaming versus being shamed

The number of respondents giving remarks because of the negative impact of other people's behaviour on climate change is higher than the number of respondents who receive remarks. Given their PEB, it seems logical that respondents remind others about the consequences of their actions on climate change than vice-versa. Respondents' lifestyles often reflect their PEB and by consequence limit the number of remarks they receive from others. Family members and friends are both the main givers and receivers of comments. Respondents easily comment people they know well, eventually talking upon people in the street. Otherwise, respondents receive comments from a more diverse public such as students, colleagues and people at sports or at events.

2.2.2.5.1 Actions and behaviour commented

The actions and behaviour subject to remarks are different according to the respondents' role as shamer or shamed person. Respondents tend to comment both climate-unfriendly actions and a lack of proactive climate-friendly actions whereas the comments they receive mainly deal with climate-unfriendly behaviour.

Concretely, climate-unfriendly behaviour regarding transport modes such as car use and flying make up a big part of the remarks, both given and received. Food choices are also often subject to remarks, but in a different way. When given, remarks are often about meat consumption or exotic fruits consumption but when received, remarks are about the consumption of livestock products other than meat. While respondents talk upon 'irresponsible' and 'absurd' behaviour of their relatives such as energy and water 'waste' and littering, they are talked upon the incoherency of participating in climate marches and not being perfectly climate neutral. It can be concluded that respondents tend to comment 'obvious' and 'impactful' actions. They comment general behaviour which does not necessarily demand much effort to change and do not significantly compromise on living standards. Conversely, respondents tend to be commentated on smaller, less impactful flaws and reminded of their imperfect lifestyles. Respondents are not commented on the actions they comment simply because they probably do not take these actions themselves.

2.2.2.5.2 Not shaming nor being shamed

Some respondents do not comment others and are not commented themselves, often for the same reason. As they do not like to interfere with people's private life, they do not accept others to interfere with their own life. Annex 10 gives an overview of respondents' motivations for not making or receiving remarks.

2.2.2.5.3 Frequency and timing

Almost half of all remarks are given or received on a now and then basis. However, respondents more often comment others (weekly/monthly) than they are being commented (few times a year/almost never). Remarks may concern several activities or behavioural patterns. According to if the respondents are the givers or the receivers of remarks, these may vary in nature. The majority of remarks are made on the spot and thus concern actions or behaviour which are directly perceived by the commentator. One in three respondents makes or receives remarks in a context of advice provision. Interestingly, respondents receive remarks on their past behaviour but mainly comment others on their future plans.

2.2.2.5.4 Emotional response

Remarks may influence one's mood or generate specific emotions. Receiving remarks seems to influence one's mood much more than giving remarks. In both cases however, remarks seem to exercise a rather positive influence on emotional states. Commentators express feeling smart, good, careful and helpful. Commented respondents express feeling happy and motivated to act and behave differently. The exchange of remarks between individuals thus seems productive in altering behaviour and thus contributes to mitigate

climate change as well as to improve mental health. Nonetheless, remarks may generate negative emotions mainly because receivers feel unable to adapt their behaviour or to do so without much effort. Receivers also acknowledge to feel ashamed by the remarks. Finally, the potential of receiving remarks generates fear among some respondents.

2.2.2.6 Guilt

A majority of respondents (78%) feel guilty about taking climate-unfriendly actions and half of them (54%) experience guilt for not proactively taking climate mitigation measures. Seventeen percent feels guilty because of their behaviour, eight percent because of their personality. One in four (27%) feels guilty every week, one in eight (15%) every month. Most respondents (47%) however feel guilty now and then.

2.2.2.6.1 No guilt

Few respondents do not feel guilty for their actions or behaviour. They advance two main reasons for this. First, even if they realise they could do even more to limit climate change, they appreciate their current climate-friendly actions. They do not feel guilty because they already take climate mitigation measures. Second, a small number of respondents do not feel guilty because they think climate change is not their individual responsibility, rather, it comes to multinationals to change their behaviour.

2.2.2.6.3 Reasons for guilt

Respondents feel guilty for several reasons. Obviously, most feel guilty because they are aware of the negative impact of certain of their actions on climate change (78%) and because they know they contribute to climate change (60%). Thirty-seven percent of the respondents feel guilty for not taking enough actions to limit climate change and thirteen percent feels guilty for being unable to take more actions. Respondents also experience guilt because although they try their best, they feel that what they do is not enough to stop climate change (60%) and will never be enough to stop it (27%). Thirty-eight percent of the respondents translates powerlessness into guilt. Finally, almost half of the respondents (48%) feel guilty for ruining the future of their (grand)children.

2.2.2.6.4 Emotional response

Negative emotions generate mechanisms to cope with and prevent one's mood from being influenced by the emotion over a long time. When it comes to 'climate guilt', respondents identified several coping

mechanisms. First, many delete guilt by deleting the cause of guilt, *i.e.* they adapt their behaviour to be more respectful of the climate. Second, respondents downplay the magnitude of their contribution to climate change and thus equally diminish their guilt. Third, respondents acknowledge limiting climate change is not their individual responsibility. Fourth, respondents remind themselves they try their best to mitigate climate change and thus should not feel guilty. Fifth, respondents suppress guilt by focusing on other (cultural or sports) activities or sixth, through ventilating. Indeed, three in four respondents (77%) always or sometimes share their feelings of guilt with others. They confess guilt associated with climate-unfriendly actions they took or certain ways in which they behaved. They mainly talk about it with people who are equally concerned about climate change, in many cases their partner, friends or family members.

2.2.2.7 Climate shaming

2.2.2.7.1 Climate shaming knowledge

Forty-four percent of the respondents have heard of climate shaming. Among them, sixty-eight percent knows what climate shaming means (twenty-nine percent is not sure). Indeed, a majority of them correctly define climate shaming. Globally, less than one in three respondents (30%) is able to correctly define climate shaming with certainty. A majority of respondents (57%) only recently (2019/2020) heard about climate shaming. They did so mainly through classic news channels such as television, radio and newspapers but also through the internet, especially via social media. Some respondents also heard about climate shaming via friends. Respondents got to know about the phenomenon in the context of reports about climate marches and climate movements, especially the Swedish anti-fly movement.

2.2.2.7.2 Climate shaming experiences and thoughts

Interestingly, while most respondents are able to correctly define climate shaming, they barely use the words shame/shaming in their answers to open questions. One respondent does when elaborating thoughts at the end of the survey2: *'Individual behaviour is a starting point that can allow, with a critical mass, to establish alternatives to existing harmful practices. But it is never enough as individual 'ethical' behaviour requires a lot of information (and sometimes discipline, sacrifice etc.) which a great share of the population may not have. Therefore '**shaming'**, educating or **moralising** individuals while ignoring the actual profiteers of environment-harming industries on the supply side will not get us anywhere ... Abolishing kerosene subsidies may be a bit more effective than lecturing your friends about their Ryanair flights (even though thinking about the consequences of the latter may help for the former). There needs to be collective*

2 Quotes may be translated from French or Dutch. Contact the author for quotes in the original language.

action that recognises the political character of climate questions and pushes for regulations that go beyond 'nudging' individuals to 'behave properly'. Individualization of responsibility (climate behaviour) is one of the threats to climate justice'. This particularly extensive reflection describes the opinion, which other respondents share, that individual responsibility is not enough to limit climate change but that the responsibility mainly lies on the supply side (big companies) and politicians should regulate this. In this view, shaming is rather useless. Respondents may express shame, shaming and related emotions or processes using other words. Three respondents explain why they do not comment others on their climate-unfriendly behaviour: *'I don't want to* ***blame*** *anyone, knowing that I'm not doing everything perfect either and I respect the different levels of climate awareness that people may have', 'I educate but I do not want to* ***judge*** *the person under any circumstances. Everyone does what he wants'* and *'I think someone who is not open beforehand will only be confirmed in his or her idea that 'the green ones' are always* ***moralising*** *or feeling morally better… **pointing out** what can be done even better'.* All three respondents express their aversion of shaming, blaming and judging as a method to change people's mentalities. They doubt that a negative, 'attacking' mode can be effective in altering behaviour. Instead, they prefer constructive ways of interaction such as having a conversation with the person. *'For the same reasons as me: there's no point in* ***blaming****',* respondents think others do not make remarks to them. Respondents do not only think shaming and blaming is counterproductive. They also consider it an inappropriate, disrespectful way of addressing an issue because *'if I don't take a climate-friendly act, there is a good reason, the person making a remark* ***judges*** *without knowing'* and thus *'everyone may give their opinion, I am not against hearing comments if they can lead to positive reflection or change. However, there are ways to say and make comments! What is annoying… that I am* ***blamed****… without taking into account all the other actions I do'.*

2.2.2.8 Eco-guilt

2.2.2.8.1 Eco-guilt knowledge

Ten percent of the respondents have heard of eco-guilt. Among them, sixty-two percent knows what eco-guilt means (thirty-eight percent is not sure). Indeed, a majority of them correctly define eco-guilt. Globally, only five percent of all respondents is able to correctly define eco-guilt with certainty. Most respondents only recently (2019/2020) heard about eco-guilt. They did so mainly through classic news channels such as television and newspapers or via social media.

2.2.2.8.2 Eco-guilt experiences and thoughts

Respondents are explicitly asked about their experiences of guilt following their climate-unfriendly actions. Except from these answers and those on the questions regarding eco-guilt knowledge, respondents barely

mention guilt in open questions. Two respondents however share that *'my feeling of guilt and helplessness is not limited to global warming but extends to the global situation (loss of wilderness, decline in biodiversity, plastic pollution, inequalities, ...)'* and *'if the law is not respected, we can speak of guilt, in the legal sense of the term. Guilt at the level of individual consciousness does not provide the impetus for change, it seems to me.'* Respondents bring up interesting issues. The former proves that not all respondents tend to confuse climate change and environmental problems, rather, that concerns with climate change are often accompanied by concerns for other environmental problems. The latter expresses skepticism about the effectivity of individual guilt, stating the higher effectivity of legal formulas in fostering change.

2.2.2.9 Climate shaming versus eco-guilt

Climate shaming and eco-guilt are clearly distinctive concepts. They vary in scope and the nature of the emotion is different. Climate shaming deals with shame in the context of climate change whilst eco-guilt deals with guilt in a broader context of environmental issues. However, not all respondents seem to clearly distinguish both concepts. Some respondents define climate shaming as eco-guilt. Others apply eco-guilt only to climate change issues. This again shows that respondents do not necessarily know or make a distinction between climate change and environmental problems, nor between shame and guilt. The terms climate shaming and eco-guilt are not popular. Almost one in two respondents (46%) has never heard of climate shaming and eco-guilt whereas only seven percent has ever heard of both concepts. Surprisingly, respondents are more familiar with climate shaming than with eco-guilt. Forty-for percent of all respondents has ever heard of climate shaming, only ten percent has ever heard of eco-guilt. One in three respondents have heard of climate shaming but not of eco-guilt. Thirty percent of all respondents is able to correctly define climate shaming, only five percent is able to do so for eco-guilt.

2.2.3 Discussion

The questionnaire and the respective answers prove useful in gathering information about climate change, society and related emotions such as shame and guilt. The combination of closed and open questions makes comparison across respondents possible while also leaving space for personal experiences and more in-depth understanding. Some results are more remarkable than others, confirming or dismantling previous research findings and leading to hypotheses and theory about climate shaming and climate shame.

2.2.3.1 Climate change

Recent research (De Moor, Uba, Wahlström, Wennerhag & De Vydt, 2020) found participants to climate marches to mainly feel anxious, worried and frustrated about climate change. Demonstrators rarely feel hopeless given that hope is a prerequisite to action. These findings are confirmed by the results of this survey, however, not completely and not in a same way. De Moor *et al*. found youngsters more often to feel anxious and less often powerless compared to adults. In this survey however, both youngsters and adults feel equally anxious and powerless. While De Moor *et al*. only checked for negative emotions regarding climate change through multiple choice, this survey targets a broader understanding of feelings by using an open question formulation. It shows that demonstrators more often but not exclusively associate climate change with negative feelings. The survey also identifies more diverse emotions as well as the motivations leading to these emotions. Demonstrators feel human, political, economic and system failure. They feel an urgent need for action in order to appease their concern for future generations.

2.2.3.2 Remarks and shame

The questionnaire does not explicitly ask about experiences of shame or shaming, nor does it measure shame/shaming proneness. Rather, it prefers to ask demonstrators about their larger interaction with individuals and to situate shame and the process of shaming within that context. Using grounded theory, this research favours the understanding of climate shame not in avoid but through personal experiences in conditional environments.

The interpersonal exchange of remarks does not necessarily signify a process of shaming which may result in one of the individuals experiencing shame. As many of the respondents to the questionnaire express, remarks about the impact of certain actions or behaviour on climate change may be positive, constructive and helpful elements of a conversation. Only one in four respondents say to feel ashamed when receiving remarks and sixteen percent say to feel ashamed *because* others point out their actions. Some respondents fear getting remarks and may therefore even hide certain actions or behaviour. Remarkably, respondents barely mention shame/shaming in their answers to the open questions.

Most respondents do comment others and do receive comments from others. They do so in a variety of situations and contexts, which do not necessarily imply shaming or feeling shame. These commentators are referred to as ‘shamers’ but of course, they do not all shame as they comment others. However, a minority of respondents choose to not comment others. One of the motivations therefore is that respondents understand commenting others as a way of shaming or blaming. They feel it is moralising and do not like

to be like that. They believe shaming and judging are disrespectful and ineffective ways of altering others' behaviour. Contrary to the literature which considers shaming a powerful tool of social control and social change, the respondents consider shaming inappropriate and ineffective.

2.2.3.3 Climate shaming: conventional or disruptive?

The form shaming takes or the type of shaming is important to understand shaming experiences. Conventional shaming typically entails an actor with higher social status and power, who is part of a majority group in society and aims at consolidating the existing norms to shame another actor, who enjoys a lower social status and is part of a minority group. Disruptive shaming is quite the opposite in that it entails a shaming actor with low social status trying to alter the existing norms and introduce new norms. To qualify shaming as conventional or disruptive thus mainly depends on two variables: (1) the relationship between the shamer and the shamed person in terms of status and group belonging and (2) the extent of internalisation or wide acceptance of the norms at stake (Jacquet, 2015). Do respondents act to climate shaming as being conventional or disruptive?

2.2.3.3.1 Relationship between actors

Characteristics of the individuals who shame and those of the individuals who are shamed do matter to define the type of shaming that is taking place and thus to understand a particular shaming experience. The survey made possible to distinguish respondents on five variables relevant for the characterisation of the relationship between the shamer and the shamed actor during a shaming experience.

First, respondents' political preference may indicate which norms and conceptions of society the respondents value or agree with. It may also indicate if respondents identify with a minority of majority group in society as well as give an idea of their social status (Abts, Swyngedouw & Meuleman, 2015; Deschouwer *et al.*, 2010; 2015). Only among the respondents with a preference for Groen, a majority shames others and is equally shamed. Among the respondents with a preference for Ecolo, however, those being shamed are fewer than those not being shamed. The difference between respondents with a preference for Groen and Ecolo is striking given that both parties are mainly characterised for being 'green'. Both Groen and Ecolo sympathizers also tend to enjoy a high social status. The elections in 2019 in Belgium however show a distinct societal distribution of Groen and Ecolo voters. Whereas Groen voters clearly represent a minority in Flanders, Ecolo voters are much less a minority, especially in Brussels. Groen voters may thus find it harder to share climate norms with others than do Ecolo voters.

Second, age may play a role in defining the shamers and the shamed ones, especially in defining which relationship is appropriate for shaming. Up to a certain age, elder people tend to enjoy a higher social status than do younger people. Youngsters indeed seem to be shamed more than adults or elderly people. A majority of youngsters admit to receive remarks while less than half of the adults and elderly persons do so. Several motivations may explain this. First, giving remarks to persons who are younger than oneself is easier than pointing out to someone who is older. Commenting younger people is not only socially more acceptable, it may also be considered part of education. Second, young people are the ones who will not only have to live with climate change but will also shape the future. It is therefore more interesting to a shamer to put energy in altering youngsters' behaviour and to sensitize them than trying to change elder people's habits, which is particularly hard. Third, youngsters more easily adapt and alter their behaviour than do elder people. It is difficult for an adult to quit his/her car when (s)he needs to drive to work every day. By contrast, youngsters may not even have their own car as they do not have a job which makes it easier for them to be critical against car use by others. Lastly, many youngsters admit to receive remarks from their parents following their participation to climate marches. Their parents demand them to stop flying and to refrain from going on holiday, because otherwise, these youngsters are reproached hypocrisy. Elder people tend to make more remarks, younger people tend to receive more remarks. However, many remarks are also exchanged between people with a similar age as not only family members but in many cases also friends comment each other. A situation in which parents make remarks to their adolescent children is less likely to be shame-inducing. It would be considered part of education and is likely to happen inside the house, without public. By contrast, a situation in which friends or random people at events give comments is likely to be shame-inducing because among peers one's public image is at stake.

Third, personal emotional characteristics such as feeling guilty may influence shaming experiences and the likeliness of being the shamer or the shamed person. It may be surprising to notice that a large majority of commentators or shamers feel guilty about their own actions or behaviour with a negative impact on climate change. Furthermore, respondents who do not feel guilty tend to refrain from making remarks to others. This may be surprising as one would suppose that, in order to comment others, oneself must feel or be exemplary. One feels guilty because (s)he is probably not perfect (*i.e.* does not have a climate neutral lifestyle) and thus would be thought off not to commentate others. However, thinking the other way round may explain why this yet happens. As respondents feel guilty for their own behaviour, they attach importance to the said behaviour and may, willingly or unwillingly, expect other to do the same. When these others fail to care about climate change, these guilty-feeling respondents start to shame. Similarly, respondents may not feel guilty because they care less about climate change and may thus be less likely to shame others for something they are not concerned with themselves. Respondents may not feel guilty for

other reasons such as because they estimate they already do a lot to limit climate change. They may tend not to shame others because they realise they are not perfect themselves and would not like others to judge them without knowing the entire context in which a person behaves. The relationship between guilt and shaming or being shamed is complex.

Fourth, knowing about the concept of climate shaming and understanding it may influence people's thoughts as well as their behaviour to it. It may be supposed that following a reading about climate shaming, a person reflects upon him/herself as well as upon the desirability and/or appropriateness of climate shaming. Almost all shamers as well as all shamed persons in the survey say to understand the concept of climate shaming and may therefore be estimated to recognise a climate shaming situation more easily than individuals who never heard of the concept.

Fifth, educational levels may indicate social status and power relations in society (Bourdieu & Passeron, 1990; Breen, 2010; Vilić, 2014). However, the survey does not indicate that high educated respondents more frequently shame and less frequently are shamed than low educated respondents. All educational levels confused, approximately half the respondents shame others (and half of them do not shame others) and approximately half of them are shamed (and half of them are not shamed).

The relationship between the main actors of a shaming situation (shamer and shamed person) may be expressed in terms of social status and power, which translates the type of shaming taking place. The more, social status may, within a given context, influence a person's understanding of the mental state of another person in terms of thinking about intentions and anticipated feelings, which consequently may impact the shaming situation (Rizzo & Killen, 2018). The above discussion indicates climate shaming to be disruptive, which entails greater risks for shaming backlashes than with conventional shaming.

2.2.3.3.2 Climate norms

The norms at stake during a shame experience define the kind of shaming. These norms are transgressed by individuals taking certain actions or behaving a certain way. The actions or behaviour thus express norms. By looking at which actions and behaviour form the objects of shaming experiences, the kind of shaming can thus be derived. Climate change is a 'super-wicked' problem with a wide and diverse set of drivers. Almost all human activities contribute in some way to enhance climate change. Therefore, a general climate norm that appeals to climate neutrality may be desirable, it is less likely (for the moment) to spread across society. A comprehensive climate norm consisting of 'doing least harm to the climate' remains vague

and therefore will exist of smaller norms affecting concrete behaviour (*e.g.* public transport becomes the norm instead of private car use).

Respondents comment on actions and behaviour for which they do not receive comments themselves. This is not surprising, since people tend to comment others on issues they judge important and by consequence avoid to misbehave themselves on these issues. People also tend to comment actions and behaviour in which they are exemplary themselves. Respondents acknowledge most shaming happens for transport modes such as flying and car use. This climate shaming aims at making plane and private car use the exception and public transport use or slow modes such as cycling the norm. Similarly, climate shaming centered on the consumption of exotic products aims at swapping standard with exception (drinking coffee is now standard but should become an exception). The same goes for shopping in hypermarkets, overconsumption and going on city trip. These perceived standard activities should be replaced by more climate-friendly norms. The aim of climate shaming may be well illustrated by the case of room lightning and trash disposal (although an environmental issue). In the past, it was common sense to leave on lights the entire day and night and to pile all trash together. Nowadays however, turning off lights when a room is empty and correct trash disposal have become the norm. Similarly, climate shaming today focuses on making meat consumption and plastic use the exception, thus altering current norms or standards in society.

Climate shaming clearly aims at altering the current norms, not to enforce them. This makes it a disruptive form of shaming which is particularly hard because shamers have to justify why the new norms are better. Climate shaming is disturbing and puts shamers in a vulnerable position.

