Climate activism is here to stay

The effect of type of environmental protests, and the influence of antecedents on the

Dutch publics' view of Extinction Rebellion

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Abstract

*Purpose***:** Climate activist groups have taken to the streets to draw attention to the urgency of climate change and to protest ineffective climate policies. These protests have become more extreme over time, sometimes with and sometimes without a clear and explicit link to the climate crisis. Little is known, however, about how the general public views such protests. This study has two objectives: To determine (1) whether climate related and non-climate related protests of Extinction Rebellion (XR) lead to different reactions, and (2) which antecedents are related to people's opinions on XR.

Method: The research questions were answered in an online study (N = 175). For RQ1, participants were experimentally exposed to two manipulated versions of a news article about an XR protest (climate related vs non-climate related), after which their opinions and attitudes were measured. For RQ2, a correlational design was used to investigate which antecedents explain their opinions on XR Convenience and snowball sampling were used to recruit the participants,

Results: The main finding for RQ1 was that the climate related protest only resulted in more positive reactions than the non-climate related protests for one of the dependent variables, opinion on XR. As for RQ2, significant predictors for people's opinion on XR were found in climate concern and attitude towards activism. The other antecedents (trust in governmental climate policies, attitude towards civil obedience, and psychological reactance) were not significant.

Conclusion: Results showed that the climate related protest resulted in a more positive opinion on XR than the non-climate related protest. This indicated that the type of protest can be important for XR with regard to public support. Climate concern and attitude towards activism turned out be antecedents for opinion on XR, indicating that the topic of climate concern and XR are clearly connected, and that XR has solidified their status as a climate activist movement with the general public, above all else.

Key words: *Climate change, climate activism, communication, non-violent protests, Extinction Rebellion, experiment, the Netherlands*

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1. Introduction

The planet's average surface temperature has risen by 1.18 degrees Celsius since the late 1800s, mostly because of rising atmospheric carbon dioxide emissions and other human activity (IPCC, 2022). By 2030, greenhouse gas emissions must be reduced by 45 percent to keep global warming under 1.5°C above pre-industrial levels, according to IPCC (2022). Otherwise, grave repercussions like rising sea levels and widespread ecological degradation can not be avoided.

With there being less and less time to tackle this issue at hand, numerous social movements have expressed their worry about the state of the climate, with Extinction Rebellion (after this: XR) as one of the most widely known. XR represents itself as a movement with a strong interest in the ecological and climate crises. Their goal is to make governments and people realize the magnitude and urgency of the problem humanity is dealing with. XR describes itself as a "grassroots movement" (Extinction Rebellion, 2023a). In a grassroots movement, there is no boss or governing body, and pressure from grassroots movements has a great ability to influence the direction of environmental policies (Kimball, 1996). Besides a 2021 polling of British adults on how they view XR (YouGov, 2021), there has not been any study on how the general public view XR. This polling was only focused on the organization XR and not the type of protests they use. It is still unknown whether these protests have had any impact on the general public and whether implementing different types of protest make a difference. Public opinion on activist groups is a topic that is rarely studied, despite the significance of public opinion in the world of activism (Liu, 2018; Wouters, 2019). In the study of Kountouris and Williams (2023), however, it was found that XR protests had a positive impact on the public's attitudes about sustainable behavior and desire to support policies to mitigate climate change. Exposure to the XR demonstration, however, was not shown to be associated with participants' assessments of the imminence or severity of environmental crises, or their opinions regarding their individual environmental and climate impact.

The severity of the environmental crisis has been noticed by the Dutch government. They are addressing the climate crisis in numerous ways, they have ratified the Paris agreement and are also implementing their own national climate policies (Rijksoverheid, 2023b). For instance, the Dutch

government tries to promote the value of cutting back on meat consumption, taking shorter showers, turning off the lights, and using durable products, among other things to reduce the climate effect (Rijksoverheid, 2023a). However, social groups like XR assert that governments are not acting quickly enough and by doing so contribute to the destruction of the earth (Extinction Rebellion, 2023d). They insist that countries are greenhouse gas neutral by 2025 (Extinction Rebellion, 2023e), where the Dutch government only intends to have 49% less $CO2$ emissions compared to 1990 by 2030 (Rijksoverheid, 2023b). Plans on both sides appear to be vastly different.

XR aims to change the public debate around climate breakdown with their ''respectful disruption'' (Taylor & Gayle, 2018). Because XR operates in the public sphere, the researcher assumes that they want to elicit reactions from the public. These respectful disruptions may be experienced as (too) extreme by the general public. However, research on the public's perception of public movements is lacking (Hsiao & Wan, 2018). Some studies assert that the general public does not support civil disobedience for social movements (Feinberg et al., 2020), but these studies do not concentrate on the movements that engage in this civil disobedience (Lee, 2015), antecedents influencing these views, and whether the use of different types of protests make a difference.

For these reasons it is critical to understand what the general population believes and what accounts for their opinion on a movement like XR. This study aims to close the gap on the Dutch public's view on the XR movement.

Research question 1: *What are the effects of type of environmental protests (climate related or non-climate related) on the opinions and attitudes of the Dutch public?*

Research question 2: *Which antecedents are related to the Dutch public's views on XR?*

To answer these research questions, this study conducted a survey study existing of a quantitative experiment and a correlational part. In the experimental part of the study participants were assigned to one of two news articles (climate related or non-climate related). Both news articles reported on a protest by XR. During this study, the climate related news article included a Ferrari (obvious link to the crisis), and the non-climate related news article included a painting (no obvious link to the crisis). In the correlational method of the study, it was tested which variables were accurate predictors for the

single measurements.

The next section of this study supplies a more in-depth summary and analysis of significant literature that serves as the foundation for the hypotheses. Because this study is divided into two parts, two distinct models were created, each with a set of corresponding hypotheses. Following a description of the study's method, the results are presented and discussed.

2. Theoretical framework

This chapter presents an analysis and discussion of the relevant literature on the effects of climate activism. The constructs for the first model are discussed first, after which the constructs for the second model are discussed. The research questions and related hypotheses for the models are combined and visualized at the end of this chapter. First, necessary context on the topic of climate activism is given.

Climate activism

Climate activism has existed for a long time, and climate activists have pushed for more effective political response to ecological problems like global warming since the early 1970s (Thomson, 2014). Climate change began to become a political concern in the middle of the 1970s, moving from purely scientific to political discourse (Haibach & Schneider, 2013). Nowadays climate activism is more active than ever, especially the last couple of years protests have become more extreme. The accumulating body of scientific knowledge on climate change is one of the factors contributing to the recent increase in climate activism (De Moor et al., 2021). With the increase in scientific knowledge and media attention on the topic of climate change, the general public became more aware of the current situation they are in. Leaving them with the urge to do something about it by means of protests. Protest is defined as followed: ''a strong complaint expressing disagreement, disapproval, or opposition''(Cambridge Dictionary, 2023). With this came a 'new wave' of climate activists and new ways of protesting: non-violent civil disobedience (de Moor et al., 2021). These protests can be categorized as cost-levying, which states that they seek norm change by raising the costs to others for not accepting new norms (Humphrey, 2007). Movements seem to still use these disruptive methods of protest, including vandalism, even though they are thought to be less effective. As a result, public support for the project drops off quickly (Simpson et al., 2018; van Dijk, 2021).

2.1 Effects of type of environmental protests

XR is one of the most widely known movements employing non-violent civilly disobedient protests. Over the past few years, XR has staged many protests of this nature. What was notable about these

protests was the type of object they used. They would either use an object related to the climate or an unrelated object. Objects unrelated to the climate crisis were for example a painting (RTL Nieuws, 2022a), a talk show table (RTL Nieuws, 2022b), or a concert hall (Nieuwenhuijzen, 2022). These objects were used to get the public talking about the crisis (Rozema, 2022). Due to the unrelated nature to the climate crisis these protests got massive media attention. Objects related to the climate crisis were for example a Ferrari (Devereux-Evans, 2022), an airport (NOS, 2022b), or a freeway (Bosman & Fasel, 2023). These objects were used due to the obvious contribution they have to the climate crisis. During this study, the protests unrelated to the climate crisis will be named non-climate related protests and the protests related to the climate crisis will be named climate related protests.

In the following section al the variables for model 1 are discussed. Model 1 combines theory and hypotheses all together.

2.1.1 Attitude towards XR activism

Effective activism, according to Reber and Kim (2006), depends on forming connections with people who have similar goals and forging alliances with other groups that have similar aims for transforming society. Studies on attitudes in connection to activism groups in general have been performed (Amenta & Polletta, 2019; Y. Hsiao & Radnitz, 2021), however, they do not go into detail about how the general public views and is affected by environmental activism (Liu, 2018).

XR protest exposure is predicted to have an impact on participants' attitudes toward XR activism. This impact is expected because of the unorthodox way XR chooses to protest, for example by blocking a highway (Extinction Rebellion, 2023c). Participants are bound to have an opinion on the way XR spread their message. A difference between the two types of XR protests is expected based on rational choice theory. This theory assumes that because humans are rational creatures, they base their decisions on thinking rationally (Green, 2002).

Due to the clear connections XR has to the climate crisis it would not be strange for the general public to assume seeing something climate related when they see an XR protest. For instance, promoting a vegetarian diet, urging a boycott of the agricultural industry, or opposing any gasoline-powered vehicles. But this is not always the case, even though framing is crucial for environmental

movements (Liu, 2018; van Dijk, 2021). When this framing is absent, the logic behind your message falls apart. It is highly likely that an unfavorable opinion from the participant on the XR protest will result when a pro-environment protester from XR uses a non-climate related object to make their point.

It is predicted that, compared to its non-climate related counterpart, the protest that is related to climate change will result in a more positive attitude towards XR activism. Participants who see the non climate related protests see XR protesters vandalizing a painting with the goal to save the climate. The missing connection between the protest and the climate crisis is expected to lead to a less positive effect on attitude towards XR activism than the climate related protest.

All the following hypotheses for model 1 (H2, H3 & H4) rely on the same argumentation as was just given in connection to rational choice theory, and why the climate related protest is expected to result in more positive scores than the non-climate related protests. This argumentation will not be discussed in as much detail for all the following hypotheses. This leads to the first hypothesis:

H1*: Climate related protests have a more positive effect on attitude towards XR activism than non-climate related protests.*

2.1.2 Attitude towards civil obedience

From an early age, people are taught to treat authority with obedience and to have faith in the reliability of these authorities, even when what happens in its name can occasionally be unpleasant. To satisfy the fundamental desire to fit in with a social group, obedience evokes the adaptation to social norms (Miller et al., 1995). If people believe that a request is legitimate, they are more likely to comply (Hoffmann, 2005; Tyler, 2006). XR feels that the requests made by the government are unjustified and thus choose to engage in civil disobedience (Extinction Rebellion, 2023a).

Compliance with formal and social norms, which are interpreted as laws, is essential for the survival of the social system and maintaining of social order (Bocchiaro et al., 2012). Every social society needs a certain amount of responsibility and deference to authority to function (Reno et al., 1993). Despite the importance of obedience in our society, there is a lack of research on the general publics attitude towards civil obedience.

XR and their way of protesting are a complete opposite of this obedience to authority. They show this by willingly blocking freeways (Extinction Rebellion, 2023c), and disturbing the social order through their civil disobedience and rebellion (Extinction Rebellion, 2023a), which is why an effect is expected for exposure to the news articles. A more positive effect for the climate related news article is expected. This leads to the following hypothesis:

H2: *Climate related protests have a more positive effect on attitude towards civil obedience than non-climate related protests.*

2.1.3 View on the XR movement

The general public is more likely to believe environmental movement groups than governments or businesses when it comes to environmental issues in most industrialized nation (Christie & Jarvis, 2012). This gives the XR movement a more positive initial edge compared to other organizations spreading information. XR has already capitalized on this by making considerable progress towards shifting public opinion in favor of drastic climate change (Kinniburgh, 2020). They have occasionally been successful in bringing environmental problems to the attention of the public, politicians, and other decision-makers, which would not otherwise have received as much notice (Snow et al., 2019). Public opinion of activist groups is a topic that is rarely studied, despite the significance of public opinion in the world of activism (Liu, 2018; Wouters, 2019).

The view that participants have on the XR movement is expected to be affected by the type of protest they will see, a difference between the climate related and the non-climate related protest is predicted. It is expected that people view the XR movement better when they see a type of protest related to that movements' goals. This leads to the following hypothesis:

H3: *Climate related protests have a more positive effect on view on the XR movement than non-climate related protests.*

2.1.4 Opinion about XR protests

Modern democracies have seen a rise in nonviolent protests over the past ten years as more people take part in boycotts, peaceful protests, and petition signings to voice their social grievances and put

pressure on their governments (Dalton et al., 2010). Public support for these protests grows, and even being detained during a nonviolent protest raises public support (Sopow, 2012). XR do not shy away from getting arrested as part of their strategy, if they consider it necessary (Extinction Rebellion, 2023a). According to recent studies, nonviolent protest strategies help observers feel more connected to the group (Simpson et al., 2018). A person is naturally more likely to have a favorable attitude of XR if they feel more kinship with it. Some academics contend that the legitimacy of nonviolence makes nonviolent protests more likely to be successful (Thomas & Louis, 2014). There have been studies on acceptance of several types of protests (Sopow, 2012), however these do not cover the distinction between a climate related and a non-climate related protest.

During this study it is expected that opinion about XR protests will be more positively influenced by seeing a climate related protest. Leading to the final hypothesis of model 1:

H4: *Climate related protests have a more positive effect on opinion about XR protests than non-climate related protests.*

Climate concern and trust in governmental climate policies have not yet been discussed. In the present investigation, model 1 does not include hypotheses for these two variables, the assumed relations between the variables are treated exploratory. Below is a brief explanation of the rationale behind this decision.

For climate concern and trust in governmental climate policies it is expected that seeing one of the two types of protests (climate related vs non-climate related) affects how the participant score these concepts, which will be further discussed in the method. It is incredibly difficult to hypothesize how these variables are scored, especially when it comes to the non-climate related protest. For example, if a participant sees the non-climate related protest they could sense some urgency on the topic of the climate crisis, which could lead to a positive score for climate concern. They could also understand XR asking for attention due to the inability of the governments' climate policies, which could lead to negative scores for trust in governmental policies. If museums are even being trespassed to get their point across, the climate crisis must be important.

Through this type of communication, the main message of XR gets more attention, but this

attention can also work counteractive. Participants would maybe not want to be associated with a movement that portrays itself like that to the outside world, which could lead to negative scores for climate concern and positive scores for trust in governmental policies. Due to these uncertainties the relations for both variables are treated exploratory.

2.2 Possible antecedents related to the Dutch public's views on XR

In the following section all variables of model 2 are discussed. Hypotheses and theory are combined in model 2. First, the dependent variables 'view on the XR movement' and 'opinion about XR protests' are discussed. Second, the independent variables, including climate concern, attitude towards civil obedience, trust in governmental climate policies, attitude towards activism, and psychological reactance are discussed separately. The research question and related hypotheses for the model are combined and visualized at the end of this chapter.

2.2.1 Dependent variables: Views on the XR movement and opinion about XR protests

There is a lack of literature when it comes to studies on public support for environmental movements (Barkan, 2004). The little research that has been performed states that organizations like XR could find success in getting support from the general public (Bugden, 2020). However, when most of the population considers a movement's socioeconomic costs to be unacceptably excessive (for instance, excessively protracted disruption of routine activities, forcing innocent people to endure indirect losses) or thinks that the movement has gotten out of hand, people will stop supporting the campaign (Hsiao & Wan, 2018). In the current study, views on the XR movement encompass everything on the topic of how participants feel about XR as an organization.

Nonviolent protests are understudied in comparison to violent protest movements (Thöresson, 2020). According to recent studies, nonviolent protest strategies help observers feel more connected to the group (Simpson et al., 2018), but extreme protests by social movements could generate less support (Feinberg et al., 2020). During the current study, opinion about XR protests encompasses everything on the topic of what participants' opinion is about the type of protests XR use.

2.2.2 Climate concern

The first antecedent used during this study is '*climate concern*.' This construct is defined as the level of understanding, willingness, and support, to help find a solution to environmental issues (Dunlap & Jones, 2002).

People find it difficult to understand the causes of climate change, and the potential implications climate change could have on their life since the immediate effects on human wellbeing are not always obvious (Carolan, 2010). Even while they do not fully understand the process by which human activity affects climate change (Lorenzoni, 2003), most people in industrialized countries appear to be quite conscious of its effects (Lorenzoni & Pidgeon, 2006).

People who believe the environment poses a threat to the nation are said to support environmental organizations (Rohrschneider, 1990). When people already posses a high level of climate concern it is likely that they are more supportive to environmental movements like XR, because these movements confirm these concerns. It has been shown that using fear to communicate the seriousness of climate change is an effective strategy (Bhagwat et al., 2016). This would explain why XR makes use of this in their messaging. It is predicted that the variables view on the XR movement and opinion about XR protests are both positively influenced by the level of climate concern a participant has. The identification that participants have to the core message of XR is expected to be an important factor on how people relate to the XR movement and their protests.

As far as the researcher is aware, no study has yet been performed on the relationship between having a high sense of climate concern in combination with people's attitudes towards XR and the movements' actions. Leading to the following hypotheses:

H5: *Climate concern is positively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*

2.2.3 Attitude towards civil obedience

Extensive research has been conducted on both the topic of civil obedience (Passini & Morselli, 2009; Pozzi et al., 2014) and civil disobedience (Cooke, 2016; Smith & Brownlee, 2017). However, public attitudes towards civil (dis)obedience are a topic within this field of literature that is rarely touched

upon. The focus in studies is mainly on the disobedience that protesters employ (Fiedler, 2009; Lee, 2015; Scherhaufer et al., 2021).

Instead of trying to overthrow the current political order, civil disobedience aims to change it (Cooke, 2016). XR's protests up to this point have all involved some form of civil disobedience, but civil disobedience might provide a poor example (Smith & Brownlee, 2017; Trichardt & Trichardt, 1986). Even though disobedience to one law at one time does not always warrant disobedience to all laws, it may encourage someone else to disobey in situations where the first person would still have complied. It is impossible to disregard the possibility that someone acting uncivilly will inspire similar behavior in others (Trichardt & Trichardt, 1986).

Taking this into account, it is predicted that being civilly obedient will negatively influence a persons view on the XR movement and their opinion about XR protests. The expectation is that breaking universally applicable laws and norms will be viewed negatively by those who score high on attitude towards civil obedience. An earlier study outlined that people who value social order are more inclined to think negatively of environmental protests (Liu, 2018). The current study argues that those who value social order are civilly obedient. Observing others break the rules you are trying to follow could thus reinforce the desire you already have to uphold those standards. This is predicted to have a negative impact on how people perceive the movement XR, and the civilly disobedient protests they engage in. Which brings us to the following hypotheses:

H6: *Attitude towards civil obedience is negatively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*

2.2.4 Trust in governmental climate policies

A larger body of research has proven that attitudes toward climate (and other environmental) policies are significantly influenced by one's level of trust in the government (Kulin & Johansson Sevä, 2020). What is meant by "trust in government" is the public's expectations about the performance of its political leaders, and government organizations in terms of how they devote, act, and fulfill their responsibilities (Cheema, 2011). In the past few years, trust in the government has never been lower in the Netherlands (Klösters et al., 2022; NOS, 2022a). Whether the level of trust in the governments'

climate policies influences the support for a climate movement contradicting these policies, is a topic which has not received any research yet.

Distrust is a big part of XRs message during their protests. They want the people to know ''the truth about the climate and ecological crisis'' (Extinction Rebellion, 2023b). If a person has a high level of trust in the governmental climate policies, the message by XR is the direct opposite from their own believes. It is therefore expected that people with a high level of trust in the governmental climate policies have a negative relation to view on the XR movement and opinion about XR protests. This is based on biased assimilation, which refers to situations in which people integrate new knowledge in a way that agrees with their current attitude (Corner et al., 2012). Thus, strengthening their already high levels of trust in the governmental policies. Besides, people often actively seek out information that confirms their preconceived notions or tendencies, which results in attitude polarization to groups with different beliefs (Stroud, 2010). XR holds different beliefs from individuals who have a high level of trust. Because of this, it is predicted that a participant in this study who placed a high degree of trust in governmental climate policies would have an unfavorable opinion of a movement that is criticizing these, and the protests they implement to get their points across.

It leads to the following hypotheses:

H7: *Trust in the governments' climate policy is negatively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*

2.2.5 Attitude towards activism

Public attitude towards activism is one of the most important things in the context of protests since political demonstrations cannot be successful without public acclaim (Barker et al., 2021; Wouters, 2019). It is not yet known whether environmental movements benefit from the general publics positive general view on activism.

The worldview of the general public may have an impact on how they view things (Liu, 2018). For instance, how protest is perceived is heavily influenced by the participants' predispositions (Wouters, 2019). Due to the logical link between protests and activism, attitude towards activism was chosen as one of the antecedents. Despite the importance of public attitude in the realm of activism,

public attitude towards activism is a subject that is rarely studied (Liu, 2018; Wouters, 2019). Which is why during this study attitude towards activism will be researched

It is predicted that participants who have a positive attitude towards activism will relate positively to view on the XR movement and opinion about XR protests. The fundamental justification for this is that those who have this optimistic outlook are expected to see protesting as a respectable democratic method of societal expression, and as a result will more likely give environmental groups exercising this right legitimacy. Studies have already shown that this is the case for more educated individuals (McKenzie & Lipset, 1962; Morris & Stouffer, 1955). Given the age of these studies, it is critical to learn whether they are even still applicable and whether this justification holds true for those who have a favorable attitude toward activism.

During this study this could mean that people who have a positive attitude towards activism in general would have a positive attitude towards the XR movement and a positive opinion about the protests they use. Leading to the following hypotheses:

H8: *Attitude towards activism is positively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*

2.2.6 Psychological reactance

Numerous studies have been conducted on psychological reactance. This theory encompasses the idea that humans often defy behavioral rules that restrict their freedom of choice by simply engaging in the prohibited behavior (Henriksen et al., 2006). This suggests that people frequently behave opposite as to what they were asked.

In the current research, psychological reactance was measured as a background characteristic. It can be viewed as a personality trait, according to studies (Milne & Wise, 1991; Shoham et al., 2004). Psychological reactance occurs when individuals are subjected to a controlling and or threatening message that jeopardizes their freedom (Miller, 2015; Roubroeks et al., 2009; Wiium et al., 2009). XR feel that their future and their freedom is in jeopardy, by the (lack of) governmental climate policies implemented which they feel are threatening the environment (Extinction Rebellion, 2023d). Thus, psychological reactance occurs. This psychological reactance that XR possesses is

expected to be positively related for participants on view on the XR movement and opinion about XR protests. The main argument for this expectation is that people who share common traits feel more drawn to each other, as will be explained below.

"Vicarious boomerang" is a term used to describe a phenomenon in psychological reactance literature. It claims that those who see others participating in 'forbidden behavior' can reclaim freedom through association (Miller et al., 2020). Reclaiming freedom is done by acting psychologically reactant (Brehm, 1966). This association, through others possessing a similar trait, is what our hypotheses are based upon.