2.2.3.3.3 Climate shaming: disruptive for how long?

Climate shaming is clearly a disruptive form of shaming because of (1) the unequal relationship between the principal actors (shamer and shamed actor) and (2) the intrusive, disturbing character of new climate norms which are aimed at breaking with conventional standards instead of enforcing them. Society is dynamic and always changing. Climate shamers precisely tend to guide this change in a specific direction. Once new norms are widely spread and internalised, disruptive shaming may turn into conventional shaming. This (partly) happened for some environmental issues such as trash disposal. For the moment, however, climate shaming is disruptive but gaining field in some domains. A comprehensive climate norm is even further away.

2.3 Interviews

2.3.1 Data collection

Participants were invited to an interview based on their answers on two questions from the survey (refer to point 1.4.2.1). Twenty-five respondents answered 'yes' to both questions and eleven respondents answered 'yes' to the second question. In total, twenty-four[3] respondents were invited (through email) to take part in an interview, of which eleven responded positively. Due to Covid-19 measures, ten interviews effectively took place through the online platform Jitsi. Respondents were equally divided among (1) both giver and receiver and (2) only receiver of remarks regarding the climate impact of actions and behaviour. The interviews lasted between thirty-two and sixty-six minutes.

2.3.2 Results

2.3.2.1 Climate shaming and shame

2.3.2.1.1 Thoughts on a climate shaming situation

Respondents received a first image (annex 11) which represents a situation of climate shaming and were asked to describe the image, tell what it made them think off, and what they thought about it. Respondents generally associated negative emotions to the image as they thought it to be moralising, critical, polarising, expressing all the contradictions we are living, the different stands people have regarding pollution, the complexity and hardship of discussing climate change. They saw in it the representation of an environmental consciousness that is inhabiting ourselves more and more but not everyone as *'people who drive cars often know that it is bad but they do nothing about it ... because they always have an excuse why they should go by car',* which may be explained by *'after all, I think it's really a change of habit that is still too much ingrained in many drivers. For some people, the car is part of their needs, well it's like drinking water or like every morning I absolutely have to drink a coffee… I think some have the same relationship with their car'.* The negativity exposed by the image is worn by both the cyclist and the car driver. Respondents feel the cyclist to be aggressive, assertive, arrogant, judgy, little empathetic, feeling powerless and superior. They notice some anger because the cyclist sees how many people drive cars which makes him feel as if he is the only one doing some effort and which may thus be of little effect. Meanwhile, the cyclist does not seem to enjoy the advantages of cycling and ignores the contexts and reasons for car driving. On the other hand, respondents feel the car driver to feel sad and think of himself as a bad person. They notice strong feelings of guilt and self-criticism, which in turn supposes the driver to be conscious and aware of the consequences car driving has. At the same time, he must not feel guilty enough to stop driving

3 The total number of respondents who answered 'yes' to at least the second question is higher than the number of respondents who were invited to an interview. This is due to the fact that respondents chose not to leave their email address at the end of the survey.

or may value other things such as liberty more. By consequence, respondents tend to disapprove situations as on the image because it has a counterproductive effect on changing towards more climate-friendly behaviour. The cyclist's shout out to the car driver makes that *'cars cause air pollution, but we're not going to get things arranged by that the cyclist point out the car driver and that he starts to feel bad'* and '*I don't think that with speeches like that, mentalities will change. But if we use guilt, we very well know that this is not what changes habits'*. Meanwhile, the car driver's reaction seems not helpful neither as *'I am bad, mea culpa, I find it ridiculous, I am convinced that it does not change anything and that it strengthens the other in his good right to judge everyone'*. In the end *'I know that 'you, polluter', does not help in any way. Then we sit in two camps and if we make the car drivers feel bad, that is only going to give a very small contribution of people who want or can get out of that car and step on a bicycle'* and '*I do not believe that this is how we will come to a real debate and move forward on the issue, everyone will somewhat lock themselves in their position because they feel attacked so it is normal to feel stuck in a position when you feel assaulted*'.

Most respondents identify with the car driver in the sense that they also feel guilty for behaving climate-unfriendly. Most respondents also identify with the cyclist on the image but to different degrees. Some respondents see in the cyclist a reflection of themselves as they equally speak out loud on climate-unfriendly behaviour. Others admit sometimes to think like the cyclist but keep it for themselves or to speak on climate-unfriendly actions but in a more friendly, less judgy way than on the image. However, most respondents add to lack context to speak upon the car driver. They all agree that driving a car is not always bad and that there may be valid reasons to do so, such as having a disability, transporting heavy things or driving long distances.

As the cyclist's reaction looks familiar to many respondents, the car driver's is not and this has many reasons. The first one is that respondents think few car drivers think of driving as a something bad for the climate and if they did, secondly, they would not think of themselves as an entirely bad person because they took one climate-unfriendly action. Most respondents agree that doing something climate-unfriendly does not make you an entirely bad person. To feel bad, one must have sufficient insight and empathy towards the cyclist. A third reason is that, in our society, people generally do not quickly feel guilty. A final reason has to do with how people react to aggressive and offensive remarks, which is often negatively, or by avoiding or by counterattacking but surely not by confirming the 'attacker'. Rather, respondents think a car driver normally reacts in ways as *'difficult cyclist' or 'I'm in my right' or 'I have to go here or there quickly' and that he will look much more from his own perspective and 'I also have the right to be on the road with my car' and 'this is an essential move for me' or 'I paid that car' or 'I also pay taxes etc.'.* However, some

respondents hope and wish for more reactions such as the one of the car driver on the image, certainly when the car is used 'for going to the bakery around the corner'. In such cases, the reaction may be legitimate and understandable. Overall, respondents think the image represents a realistic situation as many experience similar situations themselves.

2.3.2.1.2 Conceptualisation

Respondents to the interviews are asked to describe their personal experience with climate shaming and shame, both as shamers and as shamed actors. To understand these shaming episodes, their experiences are compared with how (conventional) shaming practices and shame are defined in the literature (annex 12).

First of all, the literature defines shaming as stigmatising and judging others. Respondents indeed mention stigmatisation as part of their shaming experience. They say to be depicted as hypocrite, arrogant and inconsistent 'green' persons, often by individuals who do not show PEB. Second, respondents mention to feel ashamed not only for their own behaviour but also for actions which they do not directly or entirely control. They feel ashamed for the behaviour of family members or colleagues. Several respondents also acknowledge to feel ashamed for being Belgian and Western as in '*the shame is: but what am I participating in as a Westerner and as a citizen? … It is really shame'.* Such feelings of shame for being part of a group, called collective shame, is interesting. However, the focus of this research is on interpersonal shame.

Third, respondents experience shame in relation to/in front of friends who know about the respondents' intentions and efforts of being as climate-friendly as possible. These friends are often concerned by or at least aware of climate change without acting even more climate respectfully than the respondents themselves. Respondents feel ashamed in front of other climate concerned individuals or communities such as Youth for Climate but *'do not feel ashamed for a small, bad action in front of people who themselves do worser things'.* It is easier to feel ashamed in front of people who notice the climate-unfriendly action and attach importance to it. In order words, these people share certain climate norms with the respondent and therefore will act themselves more or less according to these norms. By consequence, the respondents' failure to adhere to these social climate norms creates feelings of shame. Respondents experience shame most often in front of a group of friends, not in relation to just one person. This public character is typical for shame: the more bystanders, the more powerful shaming is because more people are informed about the person and the transgression. The audience does not necessarily have to agree to the norms to strengthen the shaming situation.

Respondents say to experience shame even in the absence of explicit point out from others. This feeling results from the anticipation of a shame-inducing situation. They explain feeling ashamed even when friends or family member notice their transgression but silence about it. This shows that, fourth, respondents are self-conscious about their transgression. They often know about and recognise the detrimental impact of their actions on climate change and therefore disapprove the action. This rational process evokes an emotional response of shame but of guilt only to a lesser extent. Respondents fear their public image but legitimise the action for themselves. So thus, fifth, shame does not necessarily arise from the impacts of an act on climate change but rather from respondents' consciousness about their inconsequential behaviour. As one respondent says, 'it is a bit contradictory then that I'm doing such a thing'. Similarly, other people may reproach and blame respondents precisely for their incoherency between talks and actions rather than for the contribution of their actions on climate change per se. The shame respondents feel translates the fear of reputational damage, loss of authority and credibility among their friends as 'climate advocates'.

Respondents also express shame for being and taking part in the system they consider wrong. As one respondent says, he felt ashamed for 'being accomplice of the store'. However, the discrepancy between respondents' thoughts, sayings and acts seems to surpass them, in that their acts are consequences of forces they do not control. They feel ashamed for being inconsequential, however, realise or perceive there is no other way. They are forced to be inconsequential and therefore feel ashamed much more than they feel guilty because *'I have thought about it, but I did not necessarily saw a better way out so yeah'* and *'well, reality is that our life has organised this way, back then we were not so attentive to that and, in any case it was hard to find a job as a psychologist, and we have been less attentive to being independent from the car which makes that today, I need a car'.* One respondent also mentions to feel ashamed for something he cannot entirely control, however in a different way *'My behaviour, well I feel ashamed for having done that, but I have the impression that is was more … ignorance. Thus, this is some relieve to the shame I feel. … It's true that I feel more ashamed since I became grandfather because I tell myself it is their future I engage with thus … But it's more a question of … as I said, ignorance, unconsciousness at that moment'*.

Sixth, respondents are most often shamed for flying. Many are the people who like to travel and often the simplest and cheapest way to do so is by plane. For faraway destinations, it is the only option. Meanwhile, the aviation industry contributes a lot to enhance climate change. Respondents' flaw in being climate-friendly often consists or focuses on flying, no matter the frequency. Many respondents try to compensate their aviation impact with climate-friendly actions in other domains such as food regime (being vegetarian, eating local and biologically cultivated products). But to compensate flying demands much effort.

Seventh, respondents tend to allow for 'a flaw' and legitimise their air travels in two ways. First, by taking many climate-friendly actions in other aspects of life, thus 'compensating' their air travels by *'I live here in a hostel with many people together, I do not take much space, I eat healthy, I mean I try to buy very local food, etc. So I try then, in a different way, to do my part'.* Second, by giving a 'valid' reason to fly. This might be for attending an educational or environmental conference or *'but because I stay for a very long time, approximately one year or so, I can, for myself at least, I can somewhere allow myself to still take the plane'* and *'yes, but uh, my goal is to stay here for a longer time and not just to travel from one country to another by plane because that, I would find really terrible'.* Respondents tend to support air travels for 'good' causes (*e.g.* intercultural exchanges, personal development) but tend to disapprove flying for short leisure holidays as one explains '*what I have a hard time with, for example, is city trips. People who fly to Barcelona or to New York for some shopping. Yes, I think that is totally whacked. But for example, for participating in an international project and this is a climate project, you may have to fly'.*

Eight, shame often comes with other negative emotions. Respondents often mention powerlessness for the impossibility of not having to take climate-unfriendly acts (such as flying to visit family abroad). They also mention grief because *'if even me, who tries to be as climate respectful as possible, make such stupid mistakes, then I think: 'How is this problem ever going to be solved? Because many people do not have the chances I have'*. They refer to internal struggles, moral conflicts and worrying. However, some respondents mention to share their feeling of shame and discuss about it with other people who are equally concerned about climate change, which may alleviate their negative emotional state. Further, respondents mention difficulties and hardship with talking or discussing climate change issues with others.

Ninth, shameful situations are not only hard and extreme negative, they are the more totalizing and permanent. While most respondents do not think back to the shameful situation out of nothing, they do when asked about it or when confronted to the possibility of taking a similar shameful act again such as is the case when traveling by plane. Most admit to still feel ashamed today for what they did in the past. Tenth, even if the shameful situation provokes very negative feelings, respondents often do not, or to a very limited extent, alter their behaviour or their way of thinking in response to being or feeling shamed. It only once more confronts them with the problem of climate change. Of course, as shame also results from actions for which the respondents see no alternative, their behaviour will not change.

Respondents describe their shameful experiences very much according to the general script of shaming and shame as found in the literature. Two remarkable features of climate shaming nevertheless come out from the respondents' experiences. First is the strong anticipating character of climate shame. Respondents feel

ashamed even before or in the absence of a real shaming situation. Second is the strong feeling of powerlessness and impossibility to change the shame-inducing action or behaviour. So far climate shaming has focused on respondents as shamed actors. But respondents are also shaming actors, mainly shaming other for taking planes and eating meat. Interestingly, respondents distinguish between individuals who feel ashamed and individuals who do not feel ashamed in response to their remarks. Individuals who feel ashamed often tend to legitimise their behaviour whereas other individuals tend to show avoiding behaviour or jump into a defensive modus. In the latter case, fruitful discussion is impossible.

2.3.2.1.3 Feeling no shame

While the majority of respondents experience some kind of shame, a few respondents do not. They all clearly identify the same reason for it: they are more climate conscious and behave more climate-friendly than most of other citizens and people around them. So why would they feel ashamed when they do most to limit climate change? As one explains *'I do not feel ashamed in front of my friends … with the reason that I think that I do more [climate-friendly actions] than they do and that I am surely more conscious then they are … I could feel ashamed in front of someone who, because of climate change for example on an island in Oceania, is threatened by floods because of a rising sea level, in front of such a person I could feel ashamed, rather than in front of my own environment'.* However, these respondents do experience guilt. They are very conscious about their climate-unfriendly actions and feel bad because of their impact but do simply not feel ashamed in front of others. This shows that most respondents are able to distinguish guilt from shame on the feature that guilt is more self-oriented and shame is more in relation to others.

2.3.2.1.4 Climate shaming anticipation

Respondents received a second image (annex 13) they could describe and comment freely. The image evokes hiding behaviour as an anticipation or as a reaction to feeling ashamed. The person is hiding its behaviour not because of the climate-unfriendly action he is taking but because of the possible, anticipated reaction of the other. As one respondent describes the image: *'That is someone who feels ashamed of the choice he made to go by plane so that he prefers not to talk about it, probably for not breaking a relationship with someone who is sensitive to the environment'.* Many respondents identify quite fast a problem with the behaviour shown in the image. They all think that hiding and concealing actions or behaviour in order to avoid being shamed, receiving remarks or having a discussion is a wrong way of behaving and will not help to solve the climate problem. Therefore, they do not hide their climate-unfriendly behaviour themselves as *'for everything you do, you should be able to say it and justify it and be honest and open about it'* thus *'we*

should keep being honest. Giving the appearance that we are doing very well for the climate and achieving this by concealing things' is not what the respondents want. Respondents thus support empirical evidence of engaging behaviour to shame rather than theoretical predictions of hiding behaviour. Two respondents however do sometimes hide climate-unfriendly behaviour when '*at certain point, even after I booked [the flight], I thought: I hope no student will ask me the question because they know that I like to travel*' as '*there are things that we do not share because we know that it is a momentary weakness, that it is not worth talking about, that happened once, that we will try to avoid and that it could destroy your self-image*'.

Respondents think of the image as a representation of a realistic situation most of them encounter in life. Almost all respondents suspect or know about other people who do not tell them the whole truth, leave climate-unfriendly details out a story or simply do not share their holiday stories with them out of fear of getting remarks or having to debate it. Respondents do not fish this information, but leave these people with their secrets, because among other things '*I know that the person has the feeling that (s)he is not doing well and that is a start of course. I do not necessarily have to emphasize it'* because as one respondent fears '*yeah, it's always when you are pro-climate, you no longer have to go on vacation, you no longer have to take a plane and indeed we're going to end up with people ending up being silent'.*

2.3.2.1.5 Climate change and environmental problems

As respondents are asked about their experiences of climate shame or climate guilt, the problem of mixing up larger environmental problems and climate change specifically, which is present in the survey answers, also here comes to the forefront. Therefore, a mechanism of control has been built into the interviews through a series of pictures which must be identified by the respondents as 'environmental problem', 'climate change problem' or both (justification needed) (annex 14). A majority of respondents prove to know about the drivers of climate change and to distinguish them from drivers of other environmental problems. However, the higher visibility of environmental problems such as trash disposal and plastic use compared to climate change may explain why respondents identify them more easily and faster as well as why they more often are the object of shaming.

2.3.2.2 Remarks

While not all respondents mention to shame other people, almost all of them say to make remarks to others on behaviour which has an impact on climate change. Respondents prove to clearly differentiate between shaming and making remarks even if the differences are sometimes only small and subtle.

2.3.2.2.1 Making remarks

Most respondents admit to purposely make remarks on other people's climate-unfriendly actions. They mainly comment air travels, exaggerated car use, food choices and when it comes to the environment, also incorrect or a lack of trash disposal. However, respondents do not comment a particular action per se, but rather speak upon people's larger behavioural flaws of incoherency such as cognitive dissonance, irresponsibility and the need to always legitimise behaviour '*because of the fact: I always try to encompass everything in numbers and the effective consequence and everything what comes around, actually I find it bullshit. I do not think that, because you behave in a certain way and you can legitimise it for yourself, that therefore the attitude is OK. … Some people think they are only allowed to fly if they have a valid reason for it, but this way you can always for yourself …, everyone thinks his own reason is a good reason*'.

The way in which remarks are given, seems to be crucial to the kind of reception it generates. Most respondents, partly for this reason, attach importance to a friendly and non-offensive way of commenting others and therefore make remarks *'to people I particularly know well. When I do not know them well, it may be felt offensive'*. They *'try to push for things going a certain way but never through attacking, never, I do not like to lecture others on that issue. I try to explain how I do it and I try to do myself, and to function this way rather than attacking directly'* because *'often, if you know them well and you say it in a friendly way, then you can build something up I think'*. The closer the person who makes remarks is with the person who receives remarks, the less offensive remarks are perceived. It not surprising to see, then, that remarks are mainly made to friends, family and children who may be very conscious and concerned about climate change but not necessarily.

The way in which remarks are perceived and received is central to attaining its purpose, *i.e*. behavioural change. Some people develop a discussion about climate change and climate action when confronted with a remark. The majority however, tends to shut down communication on the topic by avoiding to answer, by denying the action or its consequences, by legitimising their behaviour using excuses or through pointing out the person who made the remark. Often *'it is not easy to talk to people because they put themselves very quickly in a defensive modus'*.

As the exchange of remarks seldomly happen face-to-face but rather in group, bystanders' reactions might be an important factor to how the person will feel and thus if (s)he is likely to adapt his/her behaviour. While bystanders may be open to discussion, they seem to rarely intervene. Even when non-offensive remarks are made between friends, they do not always seem to stimulate behavioural change. When they

do, change is small, incremental and takes a long time. Remarks rarely change the way people think about a topic and entail the risk of making people angry and tenacious. Why do respondents then make remarks? Mainly because they feel morally obliged to and because they judge having the right to speak upon things that may affect themselves. Thus it is '*out of a certain conviction that I think it [climate change] is something society as a whole is responsible for and you, as part of it, have the right to advance it to people or at least so that they know what the consequences are of their behaviour*'. Also, '*I think that when someone has this environmentally consciousness that exists, not sharing it is even criminal as imposing it. … I think we have social, educational responsibility and that we must share our convictions but the way we do so is very, very sensitive.*'

2.3.2.2.2 Not making remarks

A few respondents prefer not to make remarks to others and they advance several motivations for it. First, they feel that remarks are moralising and '*I tell myself that everyone is responsible for his own actions and who am I to lecture others?'*. Second, they think remarks are ineffective in stimulating climate-friendly behaviour. Third, they fear a straight rejection of the remarks and by consequence a counterproductive effect because '*there has come an awareness and you can only expect behavioural change from someone if there is such a click, a certain change in consciousness, when insight comes. And that insight does not come by pointing out someone, that comes by getting information, by reading things, by seeing examples of other people but not by being rejected*'. Fourth, they prefer to highlight positive behaviour which may be more effective '*because I do not like that others make remarks to me, so I do not make them to others. And then, it is a bit moralising and annoying to each time make remarks to people. And I think they are often, or conscious, or know the problem but that they do not feel more concerned than that. I do not think negative remarks will get things arranged. And when it is positive, then I try to put forward the positivity'*.

Respondents who committed themselves not to make remarks to others about climate-unfriendly actions still find it hard to abstain from making comments, given the urgent and important character of climate change. They express that *'it's true that it makes me desperate to see that many people do not pay attention to the problem of climate change because I think that we are shooting ourselves in the foot so yeah'* and *'it is true that, it is hard not to have a moralising discourse when a bit concerned about the environment. And thus, it is hard to talk to people who are less sensitive… It is sometimes difficult to find arguments in relation to these people without being moralising. But we must, when we talk to these people, avoid being moralising'*. Respondents prefer to stimulate behavioural change through being '*a living example instead of judging and condemning and polarising'*, being positive and inspiring, giving advice and *'learn from*

others about what others do better than us and share experiences' because *'it is very complicated, giving a remark is a whole enterprise, it is an entire know-how'*.

2.3.2.2.3 Receiving remarks

Almost all respondents receive remarks from others, some of which might provoke feelings of shame. Remarks are mainly about air travel, car use and when it comes to the environment, plastic use. Respondents receive remarks from family and friends, who often share climate change concerns and make remarks in a friendly way. They do however also receive remarks from colleagues or other people they do not know and which are perceived as more offensive and aggressive. Remarks are often made in group, not face-to-face. Remarks are mainly about past events and as such, these events follow a person his/her whole life and make it impossible for the person to ever be 'clean green', adding a permanent character to any misstep. This creates anger and frustration among the respondents. But respondents also experience frustration for other reasons such as *'it is not because someone is trying to make efforts that he cannot go off the road sometimes or do something else. It is more in this sense that it frustrates me'*.