Since XR and participants who are psychologically reactant share the same characteristics, the participant is expected to feel a positive association with XR. It is thus predicted that scoring high on psychological reactance is positively related to how the participant views the XR movement and its protests. Bringing us the following hypotheses:

H9: *Psychological reactance is positively related to the public's view on the XR movement and (b) their opinion about XR protests.*

2.3 Research models

Two models were used in this investigation, as was described at the beginning of the chapter. The two models are summarized below, along with the related research question and hypotheses. Figure 1 shows model 1. The accompanying hypotheses are shown in table 1. Model 2 is depicted in figure 2, and the associated hypotheses are presented in table 2.

RQ1: *What are the effects of type of environmental protests (climate related or non-climate related) on the opinions and attitudes of the Dutch public?*

Figure 1: *Model 1*
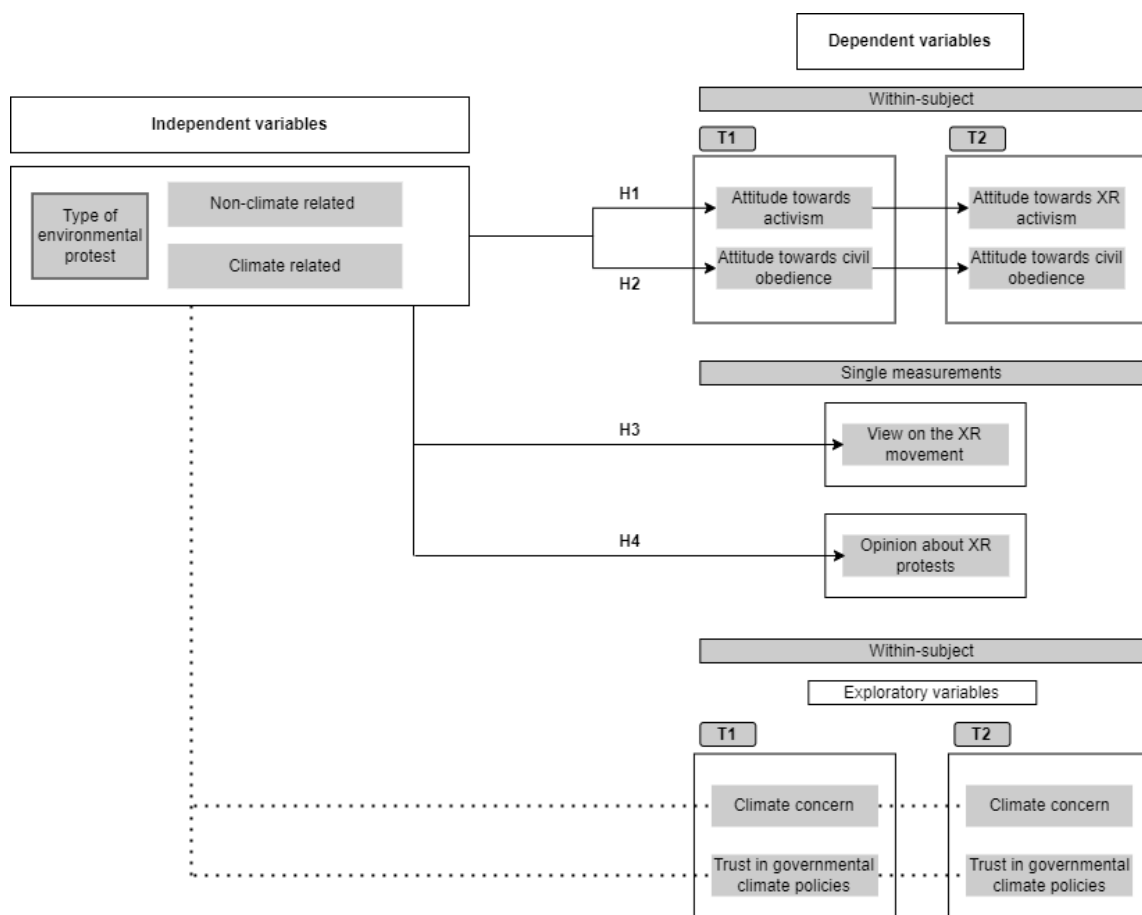
Note: the dotted lines show the explorative relations

Table 1: *Hypotheses model 1*

Number	Hypotheses
H1	*Climate related protest have a more positive effect on attitude towards XR activism than non-climate related protests*
H2	*Climate related protests have a more positive effect on attitude towards civil obedience than non-climate related protests*
H3	*Climate related protests have a more positive effect on view on the XR movement than non-climate related protests*
H4	*Climate related protests have a more positive effect on opinion about XR protests than non-climate related protests*

RQ2: *Which antecedents are related to the Dutch public's views on XR?*
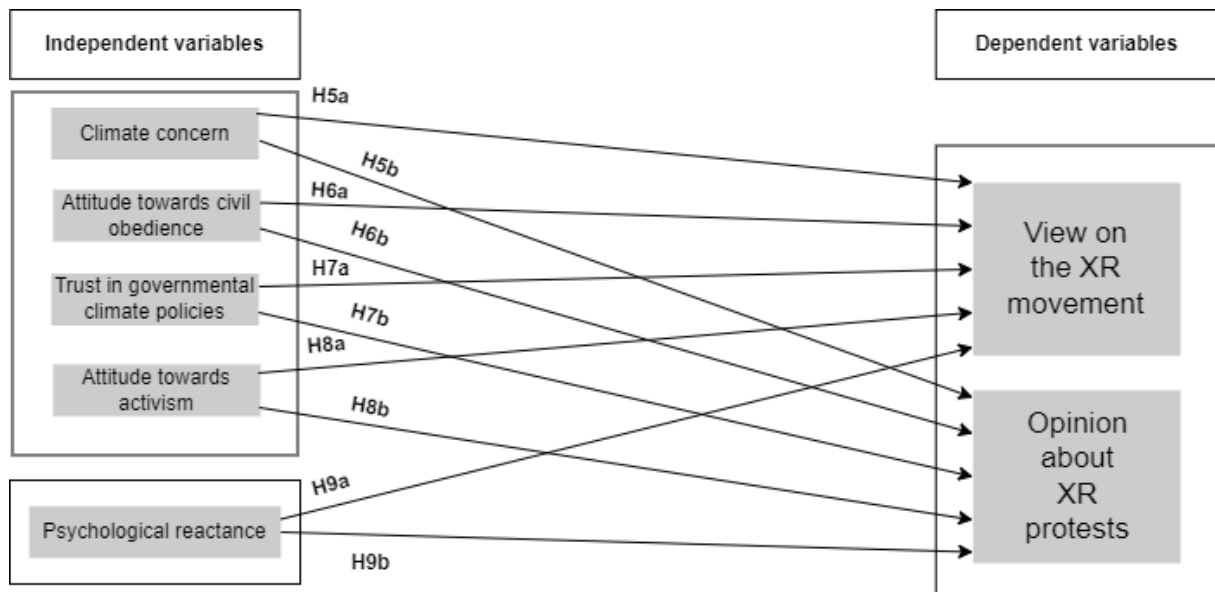
Figure 2: *Model 2*

Table 2: *Hypotheses model 2*

Number	Hypotheses
H5	*Climate concern is positively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*
H6	*Attitude towards civil obedience is negatively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*
H7	*Trust in the governments' climate policy is negatively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*
H8	*Attitude towards activism is positively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*
H9	*Psychological reactance is positively related to the public's view on the XR movement and (b) their opinion about XR protests.*

3. Method

This section of the paper provides a more detailed description of the research design, stimulus materials, measures, scale construction, procedure, and participants. The ethics committee of the University of Twente's faculty of Behavioral, Management, and Social Sciences gave its approval prior to distribution of the survey.

3.1 Research design

This study's method consisted of a quantitative online experiment for model 1 and a correlational design for model 2. For both methods an online survey was used. The survey was created and distributed using Qualtrics. Qualtrics is a secure and simple tool for survey participants to use. Because it was intended to gauge the Dutch publics' opinion, the entire survey was conducted in Dutch. During this experiment, the participants were first asked to answer a set of items for five variables. Following that, they were exposed to either one of two news articles, climate related (protest with a Ferrari) or non-climate related (protest with a painting). After reading the assigned news article participants were asked to answer the items for four of the five previous variables again. Two additional variables accompanied by corresponding items were also asked after reading the article. By using this design, this study was able to reliably determine if participants' exposure to a specific protest had an impact on their attitudes and opinions.

For the second research question, a correlational design was used. Here climate concern, attitude towards civil obedience, trust in governmental climate policies, attitude towards activism, and psychological reactance were tested to see whether any of these antecedents were good predictors for the dependent variables.

3.2 Stimulus design

A stimulus was chosen for model 1 to answer the first research question. The decision was made to use two versions of a news article for this study. Participants only needed to read; no other instructions were needed, reducing the margin for error.

The contents of the news articles were chosen next. There were many amounts of protests that

XR employed over the years, both climate related and non-climate related. Both protests had to be as different from one another as possible. However, for a fair comparison to be drawn, the protests had to be comparable in other areas. Both protests were required to cause a social upheaval, take place in a public setting where many people would see them, and cause a comparable amount of property damage. With all these criteria in mind, two XR protests were chosen for the study: a protest with a painting, and a protest with a Ferrari. Both protests received extensive media coverage, providing abundant information for the study's articles.

  Both articles used during this study were identical to each other, besides the objects used in protest and the picture content, pictures can be seen in figure 3 & 4. Both articles contained the same picture size, title, structure, number of paragraphs and written contents. The object named in the text was the only thing differing between the articles in terms of text. All other factors that could have been of possible influence were removed. The only similarity between the pictures was XR protesting for the climate crisis.

Figure 3: *Non-climate related protest picture*

Figure 4: *Climate related protest picture*

This meant that any difference in scores could only be accounted towards the object used in the protest. The news articles that were used were composites of several different existing articles. News articles in both English and Dutch were used. Since the participants were all Dutch, the articles composed for this study were all written in Dutch. All the information from news articles that were originally English were translated carefully, so no information got lost. The facts, except from the type of object used, were not changed when these stories were made. Finally, the articles were condensed without sacrificing the necessary information. This was done to prevent the participants not finishing the experiment.

Table 3 shows the detailed differences between both articles. The full text of both news articles is available in Appendix 3.

Table 3: *Differences between news articles*

Differences	Context
Object used during protests:	The main difference between the objects used during protest was the relation they had to the climate crisis. One had a obvious link to the crisis (Ferrari) and the other had no obvious link to the crisis (painting). Besides the categorical difference there were also obvious physical differences like size, weight, color, etc.
Picture content:	The object used in the picture differed between the two news articles. Besides, there were some other differences that stood out. The number of protesters in each picture was the most obivous difference. The non-climate related article contained four protesters, and the climate related article contained two. Furthermore, the climate related protest contained a slogan, where the non-climate related protest did not The location of both pictures also differed. Lastly, the non-climate related protests showed the XR logo, where the climate-related protest did not.

Below is an example of how the two news articles differed from one another. With each article, only the protest-related item was altered. Notably, all the news stories used in the survey were in Dutch. Thus, translations of the examples of sentences are provided:

Climate related: *Two members of Extinction Rebellion have glued themselves to Ferraris. The activists wanted to draw attention to climate change. After five minutes they were released and arrested.*

Non-climate related: *Two members of Extinction Rebellion have glued themselves to a Picasso painting. The activists wanted to draw attention to climate change. After five minutes they were released and arrested.*

A manipulation check about the news article version was asked at the end of each survey to determine whether possible effects could be linked to the differences between the news articles.

Participants were required to indicate the degree to which they connected the issue of the climate crisis to the object used by XR (in their assigned protest), on a scale from 0-100. After performing an independent sample t-test, a big difference was found in how the two groups scored their assigned object in terms of connection to the climate crisis. It showed that the participants who were exposed to the climate related object scored higher on the manipulation check than participants with the non-climate related object. This confirmed what was already expected, that the Ferrari ($n = 83$, $M = 51.7$, $SD = 28.5$) had more of a connection to the climate crisis than the painting ($n = 92$, $M = 29$, $SD = 27.3$).

3.3 Measures

In this study, seven constructs were measured. Four of these constructs (climate concern, attitude towards civil obedience, attitude towards (XR) activism, and trust in governments' climate policy) were measured before and after participants' exposure to the news article. The number of items within all constructs ranged from four to eight. To measure these constructs 7-point Likert scales were used, ranging from strongly disagree (1) to strongly agree (7). All items were translated in Dutch to fit the study.

Psychological reactance was defined as the idea that humans frequently defy behavioral rules that restrict their freedom of choice by simply engaging in the prohibited behavior (Henriksen et al., 2006). All items originated from Milne and Wise (1991). A total of six items were measured. Some examples:

- *I find that I often have to question authority.*

- *I am relatively opinionated*

The definition of climate concern during the study was the level of understanding, willingness, and support, to help find a solution to environmental issues (Dunlap & Jones, 2002). All items measured were from a previous study by Whitmarsh (2009). This construct contained eight items in total. Two examples of items measured in this construct were:

- *The evidence for climate change is unreliable.*

- *I do not believe climate change is a real problem.*

Attitude towards civil obedience was defined as a person's attitude toward obeying demands or orders from a government or occupying power. All items came from a previous study by (Mathes, 2021). Most items were slightly altered to fit this study. There was a total of seven items being measured in this construct. Two examples of items measured in this construct were:

- *Without law and order there is social chaos*

- *A person should never break the law.*

Trust in governmental climate policies was defined as the public's expectations for how government entities perform in carrying out their duties (Cheema, 2011), with the focus on the climate policies. All items came from previous studies by Grimmelikhuijsen and Knies (2017), Han et al. (2021), and Mansoor (2021). Items were slightly altered to fit the study. In total there were six items, such as:

- *I trust the Dutch government when it comes to their climate policy.*

- *The Dutch government performs its role of tackling climate change very well.*

Attitude towards (XR) activism was defined as the attitude towards the actions taken by a group of people to change the current social, political, economic, or other situation (Jordan, 2002). There is a distinction to be made between the two types of constructs and what they measured. Attitude towards activism was measured before exposure to the news article. This construct related to participants' attitude towards activism in general. Attitude towards XR activism was measured after exposure to the news article. This construct focused on participants' attitude towards the activism by XR they were just exposed to. For both measures the same statements were used. All the items for this construct originated from (Wan et al., 2015). In all cases the items were slightly altered to fit this study. There was a total of four items being measured in this construct, for example:

- *Activism is sometimes necessary.*

- *Activism is a good thing.*

The first single measurement variable measured in the study was view on the XR movement. Two items were borrowed and altered from Nadal and Davidoff (2015), and Wan et al. (2015). Three items in this construct were self-formulated. A total of five items were measured, such as:

- *Extinction Rebellion is contributing to fighting climate change.*

- *I support Extinction Rebellion*

The final single measurement variable was opinion about XR protests. Two items were borrowed and altered from Nielsen (1981), and Wouters and Walgrave, (2017). The construct consisted of five self-formulated components. A total of seven items were included, for example:

- *I am annoyed by the Extinction Rebellion protests.*

- *I sympathize with Extinction Rebellions protests.*

The entire questionnaire is available in Appendix 1.

3.4 Scale construction

Scale construction was carried out by performing three analyses. Two factor analyses were performed to test validity (one before and one after exposure to the experimental materials), and to summarize and reduce the data into factors. A principal component factor analysis (varimax rotation) was chosen. A reliability analysis was performed to test the studies internal consistency and to ensure that items were related to each other and could be grouped into the same factor

The first factor analysis contained the five constructs that were measured before exposure to the news article. When performing the initial factor analysis, the analysis loaded the five constructs into six factors. Some items of the same construct were loading in combined factors, where other items of the same construct loaded in separate factors. Looking at this outcome it became apparent that multiple items needed to be removed to improve the analysis. Six items from climate concern, and two items from opinion about XR protests were recoded before analysis since these items were negatively asked. An overview of the removed items:

- Climate concern: *"The effects of climate change are likely to be catastrophic."*

- Climate concern: *"Climate change is something that frightens me."*

- Civil obedience: *"A person should never take the law into his or her own hands."*

- Civil obedience: *"If I became aware of illegal activity, I would report it to the police."*

- Psychological reactance: *"If I am told what to do I do the opposite."*

In combination with removing these items, SPSS was used to perform a new analysis and was instructed to extract a total of five factors. This new factor analysis loaded all the constructs (with their corresponding items) into their own factors. With no items overlapping in this analysis only the eigenvalues of the factors and the total explained variance needed to be checked before further usages. All the components for this factor analysis turned out to have an eigenvalue over 1, and the explained variance was 64%. The standard for safe use of a factor analysis is having an eigenvalue above 1 (Kaiser, 1960), and having your explained variance as high as possible. A stronger degree of association is indicated by higher percentages of explained variance (Rosenthal, 2011). The factor analysis is available in Appendix 4.

The second factor analysis contained the six constructs that were measured after exposure to the news article. All the removed items from the first factor analysis were also removed for this second analysis. Psychological reactance was not used during this factor analysis because this construct was not measured after exposure to the experimental condition. The factor analysis showed that view on the XR movement and opinion about XR protest were loading in the same factor. As a result, a new variable was created. View on the XR movement and opinion about XR protests were combined into 'opinion on XR.' A new analysis was conducted with a total extraction of five factors for the five constructs. Some items still needed to be removed because some items loaded in combined factors while others loaded in separate factors. The following items were removed:

- View on the XR movement: *"In general XR have good arguments/statements."*

- Opinion about XR protest: *"Extinction Rebellion are protesting for the right cause."*

- Opinion about XR protest: *"I understand what Extinction Rebellion is protesting for"?*

After removal of these items the factor analysis only needed to be checked for the eigen values and the explained variance. Just like in the first factor analysis, the components in this analysis all had an eigenvalue above one. The explained variance was 72%. In appendix 4 both factor analyses are found.

Finally, Cronbach's alphas had to be measured for the constructs that were confirmed by the factor analysis. The analysis showed that the reliability for all the measured items was above .7. This indicated that more analysis could be done using the measurement scale. An overview of the Cronbach's alphas for both factor analysis can be seen in table 4.

Table 4: *Reliability analysis*

	Measurement 1	Measurement 2
Factor	Cronbach's alpha	Cronbach's alpha
Climate concern	.87	.89
Attitude towards civil obedience	.83	.85
Attitude towards (XR) activism	.82	.87
Trust in governments' climate pol	.91	.94
Psychological reactance	.74	
Opinion on XR		.94

Model 1 and model 2 had to be changed due to the creation of the new variable. The new version of these models can be seen in figure 3 and figure 4. The adjusted hypotheses can be found in table 5 and table 6.

Figure 5: *Model 1 (adjusted)*
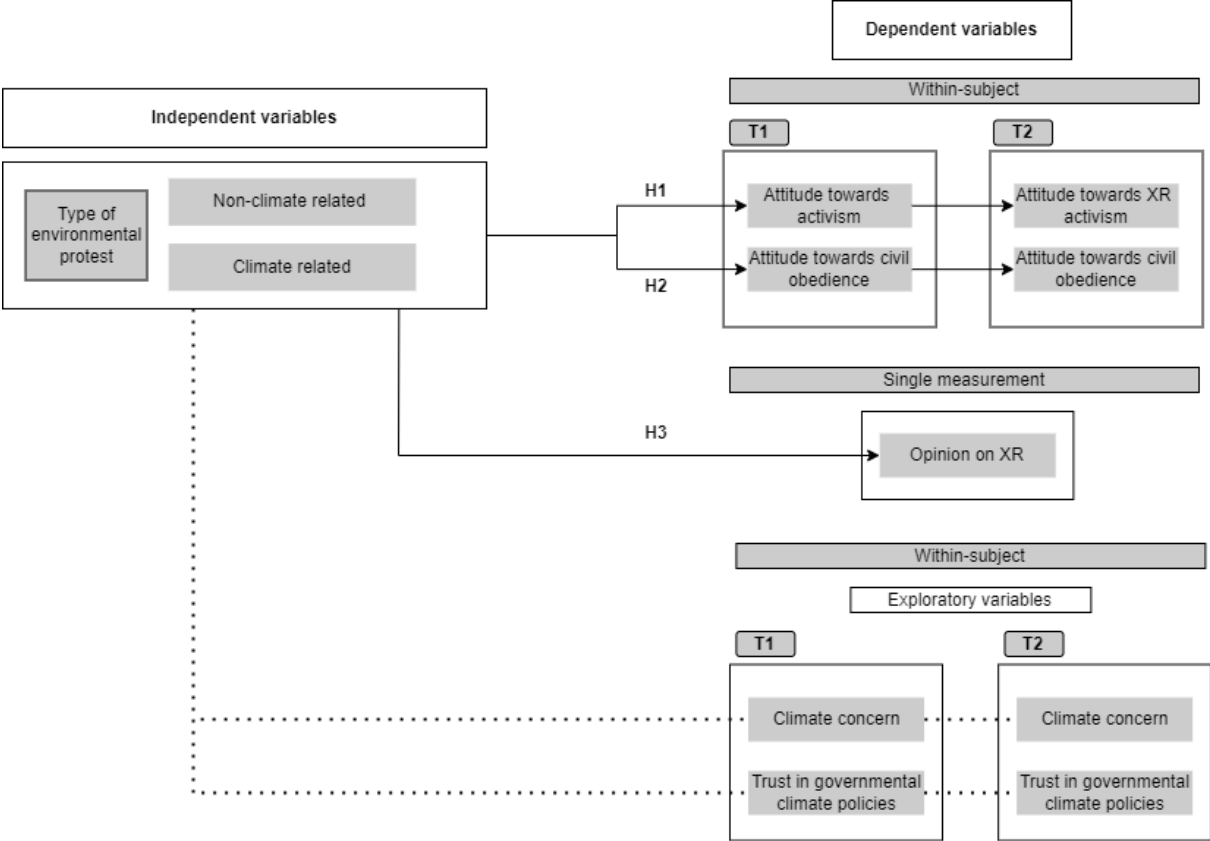
Note: the dotted lines show the explorative relations

Table 5: *Hypotheses model 1 (adjusted)*

Number	Hypotheses
H1	*Climate related protest have a more positive effect on attitude towards XR activism than non-climate related protests*
H2	*Climate related protests have a more positive effect on attitude towards civil obedience than non-climate related protests*
H3	*Climate related protests have a more positive effect on opinion on XR than non-climate related protests*