Respondents may feel frustrated by getting remarks and eventually not pay much attention to them. However, they may also feel happy and enjoy receiving remarks, especially from climate concerned friends and when given in a friendly way. Such remarks may alter respondents' behaviour. However, respondents most often try to justify their climate-unfriendly behaviour or relativize the impact of it on enhancing climate change such as *'well yeah, taking the car for 5 or 10 minutes is not good, but doing it once a month is not severe'*.

2.3.2.2.4 Not receiving remarks

Almost all respondents receive remarks, except for two. The reasons for not receiving remarks are multiple: because other people do not dare to give remarks, because others do not judge it to be important enough to make a remark on or because others are not or less climate concerned and climate-friendly than the respondents him/herself.

2.3.2.2.5 Concluding thoughts on remarks

Interestingly, respondents very naturally and quickly talk about exchanging remarks. Particularly when asked about them giving remarks to others, respondents often have a clear and direct answer. Some respondents admit having thought about such situations before, as how to engage in a friendly way to people

and avoid being moralising or offensive. They find better ways to stimulate climate action, most often through leading by example.

2.3.2.3 Discussions

Respondents explain to sometimes have simple discussions about climate change and climate action following the exchange of remarks or shaming situations. They generally appreciate these discussions with people who are also conscious and concerned about climate change. However, they also underline the hardship of having conversations with climate skeptics or less climate concerned individuals. Even with friends '*I really have a problem, it's that I have been arguing with friends, real friends because we did not agree on positions regarding the climate. Friends … tell me: 'I am fed up, everyone is discussing this, my children are bothering me with that, I am tired of living in a negative world, you still have to be able to take advantage of life'. You see, very responsible comments and so I had arguments with some … I really realise that when I get into discussions like that, I do everything except improve things, in fact I tense people up and rather than starting to improve their behaviour, I point them and I do exactly the opposite of what I wanted to do at the start'*. Thus, '*it's really all the difficulty, how we talk about it, how do we share these ideas?*

2.3.2.4 Shame, remarks and discussions

If the interpersonal exchange of remarks does not necessarily lead to shameful situations, as became clear in the survey answers, to what extent does it? The interviews allowed to ask about specific shameful situations and how these relate to the exchange of remarks and even simple discussions. As determined in above sections, two very important factors are at play in and direct interpersonal exchanges: (1) climate change awareness and (2) the willingness to act of other people. Respondents rather feel ashamed in front of others who are equally taking climate action. They prefer receiving remarks from these people because it helps to improve themselves and is not felt offensive. They like to discuss the issue with this people. However, all exchanges with people who are less concerned about climate change are much harder. It seems difficult to experience shame because there is no shared norm. Respondents tend to get frustrated and angry when receiving remarks from this people, and these people tend to react negatively and even do the opposite when getting remarks from the respondent. Discussions then are very hard. Shaming, exchanging remarks and discussing climate action are different elements which nevertheless overlap and may happen simultaneously. Remarkable is the absence of explicit remarks by many respondents. Also remarkable is

that many of them engage in a discussion about their shameful action instead of hiding away from it. Feeling ashamed mainly evokes negative emotions whereas receiving remarks may sometimes lead to frustration.

2.3.2.5 Guilt

Almost all respondents experience guilt as a reaction to having taken climate-unfriendly actions, in most cases flying and car use or to a lesser extent because of turning on the heating, and for having taken environmentally destructive actions such as buying packed foods, using plastics, or not disposing trash correctly. They almost all share their guilty feeling with other people, be it friends or family. Interestingly, respondents admit to change their behaviour in response to feeling guilty. One respondent's testimony is particularly illustrative: '*It [to feel guilty] happens to me every day. There goes no day without feeling guilty … because … I did a trip by car that I could have done by bike, really, it's everyday … We try to pay attention to all the gestures we have and … it's a very, very long learning and I try to teach it to my children too … we have a feeling of guilt because we feel that we cannot manage all these things optimally when we really want to improve it, so we are making progress but in small doses.*'

2.3.2.6 Shame versus guilt

In their answers to describe a personal situation in which they felt ashamed or they experienced guilt, most respondents prove to distinguish both emotions rather well. They were asked these questions after they saw a series of images they had to classify as 'expressing shame' or 'expressing guilt' and after they made the difference between shame and guilt explicit for themselves (annex 15). Almost all respondents distinguished both emotions in that shame emerges in relation to others whereas guilt is more introspective, thus related to the self. Shame is about transgressing what others value, guilt about disappointing the self. Respondents formulate it as *'so in the sense that if I was all alone, I don't know if I could feel ashamed but I could feel guilty'* and *'it is more guilt because it is me who puts the limits, it is me who says to myself: that is not very good and it is not the others who tell me that it is not good or that I have to be careful'*. According to many respondents, shame can be felt collectively and for someone else whereas guilt focuses on individual, personal actions. Guilt emerges when an individual does something bad even though (s)he could do it differently whereas shame implies less control over what is done. Guilt also embraces a feeling of responsibility and reparation whereas this is absent with shame.

Just as the majority of respondents make similar distinctions between shame and guilt, they faster and easier give examples of situations in which they felt guilty than situations in which they felt ashamed.

Interestingly, respondents admit having changed their behaviour after having felt guilty, but not after having felt ashamed. This may partially be explained by how the respondents identify feelings of guilt and shame. Whereas they associate guilt with responsibility, the possibility of making alternative choices and reparation possibilities, they associate shame with carrying the consequences of choices that are not really choices. It is thus easier to alter behaviour for actions which generate guilt than for actions which generate shame.

2.3.2.7 Responsibility in limiting climate change

2.3.2.7.1 Political and economic responsibility

Respondents consider it the entire world's responsibility to take measures to limit climate change. They believe everyone has to make efforts from states and governments to businesses and individuals and cooperate on a global scale. Influential and rich people, countries and companies have to contribute even more. While surely not denying individual responsibility, respondents though see a major role for the political and economic communities to take measures which may limit climate change. Respondents think that, to the contrary of what they are doing currently, governments and policy makers should guide and coordinate individuals in behaving climate-friendly. Respondents agree that *'politicians do not take their responsibility and I think that governments around the world should be much less tolerant and should be able to impose rules of conduct which they are incapable of doing now'* and *'since politics do not move, mobilization must be done from the bottom-up and the problem in our Western civilisations is that politicians ride the wave of public opinion and not the opposite and that is really sad … If politics got involved, it would enormously speed up things'* because *'there are a lot of people who don't want the change we should have. Then they say there is no political support. But a support base has to be created hè'* through *'policy makers must try to cultivate a certain attitude among their own population. I don't think something like that can start globally from the individual'. As 'we unfortunately live in a society where politicians follow the opinions of the people but I think, with a fundamental question like the climate question, we should have politicians who really take responsibility and who also pull the population towards changes but they do not do it'. However,* '*I think everyone has to do a bit … but I realise that we [taking climate-friendly efforts] are still very marginal and that it takes a wider impulse, that's why … the government should send clear signs and emphasize the importance of all these efforts and it is not only the individuals who must do efforts, it is the whole of society, at all levels*'.

Respondents loudly demand politicians and governments to take measures to limit climate change, which, they very well know, are unpopular but must nevertheless be taken. They demand governments to *'actually do as drastically for the climate as is happening now for Corona. And we should actually listen to the climate experts and not just listen to the virologists'.* Respondents urge governments to free as many means

as they did for Corona to coordinate and guide individuals as fast, as strict and as firm through obligation, stimulation, taxation (*e.g.* kerosene, polluting products, meat), prohibition (*e.g.* short distance air travels), investment (*e.g.* renewable energy, zero emission technology), provision (*e.g.* of climate-friendly alternatives, public transport), 'greening' public facilities (*e.g.* electric trains).

Unpopular measures are not the only obstacle politicians encounter. As they took such measures against Corona, they proved being able to take unpopular measures. But pressure from the economic world is also an important stumbling block as *'the government has a huge role to play here, but the problem is: are they sufficiently aware of this or do they have the means, the possibilities? I believe that there is the economic aspect which retains politicians very much from restricting companies to pollute less … there is all this economic issue'.* Thus*, 'the system must be changed. It is a question of questioning this logic of neoliberalism. I think it would take a political coup de force but except that with neoliberalism, what is quite frightening is: what is the value of politicians knowing that they are always with the lobbies negotiating economic interests? I think it is to politicians and multinationals, but politicians themselves have not found the ins and outs'.* It is to the companies' own advantage to change because '*from the moment society is collapsing, they will not gain anything either. Finally, there is a very important economic issue.'*

Politicians are also stuck in the political system itself while *'we have been going around, we have been discussing in all directions for years and advancing on nothing so I really wonder what are the models of governance of the countries that will be the most appropriate in the years to come… Our political system is in a situation of failure… I absolutely don't believe in it anymore'* so that *'it's a shame, but I don't really believe that going to vote, we as citizens, is enough to change'* as *'it's true that I feel responsible but maybe not persuasive enough for everyone to vote for the same people as me'.* Despite respondents' doubts and loss of trust in politicians and the political system, and despite politics' current failure to tackle climate change, respondents believe there still is a very important role for politics and governments in taking measures to limit climate change. They think it is the responsibility of everyone to take measures, but primarily of the political world, also especially of multinationals and businesses or to say everyone with much influence and power.

2.3.2.7.2 Individual responsibility

The majority of respondents think that governments and big businesses should take measures to limit climate change because individuals alone cannot curb it even if *'individuals have a big, big responsibility, but they must be relayed by the people who have mandated for the levels of power that are essential to*

change things' and although *'individual behaviour and pioneering behaviour of individuals is important but needs to be supported by governments and policies'*. What is this responsibility of individuals more concretely? According to the respondents, it consists of thinking, talking and doing. It all starts with being aware and conscious of own actions and behaviour, reflecting upon it and questioning it. It then means sensibilizing friends and other people as well as pressuring governments and multinationals. Finally, it means taking a maximum of actions and efforts in daily life, every individual according to his/her possibilities. All respondents agree that individuals should take a maximum of climate-friendly actions. But are individuals able and free to take such actions?

While one respondent fully agrees with individuals being free because of the democracy we live in (which implies people may decide about a lot of things), all other respondents did not or only partially agree with the statement that individuals are free. They do so because, to them, freedom is only relative. Many obstacles may impede individuals from being completely free. First of all, socio-economic and financial factors may complicate choices. Alternatives are often more expensive than meat itself and on a bigger scale, a poorer person may not have the choice to renovate his house into a passive building equipped with solar panels. Second, a lack of education and intellectual baggage or to say, someone's cultural situation, may strongly influence his/her choices and apprehension possibilities. Third, unconsciousness, uninterestedness and uninformedness may severely impede individuals from making climate-friendly choices because *'as an individual you have to be very aware and very informed, which not everyone is able to, because the advertisements and the information we get still encourage a lot of consumption, and not always towards sustainability',* therefore *'individuals must be willing to forbid themselves certain things in order to be able to make environmentally conscious choices or in other words, the temptation of advertisements and short-term vision of the pursuit of profit is so great that a lot of people can't resist'*. Fourth, even if individuals are informed, the efforts demanded to take certain actions make that individuals are not so free to take them. Behaving climate-friendly often takes a lot of time, money and inconformity (*e.g.* going by train instead of flying). Fifth, individuals are simply not entirely free because they cannot control every single thing. Even if they would like all trains to run on electricity or they would enjoy trash disposal to be organised in a different way, they cannot get it straight away. A final obstacle to ultimate individual freedom to make climate-friendly choices and behave accordingly is the lack of 'green' alternatives. These obstacles intertwine and combine in *'sensitivity to this [climate change] question is still strongly linked to material and financial well-being, and it's often said that ecological matters are really for the rich, it is not completely wrong'*. Notwithstanding the many obstacles, individuals in our society are still free to do things and not to do other things (*e.g.* taking trains, not taking airplanes). With more and

more alternatives becoming available, individuals partially or relatively enjoy freedom to make climate conscious choices.

2.3.2.8 Societal expectations

Respondents showing PEB are often known by their family and friends as 'the greens'. By consequence, they often experience certain pressure to behave climate-friendly as *'that is pretty much the NIMBY thing of: I want to keep doing my thing, but the others have to change … Yeah, and I am often the other* than' and people say *'but if you wouldn't do it, you work in the environmental sector, who would do it? … And that's just another excuse why they shouldn't. Yeah, that is a pity*'. Apart from their relatives who expect them to behave climate-friendly, and themselves who would like others to behave as they behave, respondents feel that society in general does not expect citizens to behave climate respectfully and that it *'depends on the people and the way in which they were sensitized and if they are sensitive to it just personally. So I don't expect everyone to do their best because there are still a lot of people who don't care and that's it and there are still people who just prefer their little comfort'* but *'I think you can feel it is changing… but you still have to justify too little or there are still too many people who say that climate change is happening and oh no that can be bad, but they still have the feeling: it will be okay, we will solve it, and people are inventive enough to… deal with this'*. Faith in solutions and personal comfort are not the only reasons why society does not expect people to behave more climate respectfully. Respondents also blame overloads of information, unclear communications and the priority role of economic considerations on ecological thoughts. Respondents however notice a shift and believe society as a whole will, with time, expect individuals increasingly to behave climate-friendly.

2.3.2.9 Society's perception

Respondents do not feel society expect individuals to behave climate-friendly. But they also think behaving climate-unfriendly is not perceived as behaving bad as *'the behaviour that we have now, is to pollute a lot and is still perceived as normal'.* Individual behaviour is not often perceived as wrong, only if polluting is purposefully. However, big scandals such as companies discharging oil in the ocean attract more negative and disapproving comments. Just as respondents believe society will, in the future, expect citizens to behave climate-friendly, so they believe and wish that society '*in the future will experience even stronger feelings of disapproval against certain situations or against certain lifestyles that are actually very polluting'*. They expect this to be a similar evolution as for trash disposal, where in the past it was common practice to throw rubbish anywhere without sorting it, which now has become something objectionable to do.

2.3.3 Discussion

2.3.3.1 Talking about guilt and shame

Respondents faster and easier talk about personal experiences in which they felt guilty than situations in which they felt ashamed. Several factors may explain this. First, theoretical literature predicts reactions of hiding and avoiding to feeling ashamed. Second, guilt may just be an emotion which is easier to identify and to notice to the self than shame. Third, respondents may simply experience situations that lead to guilt more often than situations that lead to shame. Lastly, guilt may reflect some positivity in that respondents admit not to be perfect but at least aware of their imperfectness whereas shame is often drenched in negativity and an entire negative image of the self.

2.3.3.2 Climate shaming effectivity

Climate shaming effectivity depends upon (1) the goal aspired and (2) the extent to which this goal is attained. First, effectivity is always measured against some defined goal. Climate shaming's aim is largely defined by the type of shaming it represent. As such, the role of conventional shaming is mainly to enforce existing norms. By contrast, disruptive shaming aims at introducing new norms. Following the survey results, climate shaming is identified as a disruptive form of shaming and largely discussed above. From this logic, its aim is to install new, climate respectful norms in society in order to elevate climate-friendly behaviour and climate action. The interviews largely confirm this as climate-friendly ideas may be common among peers with PEB, however, they are not shared by many other people. Second, climate shaming, at least for the moment, seems not to significantly introduce new climate norms and thus does not, or only to a minimal, contribute to enhance climate action. It may even be counterproductive when it generates a shame backlash and people move from 'do not tell me what to do' (feeling moralised) to angry aversion of the predetermined (climate-friendly) behaviour. However, while climate norms may not be internalised by a majority of citizens, they are nevertheless present among people showing PEB. These people are sensitive to comments upon the climate impact of their behaviour and by consequence, climate shame may drive and guide them to undertake even more climate action. This behavioural adjustment in response to climate shame is however limited because most of these people are aware of their transgression, anticipate on climate shaming about it, but feel unable to change it (without high costs). They just accept the consequence of being climate shamed.

Acceptance of the new norms is crucial, it is the condition sine qua non for climate shaming to be effective and eventually stimulate people to increase climate action. This acceptance seems correlated with expressing PEB but not exclusively. Furthermore, acceptance of the norms is no guarantee for behavioural adjustment as several additional factors need to be taken into account, especially the availability and costs and efforts of alternative behaviour. This all makes climate shaming poorly effective.

2.3.3.3 Climate shame and pro-environmental behaviour

Climate shaming and its effectivity primarily depend on the acceptance of climate norms. Individuals expressing PEB naturally accept and internalise climate norms and therefore may be more concerned with climate shaming than others. As shamers they try to introduce new climate norms, as shamed persons they feel ashamed for transgressing these norms. Individuals lacking PEB may also engage in climate shaming. As shamers, their aim is often to point out contradictions or incoherencies between talks and acts of 'greens' and to use arguments of 'greens' against themselves. These 'greens' poorly pay attention to these shamers because they are aware of their own amassed efforts in being climate-friendly. As shamed persons, individuals without PEB more often engage in shame backlashes and defensive conduct than they alter their behaviour. Climate shaming seems thus most probable and effective between individuals who share climate norms, thus often express PEB.

2.3.3.4 Climate shame and self-perception

Respondents experiencing climate shame are very diverse (*e.g.* age, education) but they all share feelings of shame for taking climate-unfriendly actions. Most of them surround themselves with friends who are equally concerned about climate change, and in front of whom they feel ashamed. These respondents often admit to be more climate respectful than average citizens and to do their best to behave climate-friendly, meanwhile recognise they are not perfect and realise other people may take even more climate actions than they do. Climate shame seems to create a feeling of personal failure which lasts for a long time (*i.e.* it is totalizing and permanent), however without undermining the positive consciousness of respondents regarding their climate efforts. To the contrary, respondents who do not experience climate shame often do not have a circle of climate conscious friends to make them feel ashamed and to shame. These respondents a fortiori feel like they are behaving a way more climate-friendly than others and are lonely in the battle to limit climate change as they cannot engage in climate discussions with like-minded peers.

2.3.3.5 Climate shaming and the agency-structure debate

Climate shaming is a social enterprise which touches upon agency, structure and culture. Which lens does climate shaming uses to understand human action? How does climate shaming situate within the agency-structure debate? Climate shaming, and shaming in general, is normative. It tends to enforce norms or impose new norms which individuals transgress. Shamers thus blame the individual in his capacity to act for doing something wrong, not a system or structure for favouring the bad behaviour or impeding the individual to well behave. Climate shaming in this sense is very agency oriented.

Remarkable, certain respondents express a struggle or disaccord between being hold completely responsible for behaving a certain way (feeling ashamed) and feeling that behaving that certain way is the only way to behave (feeling powerless), which exactly portrays the agency-structure debate. Structural factors constraining individuals in their capacity to act (agency) render individuals simultaneously ashamed and powerless. As one respondent formulates: *'the reality is that our life organised like that so, in the time we were not so attentive to that… we were less attentive we will say to be independent of the car which makes that today, I need its… I find it important that more people make an effort, but at the same time, I can understand that it is complicated in the organisation that has been set up, that's it'.*

Similarly, while respondents shame others, they also admit that several factors may constrain individuals from behaving completely in accordance to their wishes. Financial, cultural, social, informational (*e.g.* lobby, advertisements), influential (*e.g.* dominant role of economics in society) and educational elements may severely impede individuals from behaving climate-friendly, just as they may also be enabling. While the act of climate shaming thus focuses on agency, the emotions felt in reaction to it both encompass agency and structural concerns. Additionally, reactions to climate shaming may be strongly influenced by culture. Individuals valuing freedom to live the life they want without others telling them how to live or valuing privacy more than behaving environmentally friendly may refute any form of climate shaming.

Some respondents say to engage in climate shaming because it is their duty as conscious, educated and informed citizens to create awareness among other citizens and work for a better society. As governments and industries are failing to take up their responsibilities, individuals have an even greater role to play in limiting climate change. Respondents are thus clearly aware of structural and cultural factors limiting agency, however, they like to exercise their and others agencies to a maximum.

2.3.3.6 Climate shaming and the individualistic society

Two main thoughts relating climate shame and the individualistic character of today's Belgian society arise from the interviews. The first one seems to endorse Bierbrauer's (1992), Fessler's (2004) and Turner's (2006) conclusions in that individualistic societies draw on internalised bad conduct, leading guilt to overshadow shame. The number of respondents who experience guilt exceeds the number of respondents who experience shame. Also, talking about guilt seems much easier than talking about shame. Individualistic societies (*e.g.* Belgium) tend to hold individuals accountable for their actions and behaviour without relating it to societal dynamics. Similarly, individuals are hold accountable and fully responsible of their choices. It is the fault of individuals to purchase packed foods, not the stores for selling such foods

or the companies for packing it so excessively thus *'I usually put it on myself, personally [to behave climate-unfriendly]… we as consumers must impose our ideals because that's how the market works. If there is demand for a product, it will be made available. So when people start asking for reusable straws, they will get them anywhere'.* While respondents accord a great role to governments and businesses for taking measures to limit climate change, they also think individuals have a big responsibility and must take actions. Individuals have the power to pressure politicians and industries in a certain direction. Most respondents nevertheless are fully aware of the limits of individual free choice, such as posed by financial, cultural, social and educational constraints. Still, it is clearly a misstep for individuals to behave climate-unfriendly, even in the absence of other options. A second thought relates to the importance that many individuals attach to individual freedom, liberty of lifestyle and privacy. Some respondents do not shame others because they judge it to be the other person's choice, right and liberty to live a certain way. In individualistic, liberal societies, shaming is not always welcomed as it is often perceived as moralising and interfering.