Figure 6: *Model 2 (adjusted)*
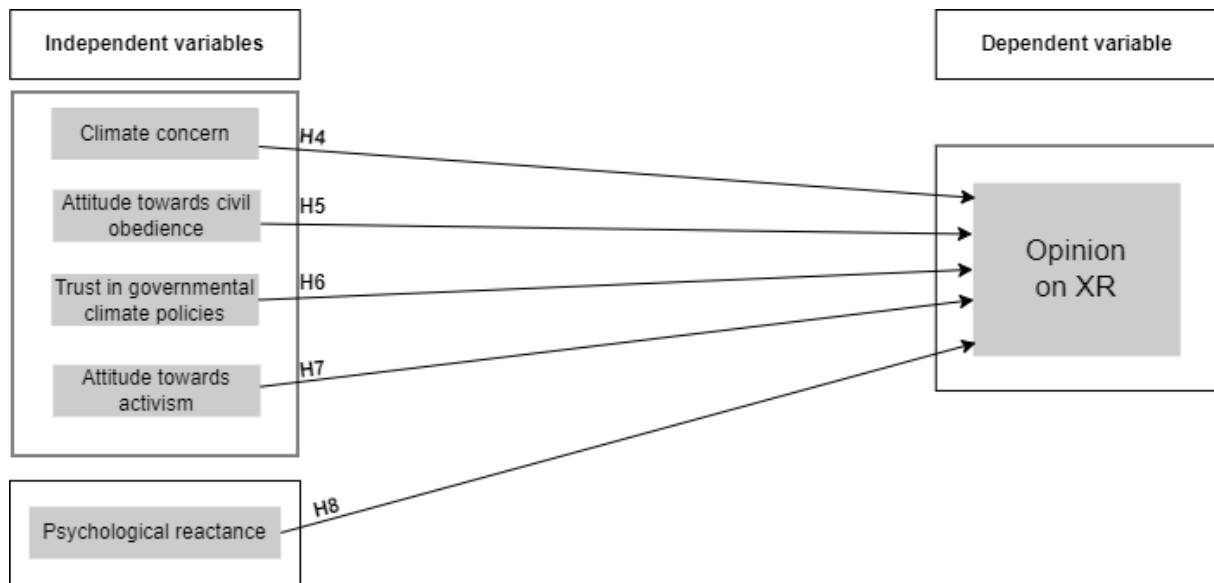
Table 6: *Hypotheses model 2 (adjusted)*

Number	Hypotheses
H4	*Climate concern is positively related to opinion on XR*
H5	*Attitude towards civil obedience is negatively related to opinion on XR*
H6	*Trust in governments' climate policy is negatively related to opinion on XR*
H7	*Attitude towards activism is positively related to opinion on XR*
H8	*Psychological reactance is positively related to opinion on XR*

3.5 Procedure

Because the experiment was conducted online a Qualtrics questionnaire was developed. The participants were given a brief overview of the research topic before the survey began. After that, participants were told that participation was optional and anonymous. Following that, a consent button was pressed to confirm their involvement in the study.

The first questions were all sociodemographic questions (e.g., age, gender, and level of education). After responding to these questions, the participants were provided the constructs in the following chronological order: climate concern, attitude towards civil obedience, psychological reactance, attitude towards activism, and trust in governmental climate policies. Then participants were exposed to one of the two news articles. After exposure to the news article participants were

again asked to respond to the constructs. Following is a chronological list of the constructs participants had to answer: climate concern, attitude towards civil obedience, trust in governmental climate policies, view on the XR movement, attitude towards XR activism, and opinion about XR protests. At the end of each survey participants had to rate, on a scale of 0 to 100, how much they believed the item in the news article had to do with the climate crisis. This question functioned as a manipulation check.

When finished with the survey the participants were thanked for taking part. They were told that there had been a slight form of manipulation to the news article they just read, plus an explanation as to why. A short piece of text with the researcher's name and contact information was placed at the end in case people had questions about anything concerning the research.

3.6 Participants

The participants were recruited completely through convenience and snowball sampling, by asking colleagues, family, and friends. This was done online through social media (Instagram, Facebook, LinkedIn, WhatsApp) and survey pool websites. All participants were also encouraged to share the survey with others. In total 239 people responded to the survey, 175 of these responses were used. From the total amount of participants 56 were discarded due to incomplete responses, and 8 were removed since they took too long to complete the survey.

In table 7 the distribution of the demographics between the participants in both conditions is displayed. In this experiment, participants were randomized into one of two conditions. To determine whether the two groups were equal, the demographic traits of both participant groups were compared.

The age of the participants was between 17 and 90 (M_{age} = 31.17, SD = 14.43). An independent samples t-test was used to compare the two conditions groups on age, $t(158.288) = -1.183$, $p = .239$.

For gender of the participants a Fisher's Exact test was used and ended up with a p-value of .582.

At last, the level of education between the two conditions groups was tested with a chi-square test. Here the levels of education were categorized in two groups: low education level and high

education level. High-school and vocational education were categorized as low, and every level of education above was categorized as high. The relation between the type of article and education level was not significant, X^2 (1, $N = 175$) = 3.212, $p = .073$.

It can therefore be concluded that the two experimental groups did not significantly differ from each other on demographic traits. The overall sample accurately represents the Dutch population, apart from the age distribution. Compared to the older participants, most of all participants are younger, as can be seen in table 7. This could be explained by the survey's distribution being completely online. The other demographics were distributed more evenly.

Table 7: *Conditions and demographics distribution of participants*

		Conditions		
		Painting	**Car**	**Total**
Demographics		**N**	**N**	**N**
Age:	17 - 24	47 (51%)	41 (49%)	88 (50%)
	25 - 34	26 (28%)	19 (23%)	45 (26%)
	35 - 44	4 (4%)	5 (6%)	9 (5%)
	45 - 54	4 (4%)	4 (5%)	8 (5%)
	55 - 64	10 (11%)	11 (13%)	21 (12%)
	65+	1 (1%)	3 (4%)	4 (2%)
Total		92 (100%)	83 (100%)	175 (100%)
Gender:	Male	38 (41%)	40 (48%)	78 (45%)
	Female	52 (57%)	42 (51%)	94 (54%)
	Other	2 (2%)	1 (1%)	3 (2%)
Total		92 (100%)	83 (100%)	175 (100%)
Education level:	High-school	3 (3%)	5 (6%)	8 (5%)
	Vocational education	6 (7%)	11 (13%)	17 (10%)
	Bachelors	47 (51%)	34 (41%)	81 (46%)
	Masters	32 (35%)	30 (36%)	62 (35%)
	P.H.D or higher	4 (4%)	3 (4%)	7 (4%)
Total		92 (100%)	83 (100%)	175 (100%)

4. Results

4.1 Correlations between the variables

The relationships between the variables have been calculated using Pearson's r, as can be seen in table 8. A correlation between 0 and .3 is low, .3 to .5 is moderate, and > .5 is high (Laerd, 2020).

The table shows all the variables used during this study. For the within-subject variables, the first measurement moment is indicated with 'before', and the second measurement moment is indicated with 'after'. The table also includes the single measure opinion on XR and the background variable psychological reactance.

All the within-subject variables have a high positive correlation between their before and after measures. This means that these variables have a strong relationship with each other. This was expected due to all the before and after variables containing the same items. The highest correlation of the within-subjects is found at trust in governmental climate policies. The lowest correlation is found at attitude towards (XR) activism.

Opinion on XR had varying results when it came to its correlations with the variables. The correlations with climate concern before (and after), and attitude towards activism before (and after) were both positive moderate. But the correlations with the other variables were either low and positive, or low and negative. Because opinion on XR was a dependent variable that was only measured once during the study, the results indicate inconsistent relationships between the variables.

Lastly, the background variable psychological reactance showed a negative low correlation with almost all variables. Only climate concern before (negative moderate) and attitude towards activism before (positive low) did not show a negative low relation. This demonstrates the extremely poor relationships that existed between psychological reactance and the other variables. Indicating that psychological reactance was not a suitable background characteristic for the current study.

Table 8: *Correlations between the variables*

Constructs	1	2	3	4	5	6	7	8	9
1 Climate concern before	1								
2 Attitude towards civil obedience before	0.14	1							
3 Psychological reactance	-.32**	-.28**	1						
4 Attitude towards activism before	.42**	-0.04	0.01	1					
5 Trust in governmental climate policies before	0.03	.26**	-0.04	-.19*	1				
6 Climate concern after	.83**	.16*	-.22**	.40**	-0.05	1			
7 Attitude towards civil obedience after	.23**	.87**	-.29**	-0.00	.24**	.24**	1		
8 Opinion on XR	.39**	0.03	-.16*	.45**	-0.13	.45**	-0.03	1	
9 Attitude towards XR activism after	.44**	-0.03	-0.07	.82**	-.21**	.41**	0.02	.48**	1
10 Trust in governmental climate policies after	-0.04	.24**	-0.04	-.19*	.91**	-0.05	.21**	-0.10	-.20**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

4.2 Testing model 1: effects of type of type of environmental protests

Two different types of analyses were conducted in this section. A repeated-measures analysis of variance was used in the first section of the analysis, and a univariate analysis of variance was used in the second section.

A repeated-measures analysis of variance was carried out to examine potential effects of protest type on the within-subject variables. Comparing the means of the selected variables allowed us to examine how the two conditions varied between the first measurement moment and the second measurement moment.

4.2.1 Effects of type of protests on the within-subject variables

Before looking at whether there was a significant difference for any of the dependent variables, the overall significance of the within-subject variables (factor1) and the within subject variables * news articles had to be looked at. When looking at the Wilks' Lambda test we saw that only factor1 was significant at $p = 0.02$. There was no significance to be found for factor1 * news articles. This means that we only look at the dependent variables for factor1.

Table 9: *Test of within-subjects contrasts and news article*

Source	Measure	df	F	Sig.	Eta^2
factor1	Attitude towards (XR) activism	1	0.94	0.33	
	Attitude towards civil obedience	1	9.46	<0.005	0.05
	Climate concern	1	0.11	0.74	
	Trust in governmental climate policies	1	0.91	0.34	
factor1 * News article	Attitude towards (XR) activism	1	0.00	0.96	
	Attitude towards civil obedience	1	0.31	0.58	
	Climate concern	1	0.09	0.77	
	Trust in governmental climate policies	1	0.00	0.93	
Total		174			

For the first part of the analysis, all the within-subject variables were used to see whether there was a significant difference between the first measurement and the second measurement. A look at the upper part of table 9 shows that civil obedience was the only variable that accounted for a significant difference between measurement one and measurement two.

Then it was tested whether there was a difference between seeing a climate related protest and a non-climate related protest for the scoring of the two measurement moments. Here it was found that there was no significant difference between seeing a different type of protest for any of the within-subject variables, as can be seen in the lower part of table 9.

It was hypothesized that seeing climate related protests would result in a more positive effect on attitude towards XR activism (H1), and attitude towards civil obedience (H2). Going off the results this study can conclude that both these hypotheses for model 1 are not supported. Lastly, the relations of climate concern and trust in governmental climate policies were approached exploratory. When looking at the table, this study comes to the same conclusion as for the other variables: seeing a climate related protests does not result in a more positive effect on the within-subject variables.

Table 10: *Descriptive statistics for the within-subject variables*

Conditions		Activism before	XR activism after	Civil obedience before	Civil obedience after	Climate concern before	Climate concern after	Trust before	Trust after
Painting	Mean	5.07	5.03	5.32	5.22	5.3	5.3	3.33	3.28
	N	92	92	92	92	92	92	92	92
	Std. Deviation	0.9	0.98	1.02	1	1.13	1.09	1.18	1.31
Car	Mean	5.2	5.16	5.43	5.29	5.53	5.56	3.36	3.33
	N	83	83	83	83	83	83	83	83
	Std. Deviation	0.83	0.88	0.89	0.96	1.22	1.13	1.2	1.29
Total	Mean	5.13	5.09	5.37	5.26	5.41	5.42	3.34	3.3
	N	175	175	175	175	175	175	175	175
	Std. Deviation	0.86	0.93	0.96	0.98	1.17	1.11	1.18	1.3

All scales were measured on a 7-point Likert scale (1= negative / 7 = positive)

The scores for the two condition groups were measured for model 1 using all the repeated variables. The mean scores and standard deviations for each of these variables are summarized above. Table 10 shows that there are some differences between how both the condition groups scored each variable. The attitude towards civil obedience was the only variable where a significant difference between the two measuring moments was found. There is difference between other variables too, however these did not turn out to be significant, as we saw in table 9. In table 11 an overview of the results for the tested hypotheses is displayed.

Table 11: *Overview of tested hypotheses*

	Content	Results
H1	*Climate related protests have a more positive effect on attitude towards XR activism than non-climate related protests*	Not supported
H2	*Climate related protests have a more positive effect on attitude towards civil obedience than non-climate related protests*	Not supported

4.2.2 Effects of type of protests on opinion on XR

Second, a univariate analysis of variance was conducted. Opinion on XR was the dependent variable. Here it was measured whether the type of protest influenced how people would score opinion on XR.

According to H3 it was expected that seeing a climate related protests would result in a more positive effect on opinion on XR than a non-climate related protest. The univariate analysis of variance showed that there was a difference in scores between the non-climate related protest ($n = 92$, $M = 3.38$, $SE = .15$) and the climate related protest ($n = 83$, $M = 3.83$, $SE = .15$). As can be seen in table 12 there was a significant effect for the type of protests on opinion on XR. The scores for opinion on XR were significantly higher for the climate related protests than for the non-climate related protests. Thus, hypothesis 3 is supported.

Table 12: *Test of Between-Subjects Effects for opinion on XR*

Source	df	F	Sig.	Partial Eta Squared
Between Groups	1	4.464	0.04	0.03
Within Groups	173			
Total	174			

Below an overview of the result for the tested hypotheses is given.

Table 13: *Overview of tested hypotheses model 1*

	Content	Results
H3	*Climate related protests have a more positive effect on opinion on XR than non-climate related protests*	Supported

4.3 Testing model 2: possible antecedents related to the Dutch public's views on XR

A regression analysis was performed with opinion on XR as the dependent variable. Only the variables before exposure to the experiment were taken to see which antecedents predicted participants' opinion on XR. This choice was made since these variables were not affected by the experiment and were thus the participants' untainted view on the topic. This gave a better insight into their everyday way of thinking. The results of this analysis are found in table 14.

Table 14: *Antecedents for opinion on XR*

	β	t	Sig.
Climate concern before	0.22	2.84	<.05
Attitude towards civil obedience before	0.01	0.14	0.89
Trust in governmental climate policies before	-0.07	-1.05	0.3
Attitude towards activism before	0.34	4.51	<.001
Psychological reactance	-.09	-1.28	.20

$R^2=.24$, $F(5, 169) = 12.136$, $P = < 0.01$

The model explained 24% of the variance. As shown in the table, only two of the five tested variables were found to be statistically significant. These variables were *climate concern before* and *attitude towards activism before*. The three additional variables were not statistically significant.

Each of the variables used in this analysis had a corresponding hypothesis. Only two of the five hypotheses were supported. Unsurprisingly, H4 (climate concern before) and H7 (attitude toward activism before) were the only ones to prove significant during the analysis, and these hypotheses were thus supported. Leaving H5 (attitude towards civil obedience), H6 (trust in governmental climate policies), and H8 (psychological reactance) to be not supported.

Below an overview of all the results for the tested hypotheses for model 2 is displayed.

Table 15: *Overview of tested hypotheses model 2*

	Content	Results
H4	*Climate concern is positively related to (a) the public's view on the XR movement and (b) their opinion about XR protests.*	Supported
H5	*Attitude towards civil obedience is negatively related to (a) the public's view on the XR movement and (b) their opinion about XR protests*	Not supported
H6	*Trust in the governments' climate policy is negatively related to (a) the public's view on the XR movement and (b) their opinion about XR protests*	Not supported
H7	*Attitude towards activism is positively related to (a) the public's view on the XR movement and (b) their opinion about XR protests*	Supported
H8	*Psychological reactance is positively related to the public's view on the XR movement and (b) their opinion about XR protests*	Not supported

5. Discussion

The main goals of this study were to determine what the effects of different type of protest (climate related and non-climate related) were on the opinions and attitudes of the Dutch public, and which antecedents influenced how people viewed XR. The next section of the paper contains a discussion of the main findings, the study's limitations, and suggestions for further research, followed by the theoretical and practical implications, and finally a conclusion.

5.1 Main findings

During this study two different models were used to answer the two research questions. The findings for both the models will be discussed.

The findings showed that the opinions and attitudes of the Dutch public did not change after exposure to type of environmental protests when a variable was measured twice. However, it was found that seeing a climate related protest resulted in a more positive opinion on XR. A total of five constructs were measured during the study for the effects of type of protest: climate concern, attitude towards civil obedience, trust in governmental climate policies, attitude towards (XR) activism, and opinion on XR. Of these five, only opinion on XR tested significantly for a more positive effect of seeing a climate related protest, compared to a non-climate related protest. This suggests that, in terms of public support, the type of the protest may matter for XR. This was also the only variable from this model that was not measured twice. Which could explain why only this was found to be significant. As for the other four variables that were measured, no significance was found at all. These four variables were all measured once before condition exposure and once after. The researcher was aware from earlier studies that exposure to XR protests did not alter one's level of concern for the environment (Kountouris & Williams, 2023). This is confirmed based on the results from the current study.

The findings showed that there were two antecedents that influenced how the Dutch public viewed XR. There was a total of five antecedents used in this model: climate concern, attitude towards civil obedience, trust in governmental climate policies, attitude towards activism, and psychological reactance. Two out of these five variables were found to be significant. These were climate concern

and attitude towards activism. Both were positive predictors, showing that there is a clear connection between the issue of climate change and XR, and that XR has cemented, above all, its reputation as a climate activist movement with the general public. Climate concern was already proven to positively influence how people viewed environmental organizations. People who perceive climate change to be a threat support environmental movements (Rohrschneider, 1990). Previous literature also aligned with attitude towards activism, which stated that a person's world view may impact how someone views the activities performed by a movement (Liu, 2018). Both the outcomes for these significant antecedents are self-explanatory. The three other antecedents were expected to account for the same logic. However, this was not the case. Attitude towards civil obedience ended up not negatively influencing how the Dutch public viewed XR. Previous research showed that people who value social order were more inclined to think negatively of environmental protests (Liu, 2018). Our results may be explained by participants not perceiving the protest as significantly upsetting the social order. Trust in governmental policies was also not found to be a good predictor. Earlier studies stated that protest can influence political attitudes through the dissemination of new knowledge about political institutions or types of rulers (Frye & Borisova, 2019). But during this study nothing of sorts was found. It could have been that the participants did not receive any new knowledge whilst being exposed to the condition, leaving little room for influencing political attitudes. Finally, psychological reactance not being a good predictor of how the Dutch public view XR might be explained by the fact that it was used as a background variable. Climate concern and attitude towards activism were the only significant predictors when it came to opinion on XR.

5.2 Limitations and future research

With the chosen research design for this study, multiple limitations arose. First, because the entire study took place online, there was no way to keep an eye on what the participants were doing while they were taking part. They might have been distracted while answering the questions. The inability of participants to ask questions when they do not understand something is another potential issue with the study being conducted online. It is possible that they answered the question even though they did not fully comprehend it. The participants may be less motivated or encouraged to respond to questions

because no one is watching them fill out the survey in person, which is another disadvantage of conducting the survey virtually. Another drawback is the lack of depth in the responses. With the use of the Likert scale, some depth has been given to participants' answers, but the reasoning behind their answers remains unknown.

Another limitation could be the length of the survey. The total completion time of the survey was estimated at around ten minutes, which is long for a survey. When a survey is too long participants could start to feel fatigued or uninterested. Especially during this experimental study this could have been the case, since participants had a task to perform. Distraction could also play a part with lengthy surveys. Future studies are recommended to try to keep the survey brief. The responses were gathered completely through convenience and snowball sampling, preventing a complete representation of the Dutch population in the study.

It would be interesting in future research to test if lesser-known environmental organizations who employ these type of protests would have the same effect on participants. Because XR are the most widely known group associated with these forms of protesting, people could possibly have prejudice. It could be studied whether other, lesser-known groups, evoke the same response.

Additional research is also needed to test whether types of protests have effect on other constructs not used during this research. There were no within-subject measures that turned out to be affected by the type of protest. It is possible that other constructs would have been more appropriate for the study. An interesting construct could be 'trust in climate movements', this has obvious ties to the study but was not used during the current research. Another interesting construct would be 'attitude towards news media', the information on movements like XR is often distributed through news media (like in this study). It would be interesting to see whether the attitude towards these media changes after exposure to different types of protest. Finally, future research needs to investigate whether there are any additional antecedents that could be used to predict people's opinions of XR. Only two of the five potential variables in the current study turned out to be antecedents. It would be intriguing to see if a different background variable could produce a noteworthy result, since the background variable in the current study was not significant. An example of a background characteristic could be "climate neutral behavior". Where you can gauge how much people are

consider themselves living a climate neutral lifestyle. This might be a reliable indicator of support for XR.

5.3 Theoretical and practical implications

The findings on this study contribute to the gap in literature on effects of environmental protest on the (Dutch) public. Previous research on the topic had purely focused on exposure to a XR protest (Kountouris & Williams, 2023). Here, some influence on beliefs about sustainable behavior and a desire to support climate change mitigation policies were discovered. During the current study, no impact was found of being exposed to a XR protest for any op the repeated measures. This study was the first to make the distinction between protests that were climate related and non-climate related (as far as the researcher is aware). The experiment performed during this study can be used as a new starting point within climate protest and nonviolent protest related research. Nonviolent protests are severely understudied in comparison to violent protest movements (Thöresson, 2020).

A difference in scores between climate related and non-climate related was expected based on rational choice theory (Green, 2002). And a significant difference was found when it came to opinion on XR, where seeing a climate related protest resulted in more positive scores. This showed the importance of framing for environmental movements (Liu, 2018; van Dijk, 2021). Public opinion regarding activist groups is a topic that is rarely studied, despite the significance of public opinion in the world of activism (Liu, 2018; Wouters, 2019). There have been studies on acceptance of several types of protests (Sopow, 2012), however these do not cover the distinction between a climate related and a non-climate related protest. This study added to the body of research on this topic. For this study, the repeated measures turned out not to be affected by the type of protest at all.

For the correlational part of the study two antecedents were found to be significant predictors for opinion on XR: climate concern and trust in governmental climate policies. Again, there were no previous studies to build off. This resulted in only two variables being significant predictors. This study lays the foundation for more research on the opinions on XR or other similar environmental movements.

As for the practical implications of this study. XR and other social movements can take these

results and use them in their next protests. This study found that using climate related protest did have a more positive influence on the Dutch public, compared to non-climate related protests, when it came to the opinion on XR. So, it would be smart for XR to only start implementing climate related protests from now on. This would result in a more positive opinions from the general public towards their organizations, which is essential for environmental movements (Wouters, 2019). Furthermore, XR should focus more on the antecedents that were found to be significant during this study, being climate concern and attitude towards activism. They obviously already use climate concern as a one of their strategies, but they should try to give it a different spin. As of now they mainly use climate concern as a broad term, where they focus on the end of the world as we know it. Putting a more personal spin of this topic might lead to more positive opinions towards XR. For instance, by focusing on what it would mean for peoples lives, their families, friends, their freedom, and safety. They should also try to incorporate the topic of activism more into their protests, this was also shown to have a positive impact on people's opinion on XR. They could do this by addressing the importance of exercising the right to protest, possibly leading to a more positive opinion on XR.

5.4 Conclusion

Environmental protests will undoubtedly continue to take place, with movements like XR leading the way. There are specific types of protests associated with this movement. However, there is still little research on how these protests affect the general public. This study made a distinction between these protests, examined their effects, and studied which antecedents were good predictors for opinion on XR. The key takeaway of this research is that the framing of XR protests is crucial when it comes to gaining public support for the movement. It was found that the type of protest (climate related or non-climate related) had a significant impact on the opinion on XR. When people were exposed to the climate related protests it resulted in more positive scores for the movement. No significant impact was found on the repeated measures, however. This research concludes that there is a difference in seeing a climate related protest compared to a non-climate related protest. However, this conclusion should be taken with caution. Furthermore, climate concern and attitude towards activism turned out to both be positive predictors of opinion on XR, proving that XR and the issue of climate change are

inextricably linked, and that XR has cemented its reputation as a climate activist movement with the general public. Even though type of environmental protests turned out to be significant for opinion on XR, and two antecedents for opinion on XR were found, a lot more studies must be performed. These studies should again focus on the type of protests and possible antecedents seeing as these topics are still understudied.