2.4 General discussion

The literature review, the surveys and the interviews generate a wide variety of information and understanding of climate shame and climate shaming experiences. Each research technique provides specific insights, which are discussed at the end of the respective section. For the aim of answering both parts of research questions, this section bundles the transversal and general insights.

2.4.1 Climate shaming: conceptualisation

Three steps consisting of (1) conceiving climate shaming by exposing its characteristics, (2) identifying patterns in climate shaming experiences and (3) looking for motivations and reactions to such experiences, lead to a summarizing table (annex 16) as a comprehensive answer to the many sub-questions of/and the main research question: **How to conceptualise, conceive and understand climate shaming and climate shame among people with pro-environmental behaviour?**

Discussing the table seems unnecessary and undesirable as the findings have already been analysed and discussed in depth in previous sections. The table provides a quick and easy overview.

2.4.2 Climate shaming: embedded in society

This research confirms the choice for a second set of research questions focused on the context in which climate shaming takes place as justified and important. Indeed, respondents often mention a 'framework' in which climate shaming takes place, they refer to a set of conditions as to why or why not climate shaming happens. Climate

shaming effectivity strongly depends on conditional factors, primarily upon the people engaged in the climate shaming situation and their characteristics (presence or absence of PEB) and additionally upon a series of other factors such as the cost of alternative behaviour. While climate shaming strongly focuses on the power of agency, structural factors may not be disregarded. In fact, structural constraints are an important source of frustration for climate action-seeking individuals. Besides, the individualistic character of society acts as a larger framework in which climate shaming takes place. It advocates individual freedom and privacy and by consequence stimulates guilt over shame. Interestingly, climate shame seems to hit predominantly individuals expressing PEB who perceive themselves as being more climate respectful than average citizens.

Limitations of this research and suggestions for further research

This research aimed at exploring the fresh and poorly studied phenomena of climate shaming and climate shame in limited time, in a limited number of pages and with limited resources. It has therefore several limitations, of which the most important are shortly discussed. First, general aspects such as the exploratory nature of the research allow for comprehensiveness and case diversity but necessarily reduce the precision and complexity. In the meantime, research on climate shaming should be extended to include also non pro-environmental behaving individuals. Second, the research methodologies and the respective research techniques have their inherent limitations. For example, grounded theory entails a risk of coding on a too abstract level and the surveys show typical problems with self-reported measures. Theoretical saturation of the cases/data was inconceivable. Finally, some limitations have to do with the author herself. Although this thesis is not the first one I write, I still make many mistakes but learn a lot. I tend to rewrite (parts of) the thesis over and over again, which takes time away for more substantial considerations. Also, I tend to analyse and research too much. Only half of what I've written has finally ended up in this work.

This research aims at being a stepping-stone and inspiration for further research on climate shaming/shame and related topics. Research should be extended so to increase understanding of climate shaming/shame experiences of larger and more different groups of people. Also, more research is needed on the structural factors and conditions that influence climate shaming and shame experiences. Another point of future research may be climate shaming backlashes and its consequences. Generally, emotional and behavioural reactions to climate shaming/shame should be studied with much more depth. The relation between climate shame and other emotions such as guilt needs further investigation. Finally, the concrete impact of climate shaming/shame on individuals, society and climate action constitutes a priority for future research.

Conclusion

Last year's mass demonstrations and climate strikes articulate growing attention for and concern with climate change. The climate marches generated large (political) debate and brought climate change much closer to people's lifeworlds and daily considerations. As people interact and discuss climate change, shaming games may evolve. Not only are individuals increasingly confronted with their own climate-unfriendly behaviour which may generate guilt, they are also increasingly watched and judged by others on the climate respectfulness of their behaviour. The act of publicly stigmatising and blaming someone for his/her contribution to climate change is called *climate shaming*. The feeling that consequently is experienced by the shamed person is referred to as *climate shame*.

Climate shaming portrays important societal dynamics and influences the course of society, affects individual well-being and directs climate change (actions). If society as a whole is to tackle climate change, then understanding the dynamics at play in society and particularly the way individuals in society approach climate change (action) seems crucial and essential. This research precisely advances apprehension of societal dynamics and climate change by studying the phenomena of climate shaming and climate shame among pro-environmentally behaving individuals. The research, of exploratory nature and which uses grounded theory to develop hypotheses and theory from the analysis of personal experiences (through surveys and interviews) and supported by a literature review, is but a stepping-stone to further research.

Nevertheless, this research brings interesting observations, significant findings and important insights on the conceptualisation of climate shaming and shame, how individuals approach and deal with this episodes and which role and place in contemporary society they receive. The most significant conclusions are here reiterated.

Climate shaming and the in consequent felt climate shame do exist and are present among a lot of pro-environmentally behaving individuals. Many of these individuals who regularly take actions to limit climate change such as participate in climate marches are climate shamed, however not on a regular basis. Conversely, many of them now and then climate shame others, principally friends who are equally concerned about climate change. Shaming in both ways (as shamer and as shamed person) mainly happens for flying, car use and food regimes. This interpersonal form of shaming often evokes a set of other negative feelings while reactions principally depend upon the acceptance and agreement of shared climate norms between the main actors. Climate shaming seems to be poorly effective in altering behaviour due to its very conditional character, though seems most effective between pro-environmentally oriented individuals.

Although climate shaming is clearly agency-oriented, shamers are aware of the structural factors that may limit individual capacity to make climate-friendly choices. Therefore, they urge for larger political and economic change without underestimating individual responsibility in limiting climate change.

Climate shaming shows three principal distinctive features (compared to other kinds of shaming): (1) its disruptive constitution in that it aims at changing and replacing prevailing standards with more climate-friendly norms, (2) its strongly anticipating character in that shame is experienced before or in the absence of a real shaming situation and (3) its association with feelings of powerlessness and impossibility to change the shame-inducing action or behaviour. By consequence, climate shaming situations are complex, difficult and entail risks of shaming backlashes. Among individuals with PEB, however, they induce legitimation of the climate-unfriendly action because often transgressors are aware of the climate impact of their action.

Given the difficulties, risks, the often counterproductive impacts and the ineffective character of climate shaming in altering behaviour, some individuals showing PEB dismiss shaming to the advantage of leading by example. They suggest a more effective role for amicable discussions, climate education, inspiring figures and inoffensive remarks in stimulating people to behave more climate respectfully. Other motivations such as aversion of being moralising, respect for privacy and noninterference in others' lives make individuals with PEB refrain from climate shaming. Conversely, only a minority of them is freed from being shamed by others due to their increased climate consciousness and efforts compared to average citizens. However, while these individuals do not experience climate shame, they do experience guilt for the impact of their climate-unfriendly actions.

Finally, talking about environmental shaming and shame may be more appropriate given the intertwined nature and the wide-spread confusion between climate change and other environmental problems.

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Annexes

Annex 1: model English survey.

Model English survey

1. Choose your language please:
   0 Français
   0 Nederlands
   0 English

2. English
   Through the questionnaire, tick off all the boxes that apply. You have the possibility to choose multiple answers.

   2.1 Did you take part in a March for the Climate in 2019 or in 2020 in Belgium?
   yes
   no => end of the survey
   don't know => end of the survey

3. March for the Climate

   3.1 How many times did you participate?

   3.2 Have you ever taken, or do you take, any action out of concern for climate change?
   yes
   no
   don't know

4. Climate action

   4.1 What did you do/ are you doing?

5. Climate action

   5.1 You:
   0 take AS MANY actions as you can in PRIVATE life to limit climate change
   0 take AS MANY actions as you can in PUBLIC life to limit climate change
   0 take SOME actions in PRIVATE life to limit climate change
   0 take SOME actions in PUBLIC to limit climate change
   0 would LIKE to take even more actions to limit climate change
   0 do nothing to limit climate change

   5.2 How old are you?

   5.3 You are:
   0 a student
   0 full-time employed

0 part-time employed
0 without employment
0 other

6. Job
   What is your job?

7. About you

   7.1 What is the highest degree of diploma you obtained?
   PhD
   Master
   Academic Bachelor
   Professional Bachelor
   High School
   other

   7.2 In general, what is your political preference (which party do you most agree with)?
   1.N-VA
   2.PS
   3.Vlaams Belang
   4.MR
   5.CD&V
   6.Ecolo
   7.Open Vld
   8.CDH
   9.Groen
   10.DéFi
   11.sp.a
   12.PVDA/PTB
   13.I have no preference
   14.I prefer not to answer

8. You comment
   People may comment or remark on others regarding the climate impact of their actions or behaviour. For example, someone may say to someone else "you'd better cycled instead of having taken the car to come here" or "you say you are green but you took the plane last summer to go on holiday".

   Do YOU make remarks on others regarding the climate impact of their actions and behaviour?
   yes
   no
   don't know

9. No
   Why not?

10. Yes

    10.1 Which action(s)/ behaviour do you comment?

10.2 Please describe a concrete situation in which YOU made comments on the climate impact of someone's action(s) or behaviour.

10.3 I make comment(s) on:
0 climate-**un**friendly actions someone takes (ex: flying)
0 climate-**friendly** actions someone does **not** take (ex: reducing the heating)
0 someone's behaviour regarding climate change
0 someone's personality and its consequences on the climate

10.4 How often do you make such comment(s)?
0 every day
0 every week
0 every month
0 now and then
0 a few times a year
0 almost never

10.5 To who do you make such remark(s)?
0 friends
0 family
0 colleagues at work
0 students
0 people at sports/associations/events
0 people I know well
0 people on the street
0 people I don't know
0 other

10.6 When do you make such remark(s)?
0 when I see someone showing climate-unfriendly behaviour
0 when I see someone showing climate-unfriendly behaviour on social media (Facebook, Instagram, …)
0 when I hear from others about someone's climate-unfriendly behaviour
0 when I know someone showed climate-unfriendly behaviour in the past
0 when I want to point out the climate impact of someone's future action or a plan
0 when someone gives climate-friendly advice to others but is not climate-friendly him/herself
0 other

10.7 How do you feel after making such remark(s)?
0 relieved
0 good
0 careful
0 bad
0 smarty
0 helpful
0 normal
0 other

11. <u>You are commented</u>
People may comment or remark on others regarding the climate impact of their actions or behaviour. For example, someone may say to someone else "you'd better cycled instead of

having taken the car to come here" or "you say you are green but you took the plane last summer to go on holiday".

Do OTHER people make comments or remarks on the climate impact of your actions or behaviour?
yes
no
don't know

12. No
Why do you think people do not comment on the climate impact of your actions/behaviour?

13. Yes

13.1 Which of your action(s) or behaviour do people comment?

13.2 Please describe a concrete situation in which you received comment(s) on the climate impact of your action(s) or behaviour.

13.3 I receive comment(s) on:
0 climate-**un**friendly actions I take (ex: flying)
0 climate-**friendly** actions I do **not** take (ex: reducing the heating)
0 my behaviour regarding climate change
0 my personality and its consequences on the climate

13.4 How often do you receive such comment(s)?
0 every day
0 every week
0 every month
0 now and then
0 a few times a year
0 almost never

13.5 From who do you receive such remark(s)?
0 friends
0 family
0 colleagues at work
0 students
0 people at sports/association/events
0 people I know well
0 people on the street
0 people I don't know
0 other

13.6 When do you receive such remark(s)?
0 when someone sees me showing climate-unfriendly behaviour
0 when someone sees me showing climate-unfriendly behaviour on social media (Facebook, Instagram, …)
0 when someone hears about my climate-unfriendly behaviour
0 when someone knows I showed climate-unfriendly behaviour in the past
0 when someone wants to point out the climate impact of my future action or a plan

0 when I give climate-friendly advice to others
0 other

13.7 Do you think these people are right in giving this kind of remarks?
yes
no
maybe

13.8 Why (not)?

13.9 Did you know some of your actions are bad for the climate?
yes
no
for some of them yes, for others no

13.10 How do you feel after receiving such remark(s)?
0 I feel grateful
0 I feel happy to see that others are concerned about the climate
0 I feel motivated to change my behaviour
0 I feel normal
0 I feel personally attacked
0 I feel shame because of my behaviour
0 I feel shame because others point out the climate impact of my behaviour
0 I feel sad because others point out the climate impact of my behaviour
0 I feel dumb because I have not reflected on the climate impact of some of my actions
0 I feel shame because I did not think of the climate impact of my actions
0 I feel motivated to do new, climate-friendly actions
0 I feel bad because I know that some of my actions are bad for the climate but I cannot change them
0 I feel bad because I know that some of my actions are bad for the climate but it requires much energy to change them
0 other

13.11 How do you usually react on such remark(s)?
0 I thank the person who made the remark(s)
0 I try to justify my actions/behaviour
0 I try to clarify my actions/behaviour
0 I try to change my action(s)
0 I try to change my behaviour
0 I do not change my action(s)/behaviour
0 I reflect on the remark(s)
0 I ignore the remark(s)
0 other

13.12 Tick off all the statement(s) that apply to you:
0 remarks from others help me to reduce my impact on the climate
0 remarks from others help me to reflect on the climate impact of my actions
0 I take into account remarks from others on the climate impact of my actions
0 remarks from others chase me constantly
0 I am afraid to get remarks on the climate impact of my behaviour
0 I am afraid to get remarks on the climate impact of my actions

0 I sometimes do not tell what I do because I fear remarks from others on the climate impact of what I do
0 I almost never tell what I do because I fear remarks from others on the climate impact of what I do
0 I don't care about climate related remarks from others
0 I don't care about climate related remarks from others because I already do my best for the climate

14. Climate change
    Climate change makes me feel…

15. Guilt
    People can feel guilty about certain of their actions or behaviour when this has a negative impact on the climate. (ex: riding a car; flying)

    16.1 Do you sometimes feel guilty about certain of your actions or behaviour because of the negative effect on the climate?
    yes
    no
    don't know

16. No
    Why not?

17. Yes

    17.1 I feel guilty about:
    0 climate-**un**friendly actions I take (ex: flying)
    0 climate-**friendly** actions I do **not** take (ex: reducing the heating)
    0 my behaviour regarding climate change
    0 my personality and its consequences on the climate

    17.2 For what reason(s) do you feel guilty?
    0 I know that certain of my action(s) are bad for the climate
    0 I know I am contributing to climate change
    0 I fear the future of my children and grandchildren
    0 I feel unable to act more climate-friendly
    0 I do my best for the climate but it is not enough
    0 I do my best for the climate but it is never enough
    0 I feel powerless to limit climate change
    0 I think I do not do enough to limit climate change

    17.3 How often do you feel guilty because of this?
    0 every day
    0 every week
    0 every month
    0 now and then
    0 a few times a year
    0 almost never

    17.4 How do you usually deal with this kind of guilty feeling?

17.5 Do you share this kind of guilty feeling with others?
yes
no
sometimes

18. Sharing guilt
With who do you share this kind of guilty feeling?

19. Climate shaming

Have you ever heard of climate shaming?
yes
no
don't know

20. Yes

20.1 When did you hear about climate shaming?

20.2 How did you hear about climate shaming? (example: through friends, through the newspaper, in a bar, in a certain context)

20.3 Do you know what climate shaming is?
yes
no
I am not sure

21. Yes
Please explain what climate shaming is

22. Eco-guilt
Have you ever heard of eco-guilt?
yes
no
don't know

23. Yes

23.1 When did you hear about eco-guilt?

23.2 How did you hear about eco-guilt? (example: through friends, through the newspaper, in a bar, in a certain context)

23.3 Do you know what eco-guilt is?
yes
no
I am not sure

24. Yes
Please explain what eco-guilt is.

25. Add

25.1 Do you like to add something?

25.2 Please leave here your email address.

Thank you for participating!

Annex 2: model English interview questionnaire. The questionnaire guides the interview but often questions change in content and order depending on the respondent's answers.

INTERVIEW QUESTIONS

Hello!
Thank you for participating to this interview. You were picked for this interview according to your responses to the online survey you filled in before. I am sure your contribution will be of great value to the research.

You must know that this interview will be recorded so that I can transcript it later on and focus on your answers for now. The interview will only be read by my professors and my professors. In no case, other people will get access to it. Your answers will be anonymized so that your name does not appear anywhere. It is important that you feel comfortable with the interview and the answers you give. You may refuse to answer certain questions and you may at any moment stop the interview if you wish. This will have no consequences. Don't hesitate to ask for explanations when questions or concepts are not clear.

I would also like you to thank you for having signed the agreement on beforehand.

SHAMED PERSON

Introduction

1. You will get to see a picture. Can you tell me what or where it makes you think off?
    > Can you describe what is happening?
    > What do you think about this situation?
    > How do you think these persons feel?
    > How do you feel looking at the whole picture?
    > Is this situation realistic?
        > Why (not)?
    > Do you believe the car driver's reaction is normal?
        > Why (not)?
    > Do you recognize yourself in a person from the picture?
        > Why (not)?
    > Have you ever experienced such a situation?
        > Explain, describe, contextualize (who, when, where, how, what, consequences, reactions)

PICTURE 1

This picture represents a climate shaming situation.

2. Do you know what climate shaming means?
> Yes: Please explain in your own words.
> No: Climate shaming is the act of shaming or blaming someone publicly for the climate impact of his or her actions or behaviour. So it is pointing out someone because she or he did something which contributes to climate change.

Before we continue, I'd like to be clear about some terms:

You'll get to see several images.
3. Could you tell me if the image deals with the climate change problem or rather with environmental problems?

(share screen) Pictures CS4-EP1-EP3-CC1-CS3-EP4-EP2-CS2.

During the interview, I'll talk about the climate impact of certain actions, by which I mean the contributions to climate change or global warming. This refers to an increasing amount of greenhouse gasses in the atmosphere which make the Earth to become warmer. These greenhouse gasses increase due to human action such as the consumption of oil, gas, coal, etc. Climate change is only a part of larger environmental problems, so not all environmental problems have to do with climate change.

4. Also, I will refer to shame and guilt during this interview. These are two different emotions, however close to each other. People tend to understand these concepts differently. Again, you'll get to see several images. Could you tell me if, in your opinion, each image represents guilt or shame?

(share screen) Pictures: show picture Shame 1. - Guilt 1. - Guilt 4. - Shame 3. - Shame Climate 1.- Shame 5. - Guilt Climate 7. - Climate Guilt 2. - Climate Guilt or Shame.

Great!
Shame is the feeling which arises from public exposure of one's 'not done' or 'bad' actions or behaviour. Thus, someone is publicly pointing out one's wrong behaviour and therefore the person feels ashamed. Guilt, however, has to do with feeling personal responsible for something which went wrong and being mad at oneself. It is the person itself who is mad at him/herself without any other person who has pointed out the wrong behaviour.

Is this clear? If you don't see a difference between shame and guilt, then it is completely fine to tell me. Do you have some questions?

<u>Climate shame experience</u>

5. Can you tell me about a situation in which you were shamed for the climate impact of an action or behaviour? You may take your time to think of such a situation. If you never found yourself ashamed of an action or behaviour and its contribution to climate change, you may simply say so. If you experienced shame several times, then please shortly talk about each of them. (You may describe the situation as extensively as possible)

> Who shamed you?
> For which actions/ behaviour?

> Was this an action you already had taken, you were taking, or you planned to take?

> Why did you feel ashamed?

> Do you think they were right to shame you?

> Where were you put ashamed? At home, public space, school, …

> Could you describe the context?

> How many people were present in the shame-inducing situation? *E.g.* Were there many friends around or only two persons?

> How did you feel precisely? Can you express the feeling? *E.g.* sad, good, motivated, frustrated, …

> How did you react to the situation?

> Did you change your behaviour as a consequence of feeling ashamed?

> Did you change the way you think of a certain issue or topic as a consequence of feeling ashamed?

> Why did that person/ group shamed you, do you think? What were their reasons or motivations to do so?

> Do you still feel ashamed for that situation? Do you sometimes think back of the situation?

Great. Let's leave your concrete situation and turn to this picture.

<u>Climate shaming anticipation experience</u>

6. Can you tell me what or where this image makes you think off?

> Can you describe what is happening?

> What do you think about this situation?

> How do you think these persons feel?

> How do you feel looking at the whole picture?

> Is this a realistic situation?

> Why (not)?

> Do you recognize yourself in a person from the picture?

> Why (not)?

> Have you ever experienced such a situation?

> Explain, describe, contextualize (who, when, where, how, what, consequences, reactions) OR

PICTURE 2

The picture is exemplary of someone who is intentionally hiding certain action or behaviour out of fear of being shamed for it.

7. Do you sometimes not tell others what you've done or what your plans are because you think they will shame you for it? *E.g.* Not telling colleagues you are going on holiday by plane.

> Can you give an example of such a situation?

> When do you intentionally conceal or hold back climate-impactful actions/behaviour?

> Which actions/ behaviour do you hold back?

> Does it always work to hold it back?

> How do you react when someone finds out?

> How do you feel when someone finds out?

> Why do you hide your actions or behaviour? Is it because you don't like others to make remarks about it, because you feel ashamed for it, because you are afraid to be shamed?

Let's turn to the next question.

Remarks without shaming

8. Do you sometimes receive comments or remarks about you actions or behaviour for their impact on climate change, BUT for which you do not feel ashamed for?
> Which actions/ behaviour are the remarks about?
> From who do you receive these remarks?
> Why do you not feel ashamed for it? Is there a difference with the situation in which you felt ashamed?

Guilt

9. Do you sometimes feel guilty about the climate impact of your actions or behaviour?
> About which behaviour/actions?
> How often do you feel guilty?
> Do you share this guilty feeling with someone? With who?

Larger questions

10. Climate change is taking place. Whose responsibility do you judge it is to take measures to limit climate change? *E.g.* Individual, rich countries, politicians, companies, the EU
> Why do you think so?
> What should they do?

11. What is the role of individuals in limiting climate change?

12. Do you believe individuals will solve the climate crisis? Are they able to do so?

13. Are individuals free to make climate conscious choices or are individuals constrained in the choices they make?
> Why?
> What are these constraints?
Could you give an example please.

14. Do you feel others in society expect you to behave in a climate respectful way?
> Why (not)?
> How?

15. Do you feel some behaviour is 'not done' in society because it has an impact on climate change?
> Yes: Which behaviour? Is this good?
> No: Should it be like that? Is this good?

End

16. Do you like to add something? Some thoughts or opinions?

Thank you a lot for your participation!

Annex 3: model informed consent.

Dear respondent,

As part of my thesis, in the Environmental Sciences program at the University of Brussels (ULB) and under the supervision of Dr. Tom Bauler, I do research on *climate change and how this is present in society*. To conduct the research as completely and detailled as possible, I use various research techniques. One is to conduct interviews.

An interview lasts on average between 45-60 minutes and, due to the exceptional Corona measures, takes place via video conference. The conversation is recorded digitally for analysis purposes. Only supervisor Dr. Tom Bauler and the assessors will have access to the recording and its transcription.

The interviews are anonymized so that respondents cannot be traced and can speak freely. Dr. Tom Bauler does have access to the names of the respondents, but only to check the research work.

Respondents voluntarily participate in the interview and may refuse to answer certain questions. They can stop the interview at any time without having to give a reason and without further consequences.

By signing this letter, the respondent declares to have read the above and to agree to participate voluntarily in the study.

Thank you!
Kimberley Vandenhole
+32 471 82 34 56
kimberley.vandenhole@ulb.be

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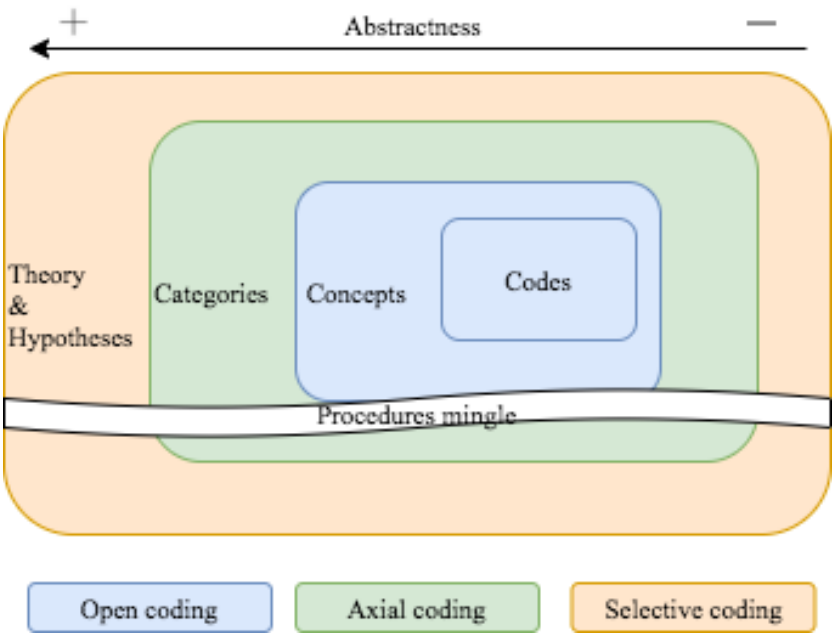
I, …… .. (name of person taking part in interview) declare that I have read the contents of this letter and want to participate in an interview in the context of research into *the social experience of climate change*.

Date Name, first name Signature

Annex 4: coding procedures used in this research (based on Strauss & Corbin, 1990).



Annex 5: table with criteria for effective shaming.

Criteria for effective shaming	
Existence of moral/social norms	The shaming actor enjoys status & competence
Transgression has impact on larger society	The larger community represent a majority
Absence of formal punishment mechanisms	The public must recognize and legitimize the shamer
Gap between desired and actual behaviour is big	The public must be sensitive and concerned to the transgression
Shaming is directed where possible benefits are the greatest	The shamed actor must be sensitive both to the source and norms
Anticipation & preparation to shaming backlashes	Availability of behavioural alternatives
Scrupulous implementation	Costs & efforts of alternatives
Personal orientations	Personal characteristics
Cultural acceptance of shaming	Goal: classic or disruptive shaming

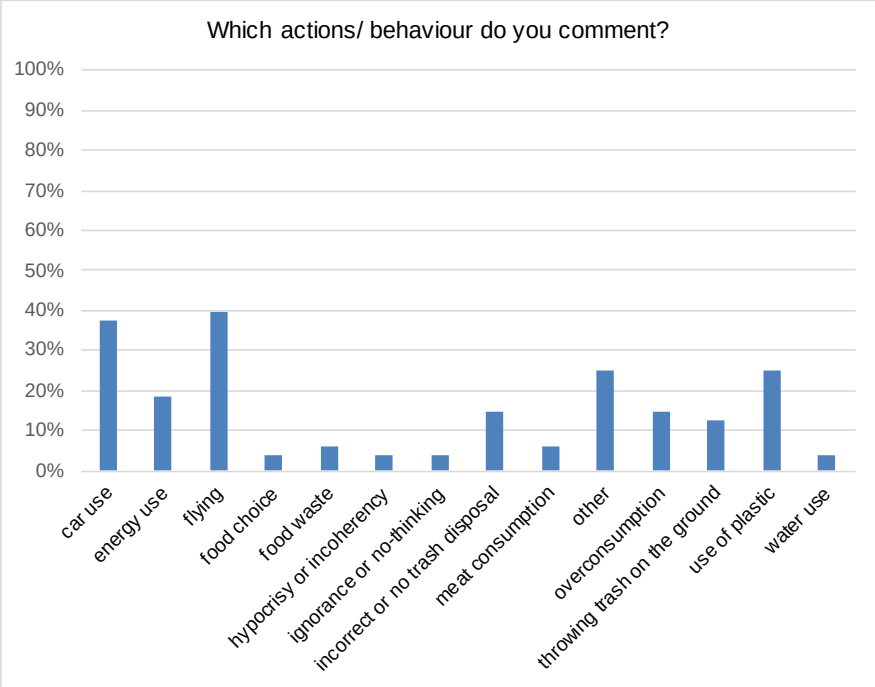
Adapted from Scambler, 2020.

Annex 6: sample profile of survey respondents.

Items	*Classification*	*Sample (%)*	*Sample (%) De Vydt (2020)*
Language	Dutch	49%	
	French	47%	
	English	4%	
Times demonstrated	1	28%	
	2	21%	
	3	15%	
	4	15%	
	5	8%	
	6	5%	
	6+	8%	
Age	15-19	27%	13%
	20-35	40%	21%
	36-65	23%	54%
	65+	10%	10%
Occupation	Student	59%	
	Full-time employed	23%	
	Without employment	5%	
	Other	13%	
Education	High school	34%	
	Professional Bachelor	10%	
	Academic Bachelor	20%	
	Master	28%	
	PhD	2%	
	Other	6%	
Political preference	Groen	36%	Groen + Ecolo 73%
	Ecolo	26%	
	PVDA/PTB	6%	5%
	sp.a	5%	
	MR	2%	
	PS	2%	
	Other	3%	
	No preference	10%	
	Unknown	9%	

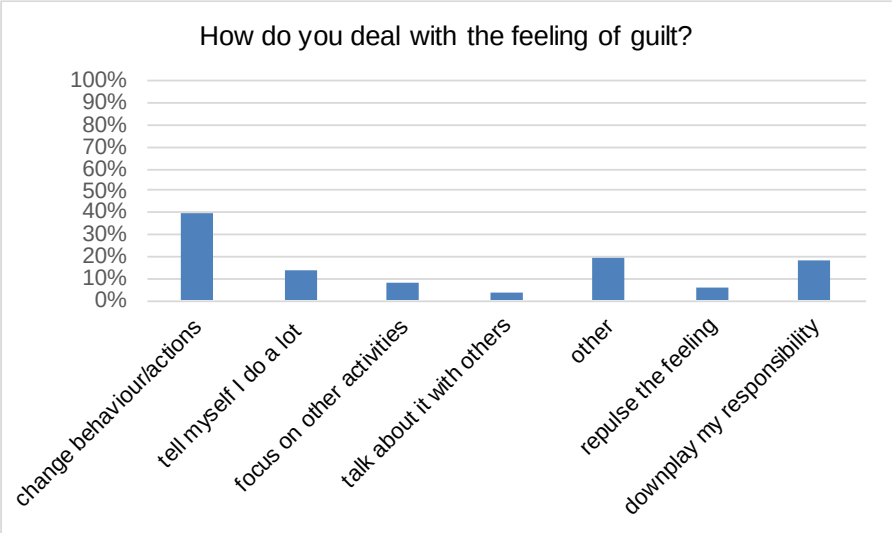
Annex 7: visualised survey results.

7.1 Type of actions/behaviour respondents comment (in percentages of respondents that comment).

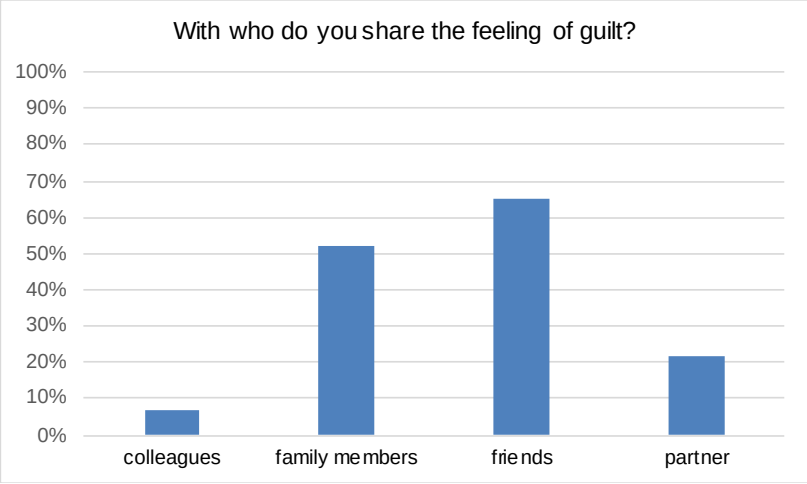


7.2 Type of actions/behaviour respondents are commented on (in percentages of commented respondents).

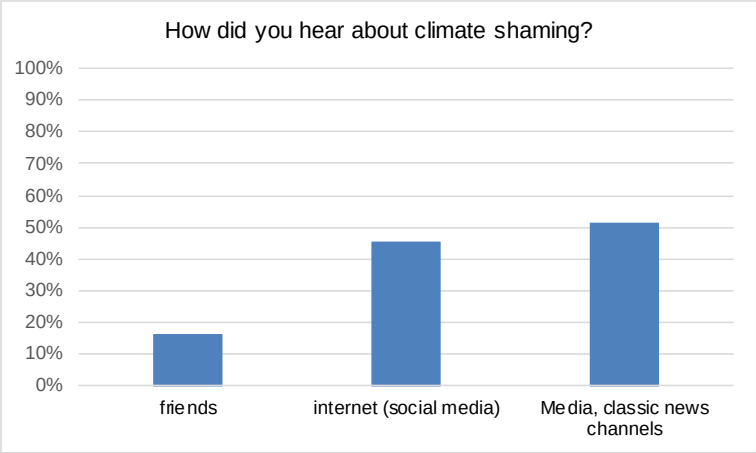
7.3 Ways respondents deal with guilt (in percentages of respondents experiencing guilt).



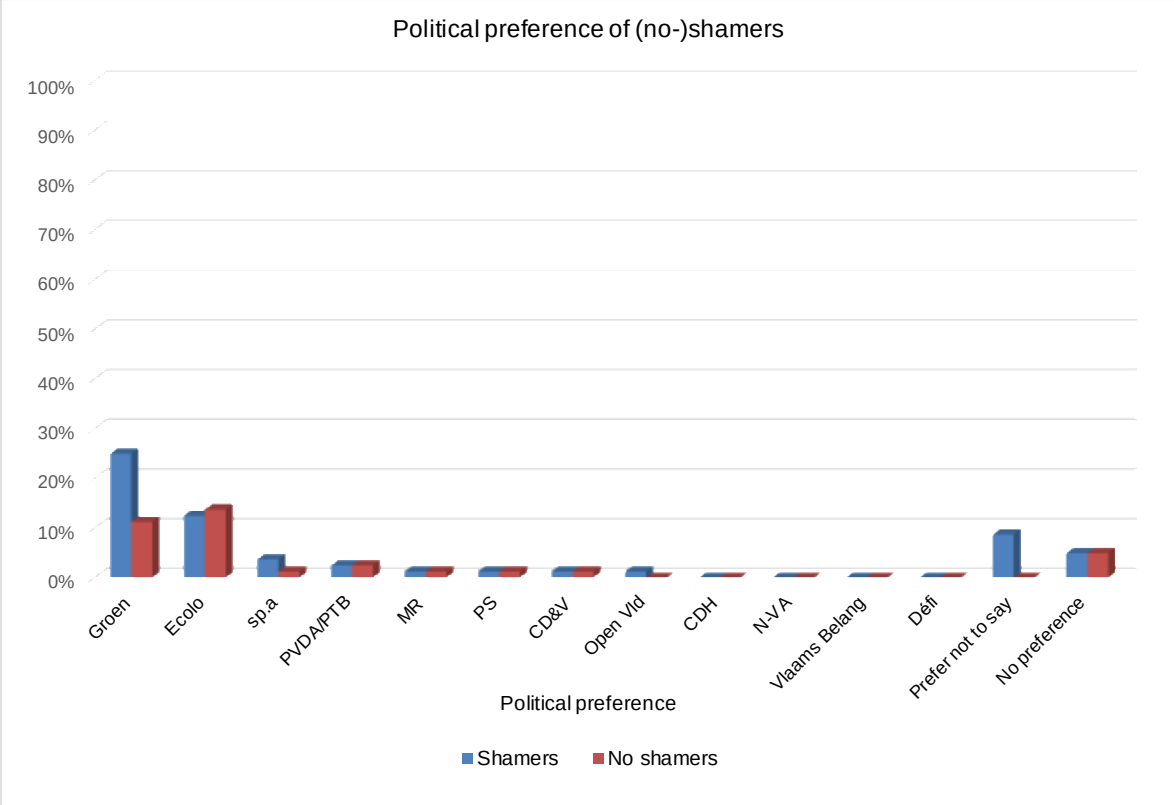
7.4 Type of people respondents share their feeling of guilt with (in percentages of respondents sharing guilt).



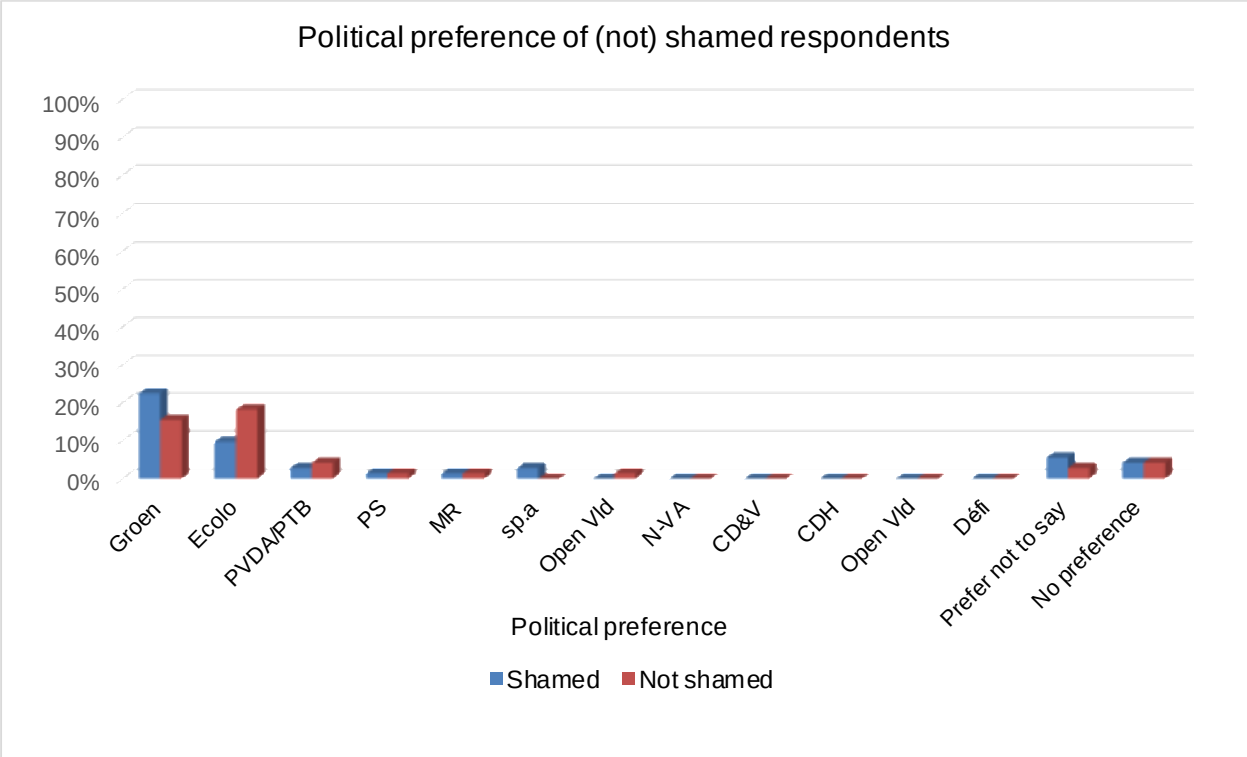
7.5 Means by which respondents heard about climate shaming.



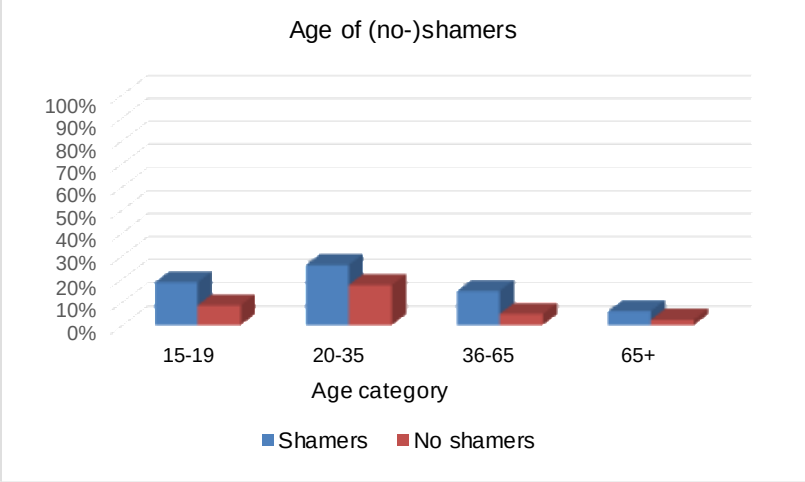
7.6 Political preference of (no-)shamers (in percentage of respondents).



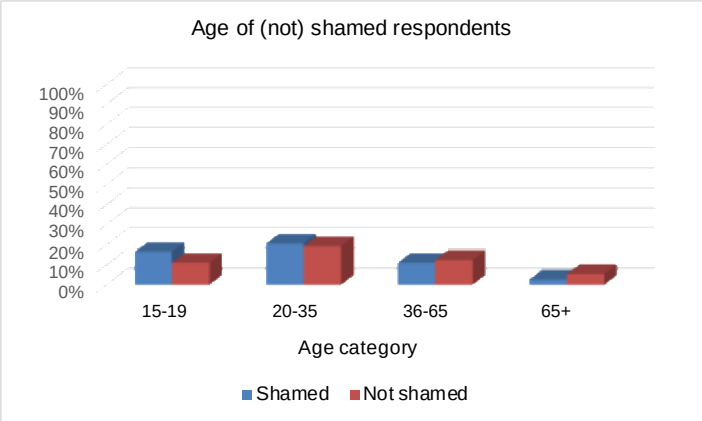
7.7 Political preference of shamed respondents (in percentage of respondents).



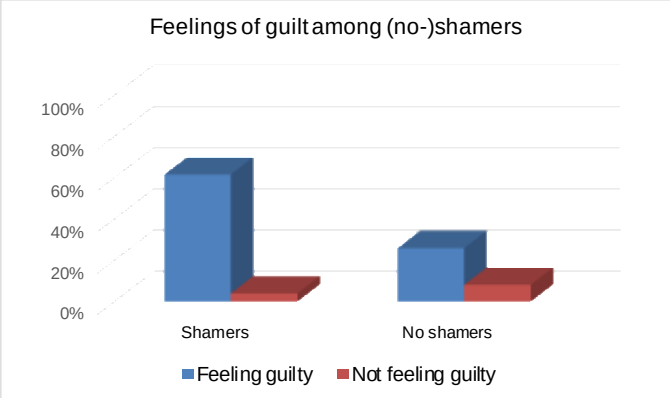
7.8 Age categories of (no-)shamers (in percentage of respondents).