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Appendices

Appendix 1: Survey design

Appendix 2: Translation of measurement scales

Appendix 3: Newspaper articles

Appendix 4: SPSS output factor analysis

APPENDIX 1: Survey design

(All surveys were taken in Dutch due to all participants being Dutch)

https://utwentebs.eu.qualtrics.com/jfe/preview/previewId/a75bb274-6b00-46b5-af0a-
a9652335de9b/SV_esz4GMzIZnr9twW?Q_CHL=preview&Q_SurveyVersionID=current

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Bedankt voor het deelnemen aan dit onderzoek! Ik voer dit onderzoek uit in het kader van mijn masteropleiding Communicatiewetenschap aan de Universiteit Twente.

Klimaatverandering is een belangrijk thema in onze maatschappij. Het doel van dit onderzoek is te achterhalen hoe Nederlanders aankijken tegen protestacties voor het klimaat. Ik zal je een aantal vragen stellen en een nieuwsbericht over zulke acties voorleggen. Het invullen zal ongeveer 10 minuten in beslag nemen. Je deelname is volkomen vrijwillig.

Je antwoorden in dit onderzoek zullen vertrouwelijk blijven. We doen er alles aan om ervoor te zorgen dat de gegevens veilig worden opgeslagen en dat je antwoorden anoniem worden bewaard.

Graag de survey correct afsluiten door ook op de laatste pagina op 'verder gaan' te drukken.

Neem bij vragen gerust contact met me op via: p.postma@student.utwente.nl

Pleun Postma
Masterstudent Communicatiewetenschap

Door op 'Ik begrijp het' te klikken bevestig je dat je de bovenstaande informatie heb gelezen en begrepen en stem je ermee in om deel te nemen.

○ Ik begrijp het

In dit deel stellen we enkele algemene vragen over jezelf.

Wat is je geslacht?

○ Man

○ Vrouw

○ Anders

Wat is je leeftijd?

Wat is je opleidingsniveau?

○ Middelbare school

○ MBO

○ Bachelors

○ Masters

○ P.H.D of hoger

○ Zeg ik liever niet

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins eens	Eens	Volledig eens
De effecten van klimaatverandering zijn waarschijnlijk catastrofaal	○	○	○	○	○	○	○
De media zijn vaak te alarmerend over zaken als klimaatverandering	○	○	○	○	○	○	○
Er is te veel tegenstrijdig bewijs over klimaatverandering om te weten of het daadwerkelijk gebeurt	○	○	○	○	○	○	○
Klimaatverandering is iets waar ik bang voor ben	○	○	○	○	○	○	○
Het bewijs voor klimaatverandering is onbetrouwbaar	○	○	○	○	○	○	○
Het is nog te vroeg om te zeggen of er echt sprake is van klimaatverandering	○	○	○	○	○	○	○
Ik weet niet zeker of klimaatverandering echt plaatsvindt	○	○	○	○	○	○	○
Ik geloof niet dat klimaatverandering een echt probleem is	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins eens	Eens	Volledig eens
Het is nooit goed om wetten en regels te overtreden	○	○	○	○	○	○	○
Ook als er geen kans is om gepakt te worden probeer ik me aan wetten en regels te houden	○	○	○	○	○	○	○
Ook als wetten en regels niet populair zijn, moeten mensen zich eraan houden	○	○	○	○	○	○	○
Zonder wetten en regels zou er sociale chaos zijn	○	○	○	○	○	○	○
Iemand moet nooit voor eigen rechter spelen	○	○	○	○	○	○	○
Ook als ik het niet helemaal eens ben met wetten en regels, probeer ik toch om me eraan te houden	○	○	○	○	○	○	○
Als ik me bewust word van illegale activiteiten, zou ik dit melden bij de politie	○	○	○	○	○	○	○

	Volledig onees	Oneens	Enigzins oneens	Niet mee eens of onees	Enigzins mee eens	Eens	Volledig mee eens
Ik heb een hekel aan autoriteiten die me vertellen wat ik moet doen	○	○	○	○	○	○	○
Ik merk dat ik vaak aan autoriteit moet twijfelen	○	○	○	○	○	○	○
Ik heb een sterk verlangen om mijn persoonlijke vrijheid te behouden	○	○	○	○	○	○	○
Als mij wordt verteld wat ik moet doen, doe ik het tegenovergestelde	○	○	○	○	○	○	○
Ik ben relatief eigenwijs	○	○	○	○	○	○	○
Ik ben erg koppig en vastberaden	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins mee eens	Eens	Volledig mee eens
Activisme is iets goeds	○	○	○	○	○	○	○
Activisme is nuttig	○	○	○	○	○	○	○
Activisme is soms noodzakelijk	○	○	○	○	○	○	○
Activisme is verstandig	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins eens	Eens	Volledig eens
Ik vertrouw de Nederlandse overheid wat betreft het klimaatbeleid	○	○	○	○	○	○	○
De Nederlandse overheid is oprecht in haar poging om de klimaatcrisis aan te pakken	○	○	○	○	○	○	○
De Nederlandse overheid is eerlijk in haar communicatie over haar klimaatbeleid	○	○	○	○	○	○	○
Over het algemeen denk ik dat de Nederlandse overheid zeer deskundig is in haar wet- en regelgeving op het gebied van het klimaat	○	○	○	○	○	○	○
De Nederlandse overheid vervult haar rol in de aanpak van klimaatverandering zeer goed	○	○	○	○	○	○	○
Ik denk dat de Nederlandse overheid er alles aan doet om de klimaatcrisis te bestrijden	○	○	○	○	○	○	○

In het volgende onderdeel krijg je een nieuwsbericht te lezen over Extinction Rebellion. Daarna zullen er vragen worden gesteld naar aanleiding van het artikel.

Extinction Rebellion lijmt zich vast aan Picasso

Twee leden van Extinction Rebellion hebben zich vast gelijmd aan een schilderij van Picasso. Daarmee wilden de actievoerders aandacht vragen voor de klimaatverandering. Na vijf minuten werden ze meegenomen en aangehouden.

De activisten gebruikte secondelijm om zich vast te plakken aan het schilderij 'Massacre in Korea'. Een van hen schreeuwde: ''Stop coal, stop gas, stop oil, stop logging''. De actievoerders hadden ook een bord bij zich met de tekst: 'climate chaos = war and famine''. Het wereldberoemde schilderij was uitgekozen om overheden aan te zetten tot actie van klimaatverandering. Volgens Extinction Rebellion wordt er veel te weinig gedaan aan de klimaatcrisis.

Achteraf bleek het schilderij niet beschadigd. Volgens de woordvoerder van Extinction Rebellion wisten ze dat ze het schilderij niet zouden beschadigen.

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins eens	Eens	Volledig eens
De effecten van klimaatverandering zijn waarschijnlijk catastrofaal	○	○	○	○	○	○	○
De media zijn vaak te alarmerend over zaken als klimaatverandering	○	○	○	○	○	○	○
Er is te veel tegenstrijdig bewijs over klimaatverandering om te weten of het daadwerkelijk gebeurt	○	○	○	○	○	○	○
Klimaatverandering is iets waar ik bang voor ben	○	○	○	○	○	○	○
Het bewijs voor klimaatverandering is onbetrouwbaar	○	○	○	○	○	○	○
Het is nog te vroeg om te zeggen of er echt sprake is van klimaatverandering	○	○	○	○	○	○	○
Ik weet niet zeker of klimaatverandering echt plaatsvindt	○	○	○	○	○	○	○
Ik geloof niet dat klimaatverandering een echt probleem is	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins eens	Eens	Volledig eens
Het is nooit goed om wetten en regels te overtreden	○	○	○	○	○	○	○
Ook als er geen kans is om gepakt te worden probeer ik me aan wetten en regels te houden	○	○	○	○	○	○	○
Ook als wetten en regels niet populair zijn, moeten mensen zich eraan houden	○	○	○	○	○	○	○
Zonder wetten en regels zou er sociale chaos zijn	○	○	○	○	○	○	○
Iemand moet nooit voor eigen rechter spelen	○	○	○	○	○	○	○
Ook als ik het niet helemaal eens ben met wetten en regels, probeer ik toch om me eraan te houden	○	○	○	○	○	○	○
Als ik me bewust word van illegale activiteiten, zou ik dit melden bij de politie	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins eens	Eens	Volledig eens
Ik vertrouw de Nederlandse overheid wat betreft het klimaatbeleid	○	○	○	○	○	○	○
De Nederlandse overheid is oprecht in haar poging om de klimaatcrisis aan te pakken	○	○	○	○	○	○	○
De Nederlandse overheid is eerlijk in haar communicatie over haar klimaatbeleid	○	○	○	○	○	○	○
Over het algemeen denk ik dat de Nederlandse overheid zeer deskundig is in haar wet- en regelgeving op het gebied van het klimaat	○	○	○	○	○	○	○
De Nederlandse overheid vervult haar rol in de aanpak van klimaatverandering zeer goed	○	○	○	○	○	○	○
Ik denk dat de Nederlandse overheid er alles aan doet om de klimaatcrisis te bestrijden	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins mee eens	Eens	Volledig mee eens
Over het algemeen heeft Extinction Rebellion goede argumenten en standpunten	○	○	○	○	○	○	○
Extinction Rebellion geeft me het gevoel dat er een echt probleem is	○	○	○	○	○	○	○
Extinction Rebellion draagt bij aan de strijd tegen klimaatverandering	○	○	○	○	○	○	○
Extinction Rebellion is betrouwbaar	○	○	○	○	○	○	○
Ik steun Extinction Rebellion	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins mee eens	Eens	Volledig mee eens
Activisme is iets goeds	○	○	○	○	○	○	○
Activisme is nuttig	○	○	○	○	○	○	○
Activisme is soms noodzakelijk	○	○	○	○	○	○	○
Activisme is verstandig	○	○	○	○	○	○	○

	Volledig oneens	Oneens	Enigzins oneens	Niet mee eens of oneens	Enigzins mee eens	Eens	Volledig mee eens
Ik erger me aan de Extinction Rebellion-protesten	○	○	○	○	○	○	○
Extinction Rebellions manier van protesteren is de juiste manier om dat te doen	○	○	○	○	○	○	○
Extinction Rebellion protesteert voor de goede zaak	○	○	○	○	○	○	○
De doelwitten van Extinction Rebellions protesten zijn logisch voor mij	○	○	○	○	○	○	○
Ik sympathiseer met Extinction Rebellion protesten	○	○	○	○	○	○	○
Ik begrijp waar Extinction Rebellion voor protesteert	○	○	○	○	○	○	○
De acties van Extinction Rebellion storen mij	○	○	○	○	○	○	○

Naar aanleiding van het nieuwsbericht

Helemaal niks										Heel veel
0	10	20	30	40	50	60	70	80	90	100

Hoeveel had het object van de protestactie in jouw ogen te maken met de klimaatcrisis?

Enorm bedankt voor het invullen van de survey!

Nog een keer op 'verder gaan' drukken om de survey correct af te sluiten.

In de introductie vertelde ik dat het doel van dit onderzoek was te achterhalen hoe Nederlanders aankijken tegen protestacties voor het klimaat. In het onderzoek heb ik deelnemers aan twee verschillende acties van Extinction Rebellion blootgesteld. Je bent willekeurig aan een van de twee nieuwsberichten toegewezen die nagenoeg hetzelfde waren. De acties zijn in het echt gebeurd. Maar om ze zoveel mogelijk hetzelfde te presenteren, heb ik de oorspronkelijke teksten moeten aanpassen. Daarbij is er soms informatie weggelaten of veranderd. Voor preciezere beschrijvingen van de acties verwijs ik je graag naar de nieuwsmedia.

Als je vragen hebt met betrekking tot deze studie, het doel of de procedures, of als je een ander onderzoek gerelateerd probleem hebt, neem dan gerust contact met mij op.

Pleun Postma, p.postma@student.utwente.nl

Nog een keer op 'verder gaan' drukken om de survey correct af te sluiten.

Nog een keer op 'verder gaan' drukken om de survey correct af te sluiten.

Voor SurveyCircle-gebruikers (www.surveycircle.com): De Survey Code is: M7R5-HRWP-P8CT-4DV3

Voor Surveyswap-gebruikers: De Survey Code is: LE7A-89OD-2FTM

Nog een keer op 'verder gaan' drukken om de survey correct af te sluiten.

APPENDIX 2: Translation of measurement scales

Table 16: *Overview of the translated items for the survey*

Construct	Items
Climate concern	The effects of climate change are likely to be catastrophic
	The media is often to alarmist about issues like climate change
	There is too much conflicting evidence about climate change to know whether it is actually happening
	Climate change is something that frightens me
	The evidence for climate change is unreliable
	It is too early to say whether climate change is really happening
	I am uncertain about whether climate change is really happening
	I do not believe climate change is a real problem
Civil obedience	A person should never break the law
	Even if there is no chance of getting caught a person should not break the law
	Even if a law is unpopular it should be obeyed
	Without law and order there is social chaos
	A person should never take the law into his or her own hands
	Even though a person may not like the law the person must obey it
	If a person becomes aware of illegal activity, the person should report it to the police
Trust in governments' climate policy	I trust the Dutch government when it comes to their climate policy
	The Dutch government is sincere in their attempt to tackle the climate crisis
	The Dutch government is honest in their communication regarding their climate policy
	In general I think that the Dutch government is very knowledgeable about their laws and regulations concerning the climate
	The Dutch government performs its role of tackling climate change very well
	I think that the Dutch government is doing everything it can to combat the climate crisis
View on XR	In general XR have clear arguments/statements
	Extinction Rebellion make me feel like there is a genuine problem
	Extinction Rebellion is contributing to fighting climate change
	Extinction Rebellion are trustworthy
	I support Extinction Rebellion
Attitude towards XR activism	Activism is a good thing
	Activism is useful
	Activism is sometimes necessary
	Activism is sensible
Opinion about XR protests	I am annoyed by the Extinxtion Rebellion protests
	Extinction Rebellions way of protesting is the right way to do it
	Extinction Rebellion are protesting for the right cause
	The location of Extinction Rebellions protests make sense to me
	I sympathize with Extinction Rebellions protests
	I understand what Extinction Rebellion is protesting for
	The actions of Extinction Rebellion bother me
Psychological reactance	I resent authority figures who tell me what to do
	I find that I often have to question authority
	I have a strong desire to maintain my personal freedom
	If I am told what to do I do the opposit
	I am relatively opinionated
	I am very stubborn and set in my ways

Extinction Rebellion lijmt zich vast aan Picasso

Twee leden van Extinction Rebellion hebben zich vast gelijmd aan een schilderij van Picasso. Daarmee wilden de actievoerders aandacht vragen voor de klimaatverandering. Na vijf minuten werden ze losgemaakt en aangehouden.

De activisten gebruikten secondelijm om zich vast te plakken aan het schilderij 'Massacre in Korea'. Een van hen schreeuwde: "Stop coal, stop gas, stop oil, stop logging". De actievoerders hadden ook een bord bij zich met de tekst: "climate chaos = war and famine". Het wereldberoemde schilderij was uitgekozen om overheden aan te zetten tot actie tegen klimaatverandering. Volgens Extinction Rebellion wordt er veel te weinig gedaan aan de klimaatcrisis.

Achteraf bleek het schilderij niet beschadigd. Volgens een woordvoerder van Extinction Rebellion wisten ze dat ze het schilderij niet zouden beschadigen.

Extinction Rebellion lijmt zich vast aan Ferrari's

Twee leden van Extinction Rebellion hebben zich vast gelijmd aan Ferrari's. Daarmee wilden de actievoerders aandacht vragen voor de klimaatverandering. Na vijf minuten werden ze losgemaakt en aangehouden.

De activisten gebruikten secondelijm om zich vast te plakken aan twee rode Ferrari's. Een van hen schreeuwde: "Stop coal, stop gas, stop oil, stop logging". De actievoerders hadden ook een bord bij zich met de tekst: "world of auto destruction". De peperdure raceauto's waren uitgekozen om overheden aan te zetten tot actie tegen klimaatverandering. Volgens Extinction Rebellion wordt er veel te weinig gedaan aan de klimaatcrisis.

Achteraf bleken de auto's niet beschadigd. Volgens een woordvoerder van Extinction Rebellion wisten ze dat ze de auto's niet zouden beschadigen.

Table 17: *Factor analysis 1*

Statements	1	2	3	4	5
Q5_2 Trust - De Nederlandse overheid is oprecht in haar poging om de klimaatcrisis aan te pakken	0,896				
Q5_5 Trust - De Nederlandse overheid vervult haar rol in de aanpak van klimaatverandering zeer goed	0,874				
Q5_1 Trust - Ik vertrouw de Nederlandse overheid wat betreft het klimaatbeleid	0,818				
Q5_3 Trust - De Nederlandse overheid is eerlijk in haar communicatie over haar klimaatbeleid	0,816				
Q5_4 Trust - Over het algemeen denk ik dat de Nederlandse overheid zeer deskundig is in haar wet- en regelgeving op het gebied van het klimaat	0,806				
Q5_6 Trust - Ik denk dat de Nederlandse overheid er alles aan doet om de klimaatcrisis te bestrijden	0,678				
Q1_6 Cli_Con - Het is nog te vroeg om te zeggen of er echt sprake is van klimaatverandering		0,871			
Q1_5 Cli_Con - Het bewijs voor klimaatverandering is onbetrouwbaar		0,81			
Q1_7 Cli_Con - Ik weet niet zeker of klimaatverandering echt plaatsvindt		0,772			
Q1_8 Cli_Con - Ik geloof niet dat klimaatverandering een echt probleem is		0,765			
Q1_3 Cli_Con - Er is te veel tegenstrijdig bewijs over klimaatverandering om te weten of het daadwerkelijk gebeurt		0,71			
Q1_2 Cli_Con - De media zijn vaak te alarmerend over zaken als klimaatverandering		0,627			
Q2_3 Civ_Obe - Ook als wetten en regels niet populair zijn, moeten mensen zich eraan houden			0,839		
Q2_2 Civ_Obe - Ook als er geen kans is om gepakt te worden probeer ik me aan wetten en regels te houden			0,786		
Q2_6 Civ_Obe - Ook als ik het niet helemaal eens ben met wetten en regels, probeer ik toch om me eraan te houden			0,751		
Q2_1 Civ_Obe - Het is nooit goed om wetten en regels te overtreden			0,747		
Q2_4 Civ_Obe - Zonder wetten en regels zou er sociale chaos zijn			0,683		
Q4_2 Acti - Activisme is nuttig				0,812	
Q4_1 Acti - Activisme is iets goeds				0,785	
Q4_4 Acti - Activisme is verstandig				0,756	
Q4_3 Acti - Activisme is soms noodzakelijk				0,73	
Q3_5 Psy_Rea - Ik ben relatief eigenwijs					0,739
Q3_6 Psy_Rea - Ik ben erg koppig en vastberaden					0,705
Q3_3 Psy_Rea - Ik heb een sterk verlangen om mijn persoonlijke vrijheid te behouden					0,695
Q3_1 Psy_Rea - Ik heb een hekel aan autoriteiten die me vertellen wat ik moet doen					0,656
Q3_2 Psy_Rea - Ik merk dat ik vaak aan autoriteit moet twijfelen		0,317			0,561
Explained variance:	20.54%	18.65%	10.66%	8.17%	5.73%
Eigenvalue:	5.34	4.85	2.77	2.12	1.49
Cronbach alpha:	.906	.874	.829	.821	.737

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 6 iterations.
Coefficients with an absolute value below .3 were suppressed.

Table 18: *Factor analysis 2*

Statements	1	2	3	4	5
Q11_5 Opinion - Ik sympathiseer met Extinction Rebellion protesten	0,873				
Q11_2 Opinion - Extinction Rebellions manier van protesteren is de juiste manier om dat te doen	0,858				
Q9_4 View - Extinction Rebellion is betrouwbaar	0,852				
Q9_5 View - Ik steun Extinction Rebellion	0,852				
Q11_1 REV Opinion - Ik erger me aan de Extinction Rebellion-protesten	0,816				
Q11_4 Opinion - De doelwitten van Extinction Rebellions protesten zijn logisch voor mij	0,762				
Q9_2 View - Extinction Rebellion geeft me het gevoel dat er een echt probleem is	0,749				
Q11_7 REV Opinion - De acties van Extinction Rebellion storen mij	0,735				
Q9_3 View - Extinction Rebellion draagt bij aan de strijd tegen klimaatverandering	0,71				
Q8_2 Trust - De Nederlandse overheid is oprecht in haar poging om de klimaatcrisis aan te pakken		0,901			
Q8_1 Trust - Ik vertrouw de Nederlandse overheid wat betreft hun klimaatbeleid		0,901			
Q8_3 Trust - De Nederlandse overheid is eerlijk in haar communicatie over haar klimaatbeleid		0,879			
Q8_5 Trust - De Nederlandse overheid vervult haar rol in de aanpak van klimaatverandering zeer goed		0,869			
Q8_4 Trust - Over het algemeen denk ik dat de Nederlandse overheid zeer deskundig is met hun wet en regelgeving op het gebied van het klimaat		0,852			
Q8_6 Trust - Ik denk dat de Nederlandse overheid er alles aan doet om de klimaatcrisis te bestrijden		0,818			
Q6_7 Cli_Con - Ik weet niet zeker of klimaatverandering echt plaatsvindt			0,825		
Q6_6 Cli_Con - Het is nog te vroeg om te zeggen of er echt sprake is van klimaatverandering			0,819		
Q6_5 Cli_Con - Het bewijs voor klimaatverandering is onbetrouwbaar			0,809		
Q6_3 Cli_Con - Er is te veel tegenstrijdig bewijs over klimaatverandering om te weten of het daadwerkelijk gebeurt			0,807		
Q6_8 Cli_Con - Ik geloof niet dat klimaatverandering een echt probleem is			0,736		-0,312
Q6_2 Cli_Con - De media zijn vaak te alarmerend over zaken als klimaatverandering	-0,374		0,574		
Q7_3 Civ_Obe - Ook als wetten en regels niet populair zijn, moeten mensen zich eraan houden				0,874	
Q7_2 Civ_Obe - Ook als er geen kans is om gepakt te worden probeer ik me aan wetten en regels te houden				0,832	
Q7_6 Civ_Obe - Ook als ik het niet helemaal eens ben met wetten en regels, probeer ik toch om me eraan te houden				0,816	
Q7_1 Civ_Obe - Het is nooit goed om wetten en regels te overtreden				0,718	
Q7_4 Civ_Obe - Zonder wetten en regels zou er sociale chaos zijn				0,652	
Q10_1 Acti - Activisme is iets goeds					0,849
Q10_2 Acti - Activisme is nuttig					0,828
Q10_3 Acti - Activisme is soms noodzakelijk					0,781
Q10_4 Acti - Activisme is verstandig	0,356				0,67
Explained variance:	29.79%	17.02%	11.67%	6.97%	6.16%
Eigenvalue:	8.94	5.11	3.50	2.09	1.85
Cronbach alpha:	.943	.941	.890	.845	.869

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 5 iterations.
Coefficients with an absolute value below .3 were suppressed.