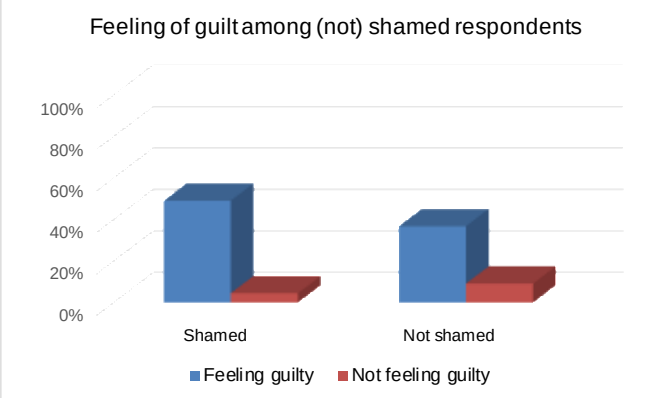
7.9 Age categories of (not) shamed persons (in percentage of respondents).



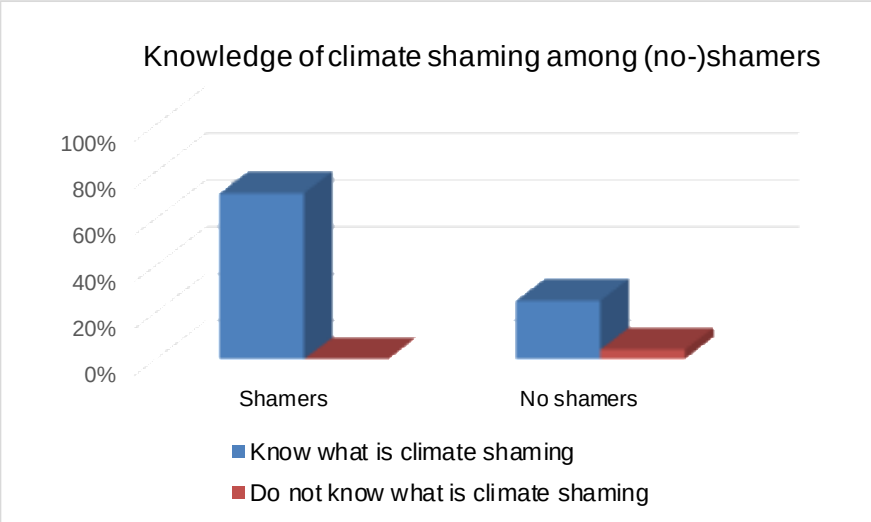
7.10 Feelings of guilt (presence or absence) among (no-)shamers (in percentage of respondents).



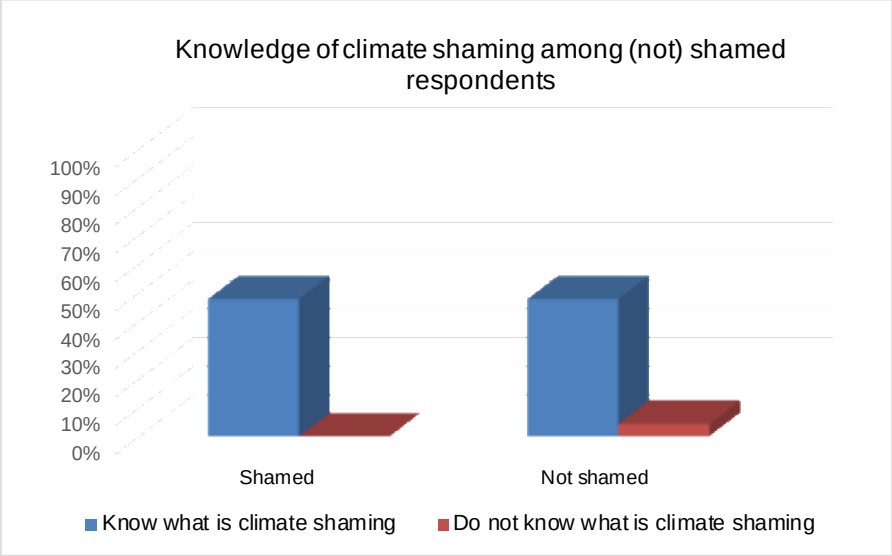
7.11 Feelings of guilt (presence or absence) among (not) shamed respondents (in percentage of respondents).



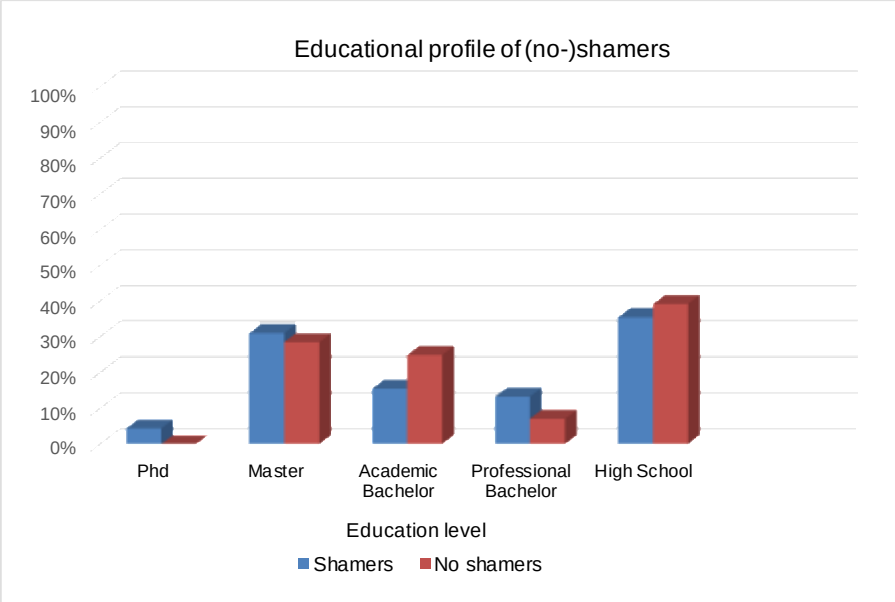
7.12 Knowledge of climate shaming among (no-)shamers (in percentage of respondents).



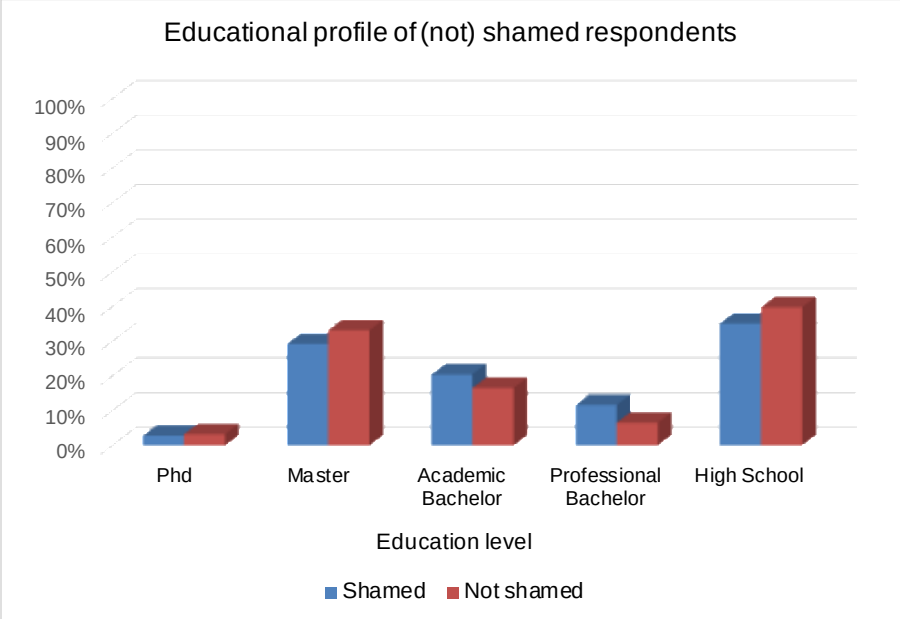
7.13 Knowledge of climate shaming among (not) shamed respondents (in percentage of respondents).



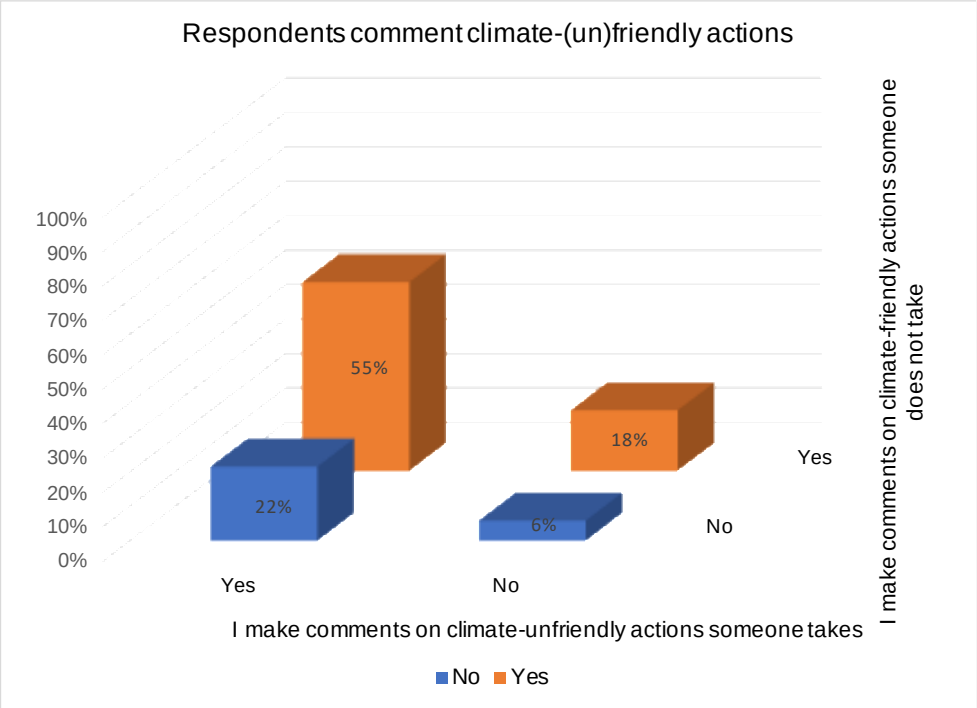
7.14 Educational profile of (no-)shamers (in percentage of respondents).



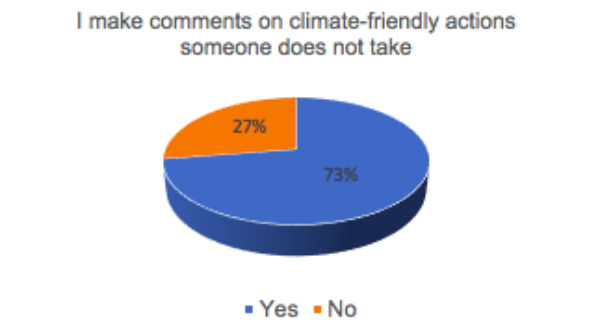
7.15 Educational profile of (not) shamed respondents (in percentage of respondents).

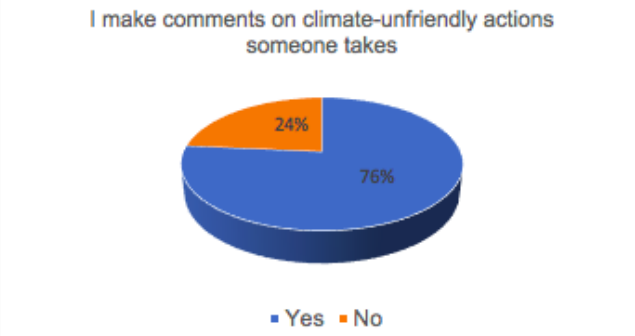


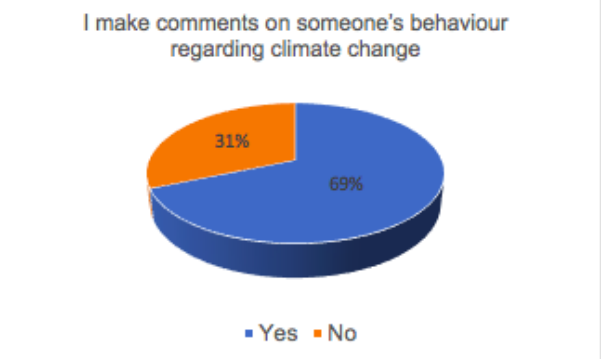
7.16 Respondents comment climate-(un)friendly actions (in percentage of respondents).

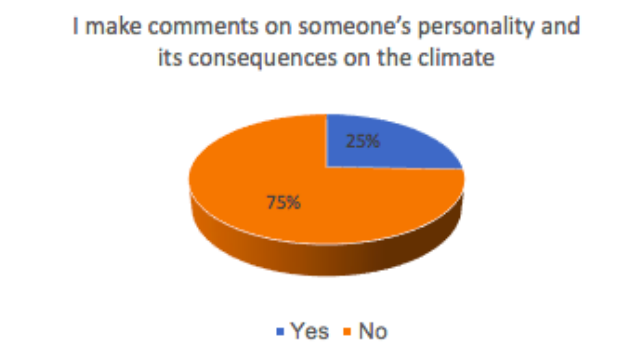


7.17 On what respondents comment (in percentage of respondents).

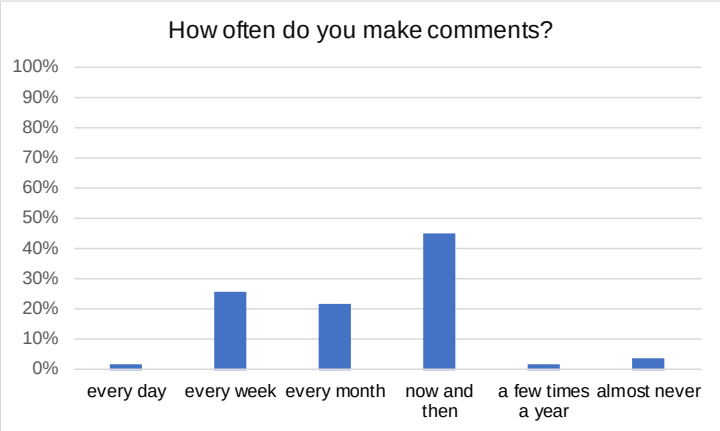




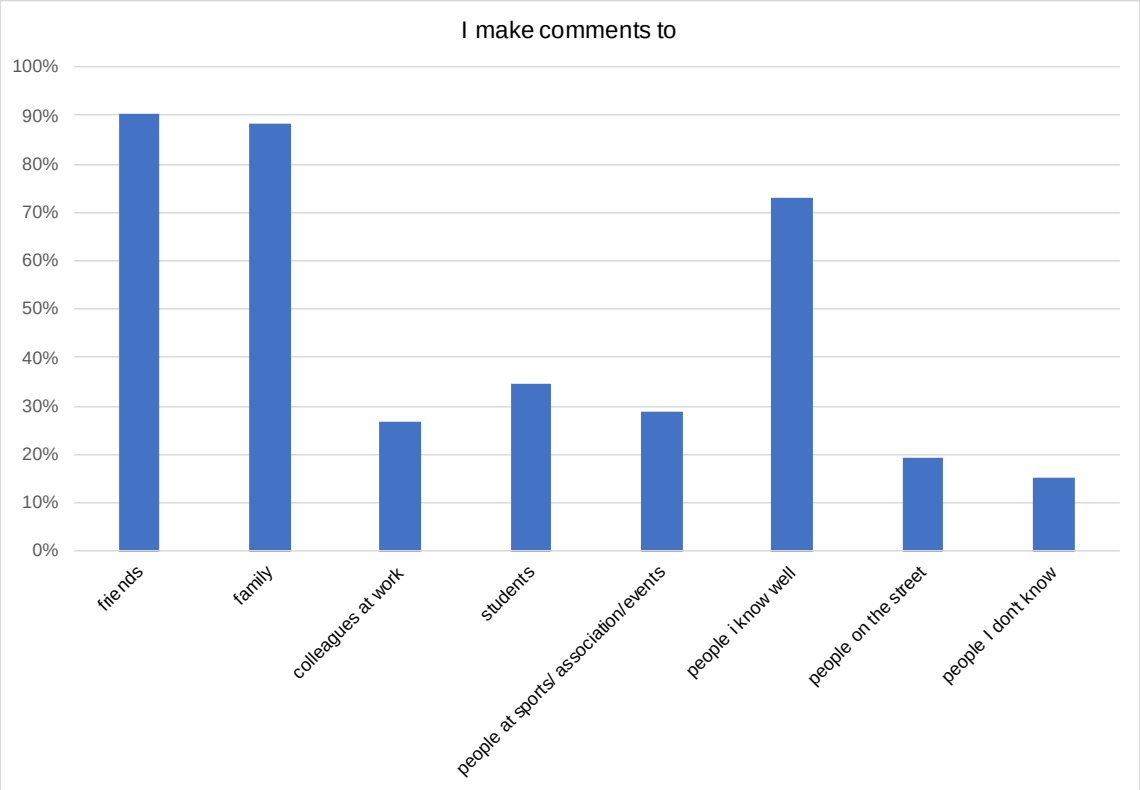




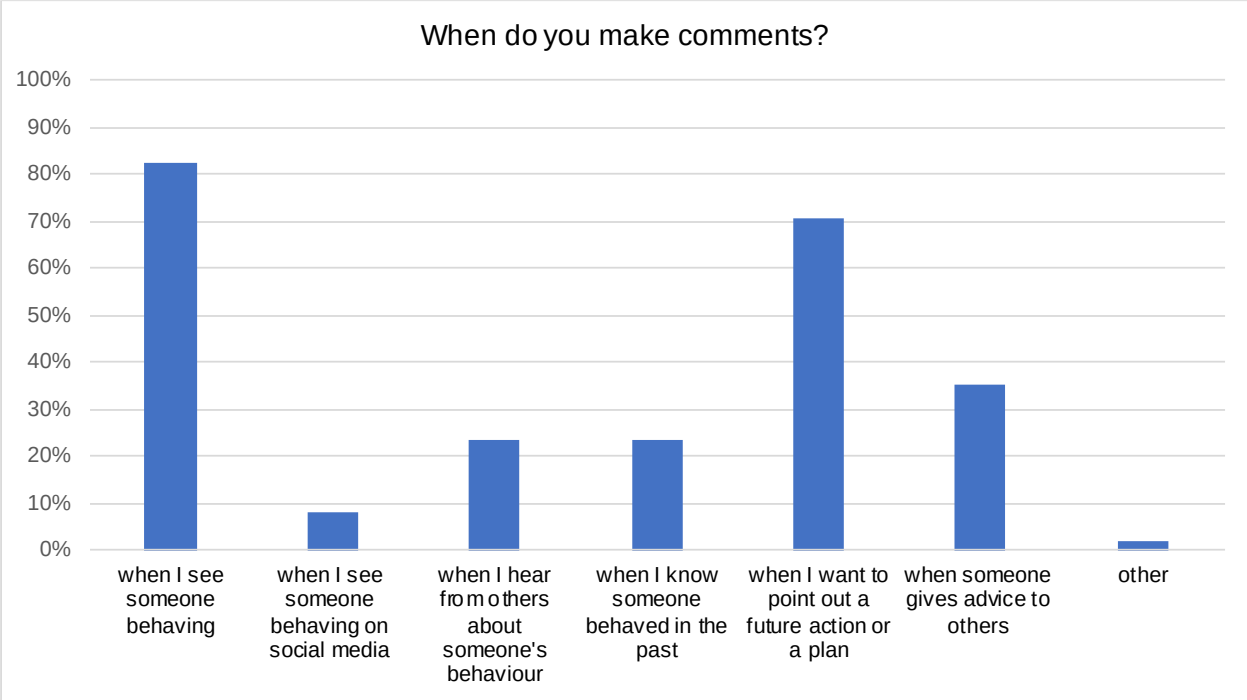
7.18 Frequency of comments given by respondents (in percentage of respondents who give comments).



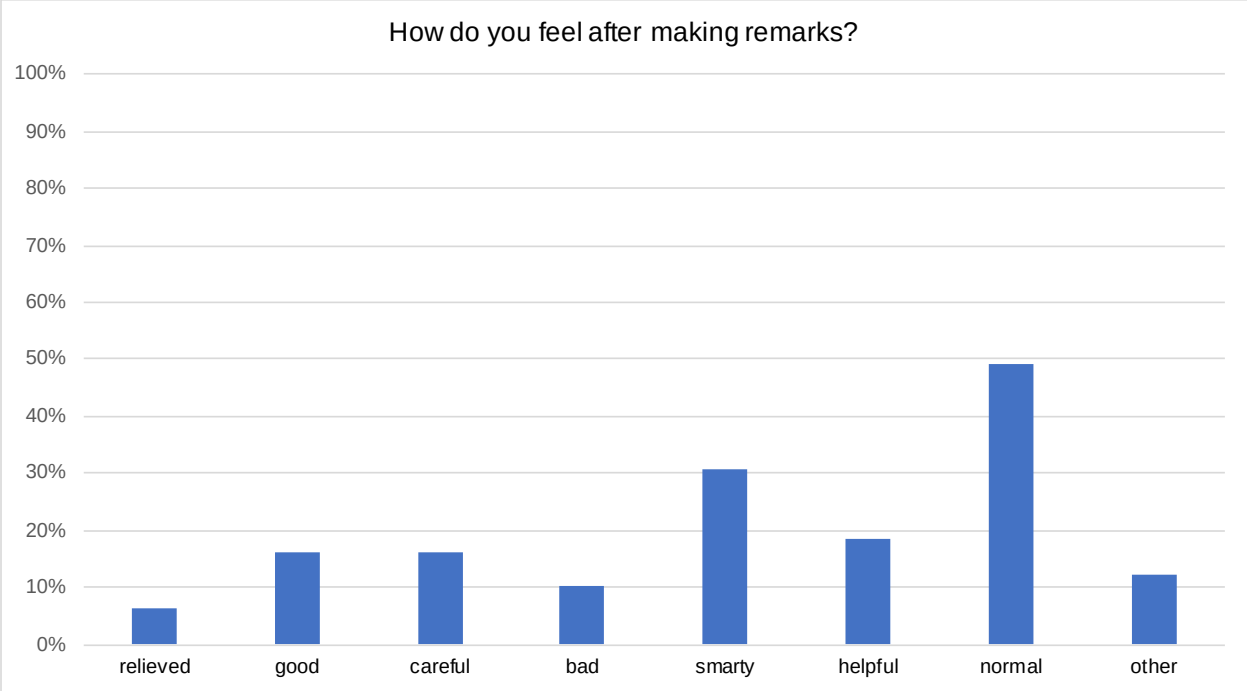
7.19 To whom respondents make remarks (in percentage of respondents who make remarks).



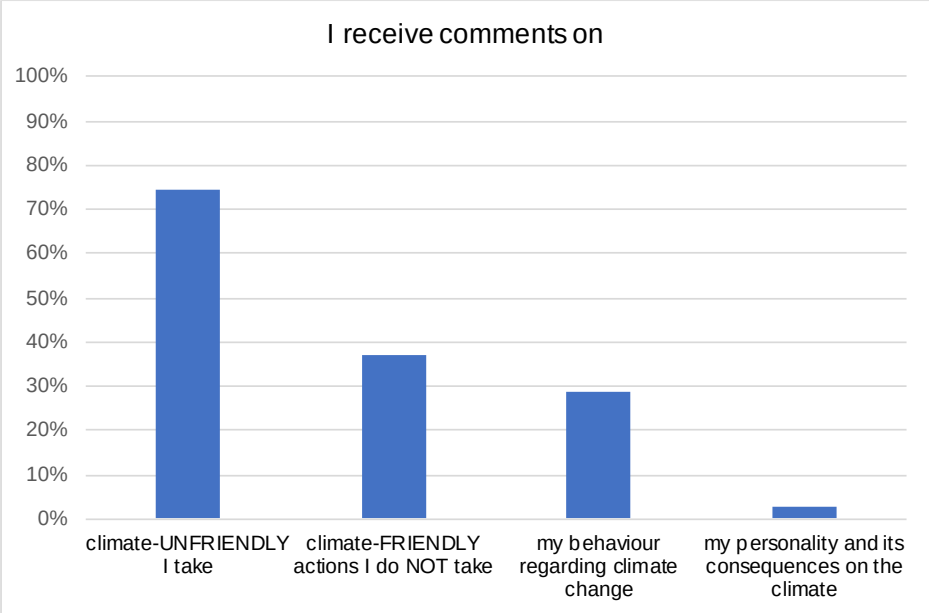
7.20 Occasions for respondents to make remarks (in percentage of respondents who make remarks).



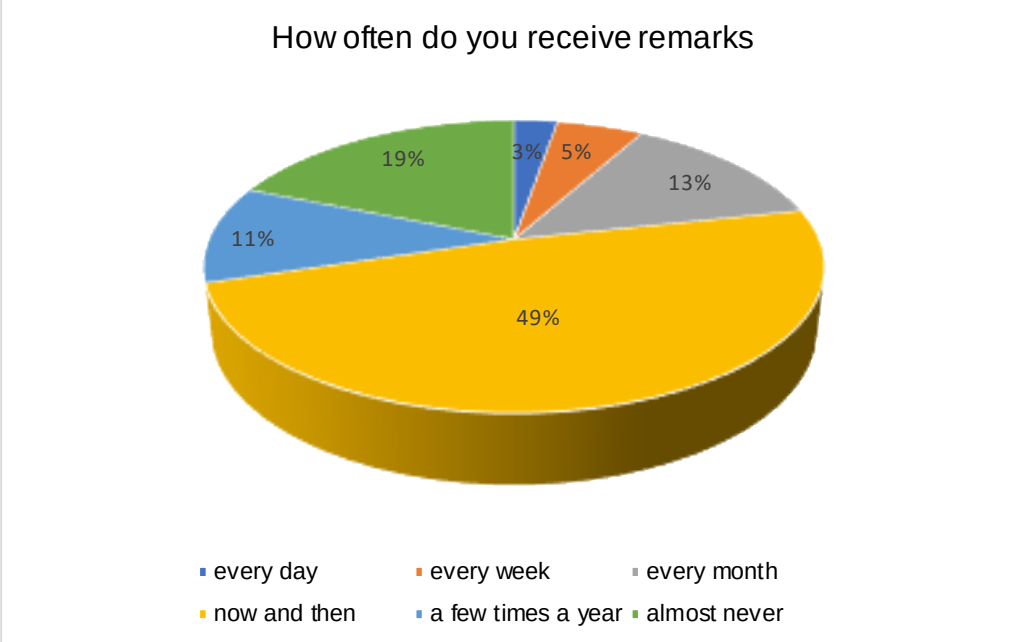
7.21 Emotional response of respondents on making remarks (in percentage of respondents who make remarks).



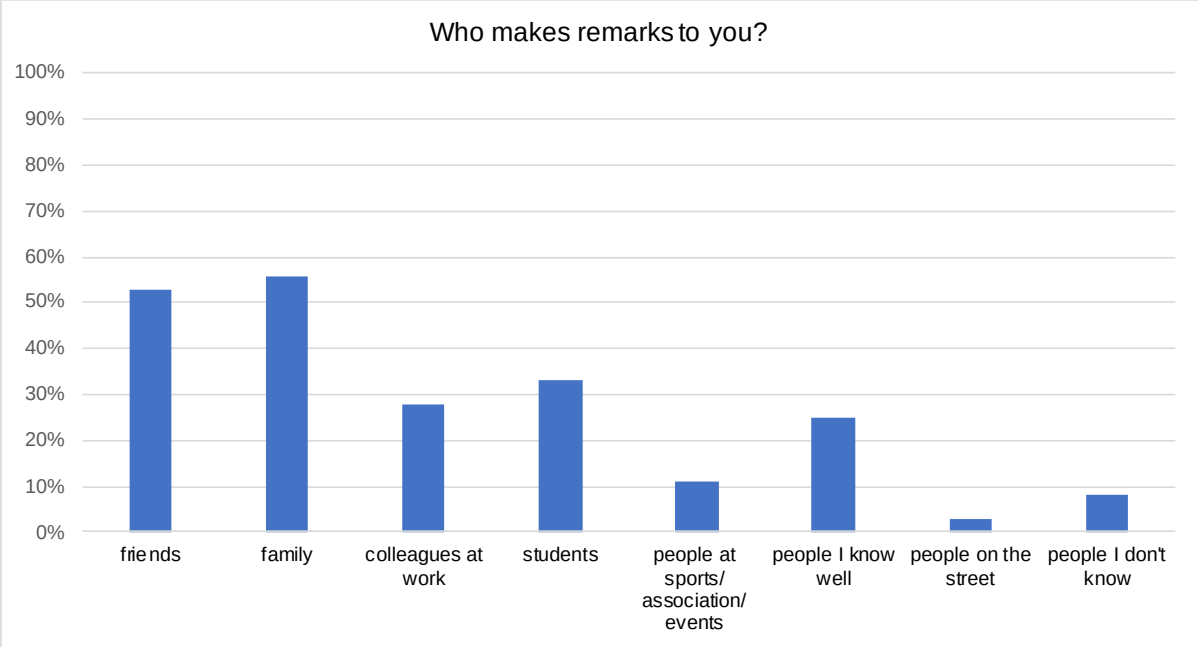
7.22 On what do respondents receive comments (in percentage of respondents who receive comments).



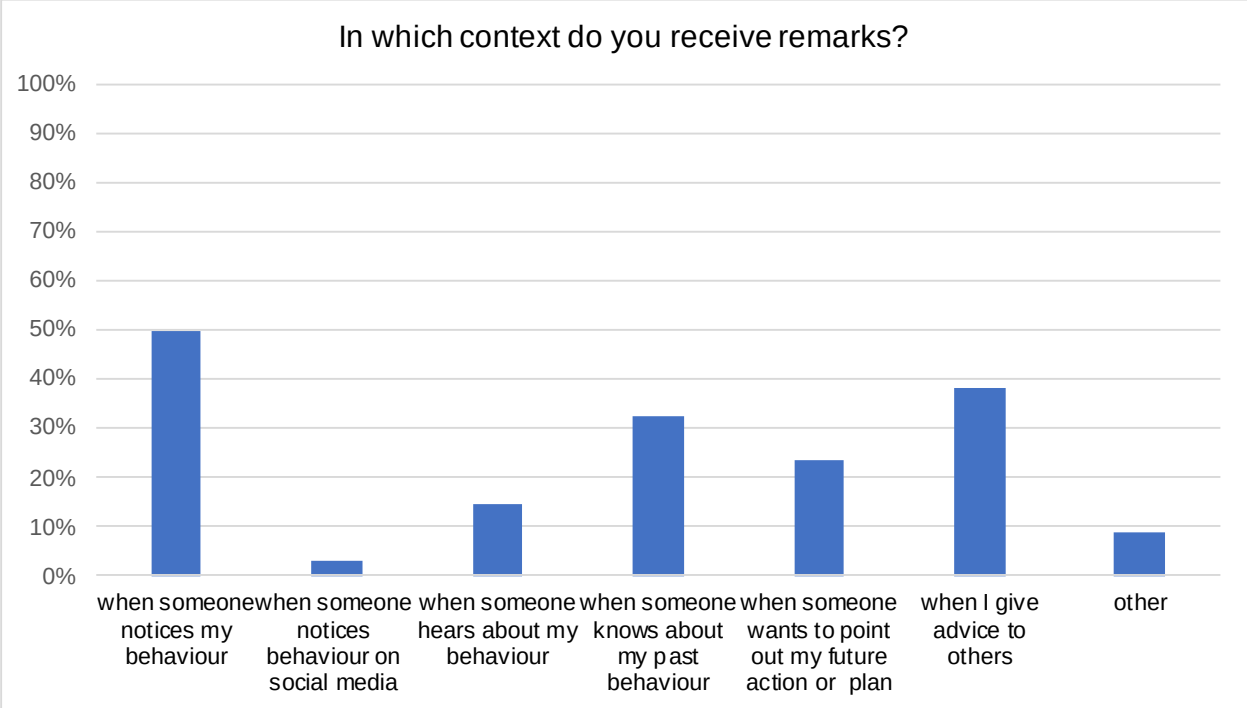
7.23 Frequency of respondents receive comments (in percentage of respondents who receive comments).



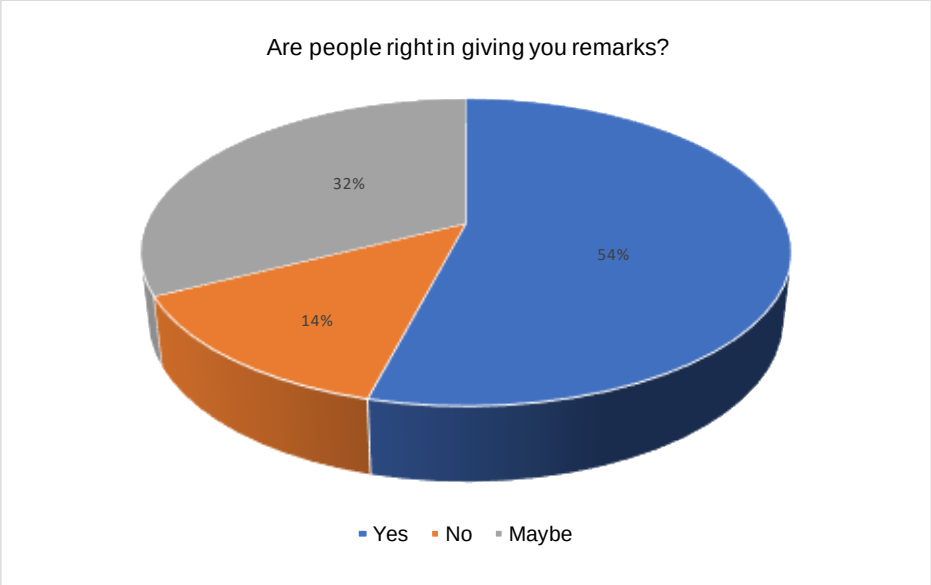
7.24 Type of people to make remarks on respondents (in percentage of respondents who receive comments).



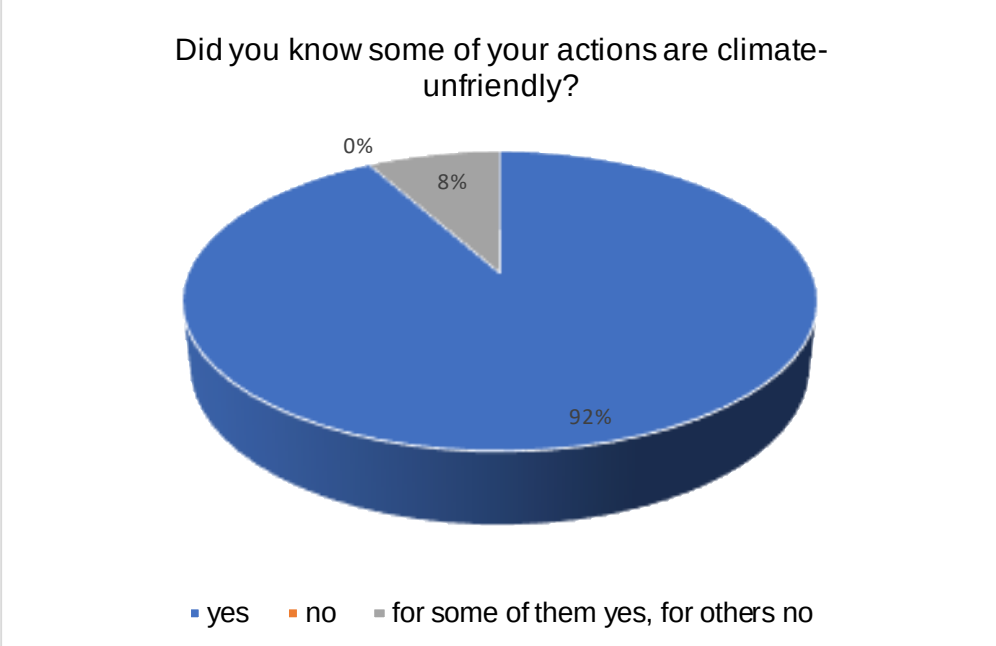
7.25 Context in which respondents receive remarks (in percentage of respondents who receive comments).



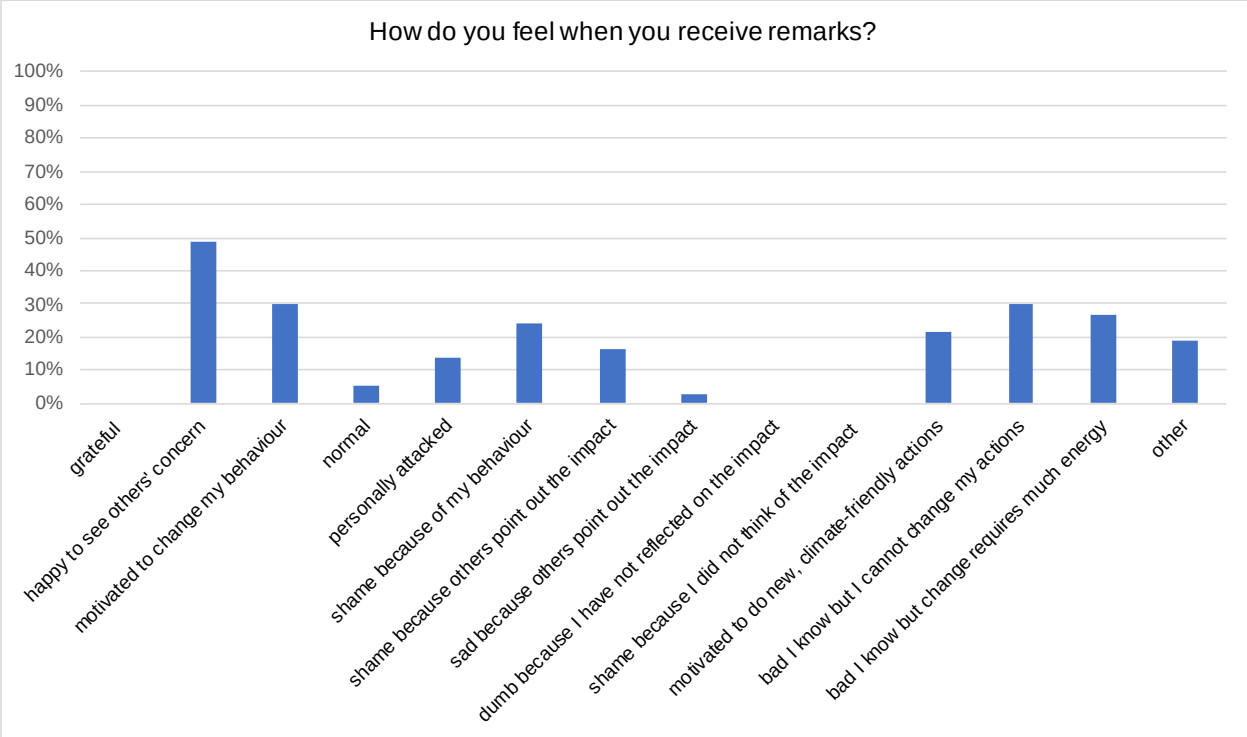
7.26 Respondents think that others are right or not in giving them remarks (in percentage of respondents who receive comments).



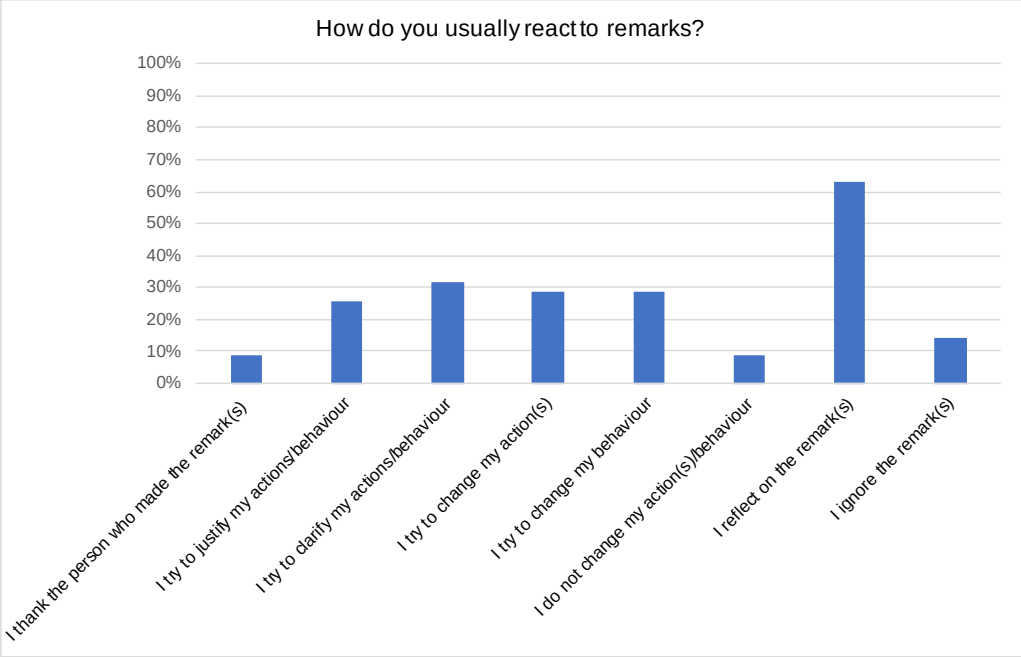
7.27 Respondents do or not know their commented behaviour is climate-unfriendly (in percentage of respondents who receive comments).



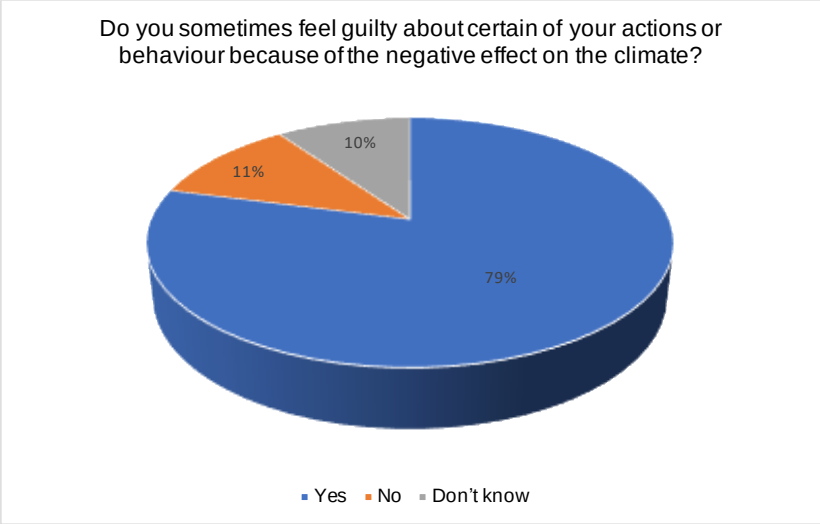
7.28 Emotional response of respondents to receiving remarks (in percentage of respondents who receive comments).



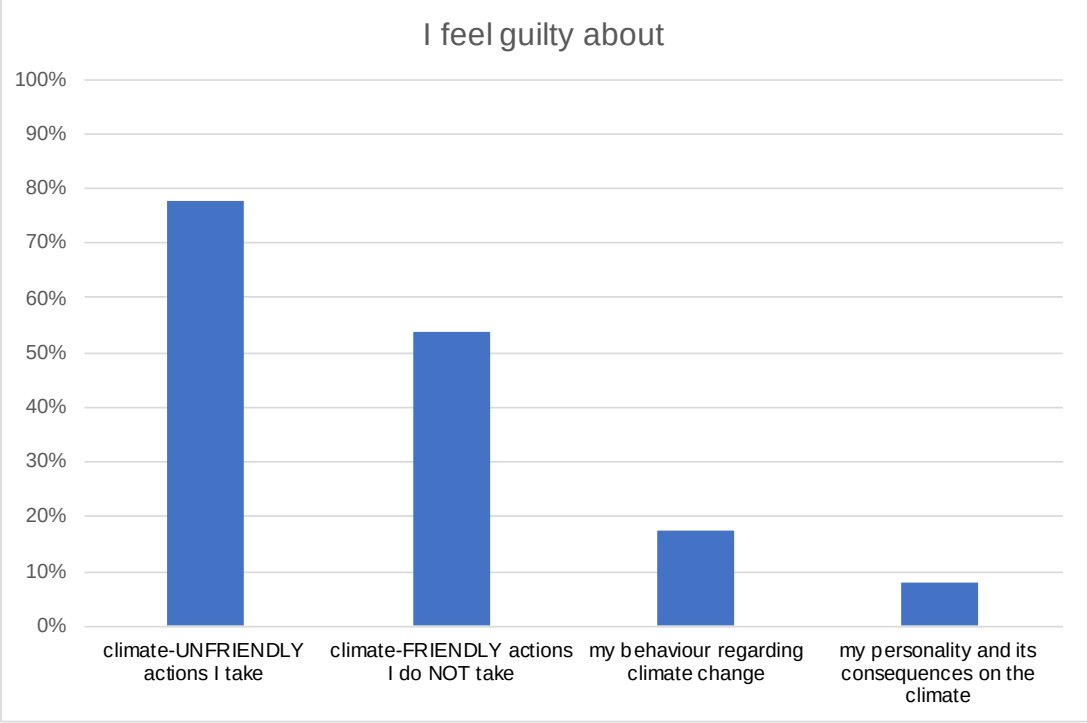
7.29 Behavioural response of respondents to receiving remarks (in percentage of respondents who receive comments).



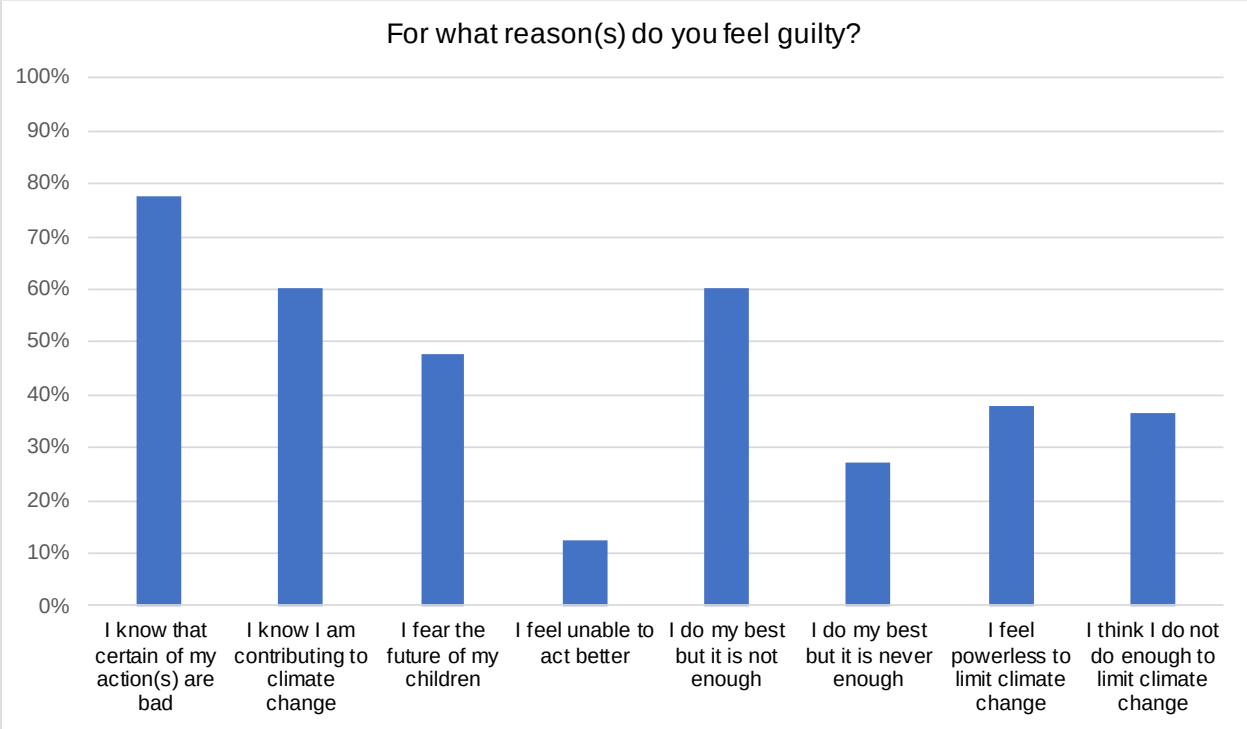
7.30 Respondents do or not feel guilty for their behaviour (in percentages of respondents).



7.31 Reasons for respondents to feel guilty (in percentage of respondents who feel guilty).



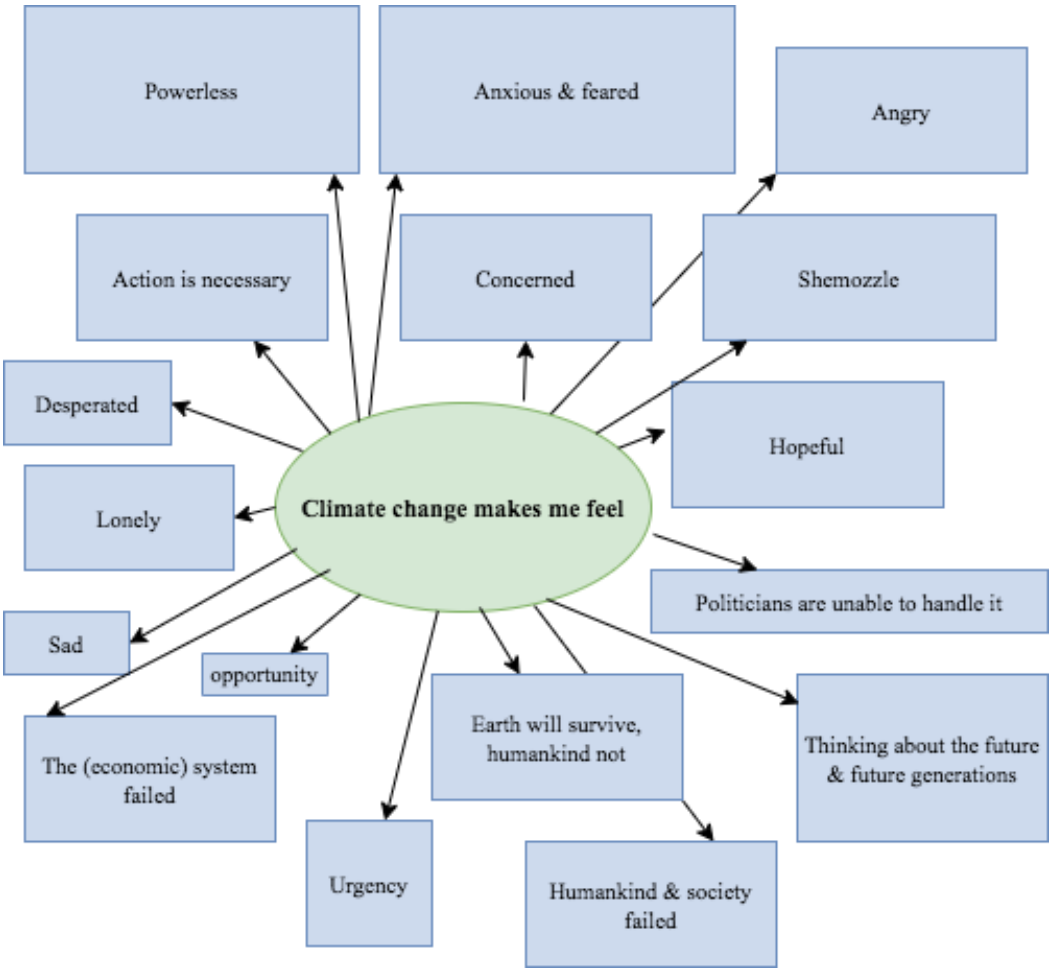
7.32 Motivations for respondents to feel guilty (in percentage of respondents who feel guilty).



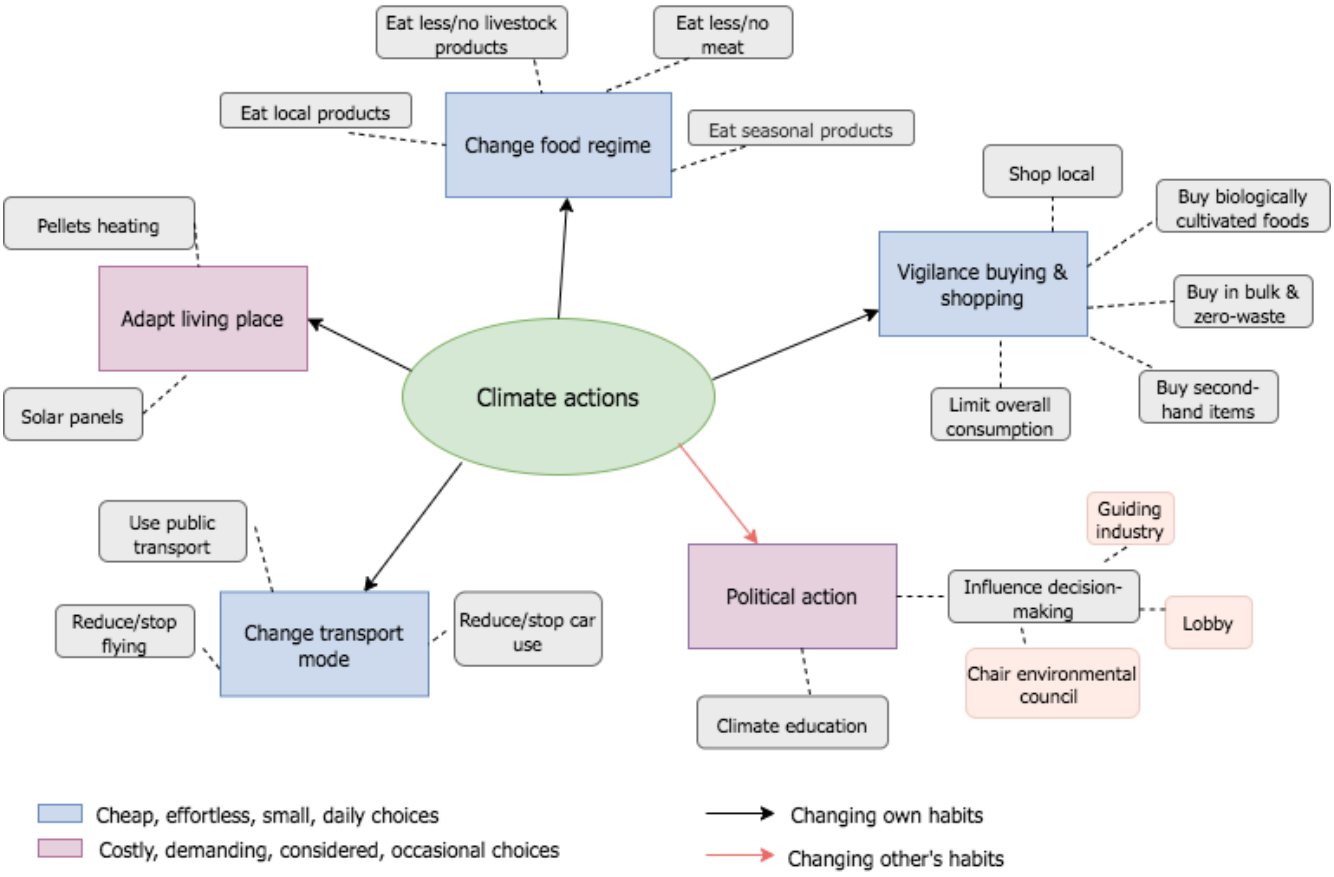
7.33 Frequency of guilt experienced by respondents (in percentage of respondents who feel guilty).

7.34 Respondents do or not share guilt (in percentage of respondents who feel guilty).

Annex 8: hierarch map for 'climate change makes me feel…'



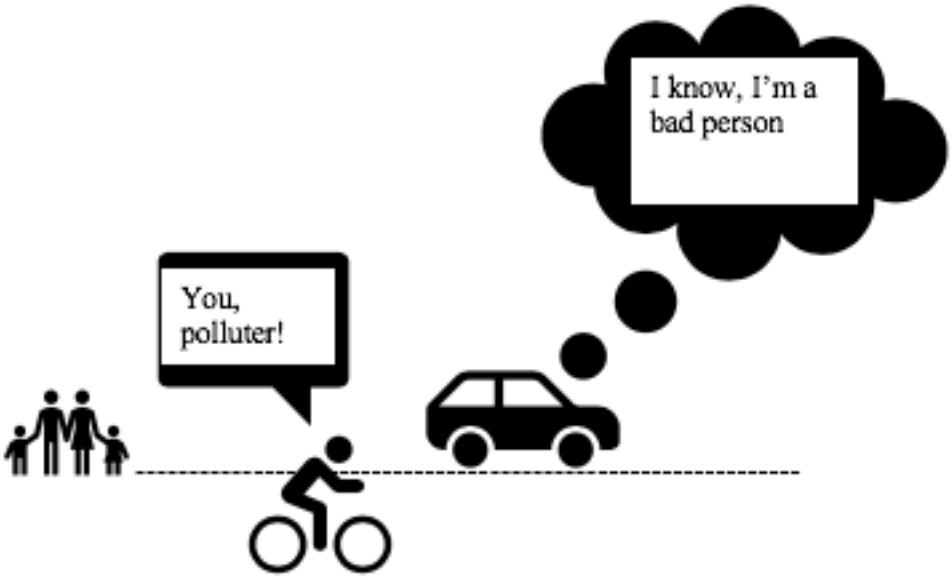
Annex 9: climate actions



Annex 10: table with motivations for not making or receiving remarks.

Reasons why respondents do not make or receive comments	
<u>Do not make</u>	<u>Do not receive</u>
Remarks are not constructive nor effective in changing people's habits.	Other people are indifferent to climate change issues.
Remarks are moralizing, which is undesirable.	Remarks may not be given to someone who undertakes efforts to limit climate change.
Remarks are an assault on individual choice and private life.	Remarks are an assault on individual choice and private life.
Remarks may not be given when a person's own lifestyle is imperfect.	Remarks may not be given to someone who does better in limiting his/her impact on the climate.

Annex 11: image 1: climate shaming situation.



Annex 12: elements of shaming and shame based on the literature.

Elements of shaming & shame (based on the literature)	
Shaming	Shame
Stigmatizing	Society's disapprobation
Judgement	Personal disapprobation
Failure to adhere to shared norms/values OR	Failure to adhere to shared norms/values OR
Transgression of shared norms/values	Transgression of shared norms/values
Moral or social norms	Moral or social norms
Public character (audience)	Awareness of transgression
Assumed community shaming	Self-consciousness
Totalizing & permanent	Totalizing & enduring
Reputational damage (credibility, authority, …)	Reputational damage (credibility, authority, …)
	Connection to negative feelings
	Affective reaction

Annex 13: image 2: anticipation of climate shame.

Annex 14: table with respondent identification of climate change or environmental problem.

Respondent number/ Picture	Flying	Straws	Pesticides	Heating	Coffee & avocadoes	Polluted water	Trash disposal	Lamp
1	CC	EP	EP	CC	EP	EP	EP	CC
2	CC	EP	EP	CC	CC	EP	EP	CC
3	EP	EP	CC	CC	EP + CC	CC	EP	EP + CC
4	EP + CC	EP	EP	EP + CC	EP + CC	EP	EP	EP + CC
5	EP	CC	EP	EP	CC	EP + CC	EP	EP
6	EP + CC	EP	CC	CC	CC	EP	EP	CC
7	CC	CC	EP + CC	EP	CC	CC	EP	EP + CC
8	CC	EP	CC	CC	CC	EP	EP	/
10	CC	EP	EP	CC	CC	EP	EP + CC	EP + CC
% CC	78	23	44	78	89	33	11	78
% EP	44	78	67	33	33	78	100	56

CC = climate change

EP = environmental problem

Annex 15: table with respondent identification of guilt or shame.

Respondent number/ Picture	Pointing out someone	Thinking about flying	Raining	Hiding a face	Bird with mask	Hiding and keeping on a distance	Carrying the world	Inside a polluting Earth	Thinking
1	SH	GU	GU	SH	SH	GU	GU	GU	SH
2	GU	SH	SH	SH	GU	GU	SH	SH	GU
3	SH	GU	SH	SH	GU	SH	GU	SH	GU
4	SH	GU	SH	SH	/	SH	GU	/	/
5	SH	GU	GU	GU	SH	SH	GU	SH	SH
6	GU	SH	GU	SH	GU	SH	GU	GU	SH
7	SH	GU	GU	GU	SH	SH	GU	GU	GU
10	SH	GU	/	SH	GU	GU	GU	GU	GU
% SH	75	25	43	75	43	62	12	43	43
% GU	25	75	57	25	57	38	88	57	57

SH = shame

GU = guilt

Annex 16: summarizing table to answer the research question.

Summarizing table for climate shaming & climate shame			
Conceptualising element		**The shamer**	**The shamed**
Who?	The shamer	Political preference for Groen Mainly adults, elder people Feeling guilty about own actions, behaviour Knows what climate shaming means	Family members (56%) (often parents) Friends (53%) Students (33%) Colleagues (28%) People at sports/ events (25%)
	The shamed	Family members (88%) Friends (90%) People know well (73%) People in the street (20%) People don't know (15%)	Political preference for Groen Mainly young people Feeling guilty about own actions, behaviour Knows what climate shaming means
What?	Actions, behaviour or personality?	Behaviour/actions with a negative impact on the climate (75%) Inaction to take climate change measures (75%) Behaviour regarding climate change (70%) Personality with an impact on climate change (25%)	Behaviour/actions with a negative impact on the climate (74%) Inaction to take climate change measures (37%) Behaviour regarding climate change (29%) Personality with an impact on climate change (3%)
	Concrete actions, behaviour	Transport modes (car use, flying) 'Energy waste' (lights, heating) Consumption of meat, exotic products Overconsumption Plastic use Littering, incorrect or no trash disposal 'Water waste' Ignorance, incoherency talks-actions 'Irresponsible', 'absurd' behaviour	Transport modes (car use, flying) Food choices (vegan, exotic products) Holidays Consumption of eco-irresponsible goods Shopping style *(*hypermarkets, too many clothes) Smoking Participation climate marches
When?	Frequency	Weekly (25%) Monthly (20%) Now and then (45%)	Daily (3%) Weekly (5%) Monthly (13%) Now and then (49%) Few times a year (11%) Almost never (19%)

	Timing	On the spot (82%) Future plans (78%) Advice (33%) Social media (8%)	On the spot (50%) Future plans (24%) Advice (38%) Social media (3%) Past behaviour (32%)
Where?		At home In public spaces On the street	At home In public spaces At school, university At sports, other events
Why?	drivers & motivations	Certain actions, behaviour are indeed not very respectful of the climate Sensitizing Educate about climate change actions Create awareness, consciousness Change 'irresponsible', 'absurd' behaviour Point out incoherency, hypocrisy	Certain actions, behaviour are indeed not very respectful of the climate Makes (self-) reflecting possible Makes improvement possible No comprehensive picture of lifestyles (hunting flaws) Reaction to self-confrontation Ease of remarks vs. difficulty of climate neutral life Egoistic excuse
Why not?		Ineffective and unconstructive Moralizing Assault on individual choice and private lifestyle Own imperfect lifestyle	Indifference Many efforts yet taken Assault on individual choice and private life Unbalanced climate impacts
Consequence / reactions	Behavioural		Take remarks into account (58%) Do not take remarks into account (14%) Hiding (silence on actions) Adapt actions, behaviour Start new actions, behaviour
	Emotional	No consequences (49%) Smarty (31%) Good (16%) Careful (16%) Helpful (18%) Bad (10%)	Happy (49%) Motivated to alter behaviour (30%) Motivated to new behaviour (22%) Bad for the impossibility to change (30%) Bad for the efforts to change (27%) Ashamed (25%) Ashamed because of public (16%) Afraid to receive comments Frustrated Attacked Disappointed