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Understanding How Descriptive Norms Influence Participation in Collective Action: The Context of The Housing Movement in the United States of America

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Master (MSc) in Psychology of Intercultural Relations

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CIÊNCIAS SOCIAIS
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Department of Psychology

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Resumo

A ação coletiva (AC) tem-se revelado uma força extremamente impactante no que diz respeito a motivar as pessoas a participarem em ações que beneficiam tanto a si próprias como aqueles que as rodeiam (Agostini & van Zomeren, 2021). Por outro lado, o papel das normas sociais e a decisão de as perpetuar não é um conceito tão claro, devido à sua sub-representação na literatura. Numa única experiência, utilizando uma abordagem de método misto, manipulámos as normas descritivas de participação no movimento habitacional nos EUA e medimos quatro tipos distintos de ação coletiva: ações coletivas gerais, convencionais, violentas e não normativas. Adicionalmente, prevíamos que esta relação fosse significativamente mediada por conceitos propostos pelo Modelo de Identidade Social da AC (SIMCA). Algumas partes da nossa previsão foram confirmadas, sobretudo através de um efeito total significativo e de um efeito indireto global significativo em todas as medidas de AC, mas os diferentes efeitos indiretos específicos resultaram apenas em efeitos marginais através da identificação politizada, enquanto todas as outras variáveis produziram efeitos fracos. Resumidamente, as normas sociais descritivas que indicavam uma elevada participação entre o círculo próximo dos participantes aumentaram as intenções de ação coletiva, sendo que os fatores especulados pelo SIMCA mediarão parcialmente esse efeito.

Palavras-Chave: Ação Coletiva, Normas Descritivas, Dual-Chamber SIMCA Model, Habitação

Abstract

Collective Action (CA) has been shown to be an incredibly impactful force when it comes to motivating people to take part in actions that benefit themselves and those around them (Agostini & van Zomeren, 2021). In this case, this study aims to see what might be the driving forces that inflame the desire to pick up the metaphorical torch and to join in on a collaborative effort. In a single experiment, we manipulated descriptive norms of participation in the housing movement in the USA and measured four different kinds of collective action. These included general, conventional, violent, and non-normative collective actions. We hypothesized that when participants were presented with information that indicated high normative participation among their people from their “home state”, this would result in stronger willingness to participate in collective actions. Additionally, we hypothesized that this relationship would be mediated by concepts proposed by the Social Identity Model of CA (SIMCA). Some parts of our hypothesis were supported, mainly through a significant total effect and a significant overall indirect effect on all measures of CA, but different specific indirect effects only resulted in marginal effects via politicized identification, and all other variables yielded weak effects. In short, descriptive social norms that indicated high participation among participants’ close circle increased collective action intentions and that the factors hypothesized by SIMCA partially mediated this effect.

Keywords: Collective Action, Descriptive Norms, Dual-Chamber SIMCA Model, Housing, USA

Introduction

All around the world there are a multitude of social issues where people band together and try to enact change for the better. Such social issues consist of climate change, women's rights, LGBTQ rights, immigration, economic strikes, and so on. People often want to express themselves and they want change for the better. Another social issue that plagues many countries in the modern day is the issue of affordable housing and the USA is one of the many countries that has suffered significantly. Since the Great Recession of 2008, home ownership rates have greatly fallen resulting in many foreclosures and short sales. As a result, more and more people have been renting homes leading to significant increases in rental costs for individuals and families. Costs for housing and land are also rising substantially, and affordable quality housing is becoming more challenging to obtain (Burns et al, 2021). As previously stated, this issue of affordable housing is not unique to the USA. Another country that has experienced hardship from increased housing costs is Portugal.

In a study by Cidades, they identify that there are economic hardships in Portugal that are related to the increase of housing costs, and they state that a significant contributing factor to the increase in housing is Portugal's past with authoritarianism. They also state that the disdain for the authoritarian government lead to many people supporting the urban rights movement, which advocated for an increase of public spaces and housing (Cidades, 2024). Housing or shelter is seen as one of the most fundamental requirements for a healthy and fully functioning human according to Maslow's hierarchy of needs (Maslow, 1987), so it seems that this issue is highly applicable to all nations around the world. Thus far, we have identified different kinds of social movements and where they might take place in the world, but another area to explore is what compels people to participate in social change. Referring to the study by Cidades once again,

they performed a study that looked at the relationship between descriptive social norms and collective action. As previously stated, the collective action they chose to study was the housing movement in Portugal and this study aims to replicate this study, but in the context of the USA.

Just like Cidades, this study focuses on what is known as descriptive social norms. Cialdini states that descriptive social norms are not mainly about perceptions of what others approve of but of what others do (Cialdini, 2007). Or in other words, what actions other people take. Additionally, since collective action involves the real physical actions of a group of people, descriptive social norms seem even more relevant in the context of social change. As previously mentioned by Cidades, descriptive social norms have been known to be significantly correlated with increased participation in collective action (Cidades, 2024).

In line with our study acting as a replication, we also will be using the SIMCA model as mediators between the relationship of descriptive social norms and collective action. The three main parts of the SIMCA model are politicized identification, high perceived injustice, and high perceived group efficacy. These concepts are said to be significant motivators in encouraging collective action (Franc et al, 2023).

Lastly, we would like to address the significance of this line of research. Firstly, the literature on the subject of descriptive social norms is underrepresented in terms of scientific research compared to other forms of social norms (Irwin & Simpson, 2013), and secondly, some of the most current literature might come across as fractured or inconsistent. For example, there are various studies looking at the underlying factors such as strategic substitutability, which may suggest that social norms have the ability to deter people from participating in collective actions (Cantoni et al., 2019; Jarke-Neuert et al., 2023). Cantoni and colleagues state that the two strongest indicators of strategic substitutability are when protests are in the stage when the public

goods component of a protest looms large relative to a movement's ultimate success, and when people perceive an increase in the probability of a government crackdown (Cantoni et al., 2019). These findings can be interpreted as somewhat contradictory when considering the work from Cidades, especially in regard to a public good being linked with altruism or pro-social behaviors. The concept of strategic substitutability in a way goes against the idea that people band together for the greater good of people, because it implies people may not be as invested in collective action and are willing to just sit it out in certain conditions. This is why it is important for there to be more research done on this subject, and that is what this study aims to do.

Chapter 1

Literature Review

1.1. Descriptive social norms

As previously mentioned, Cialdini stated that descriptive social norms are not mainly about perceptions of what others approve of but of what others do. Cialdini then goes on to state that injunctive social norms mobilize people into action via social evaluation, while descriptive social norms move them to act via social information (Cialdini, 2007). But what motivates people to act based on this social information?

Jacobson states that the main motivation for following descriptive social norms (social information) is the desire to make correct and efficient choices. They also act as a sort of mental heuristic that helps preserve mental effort (Jacobson, 2024). Cialdini and his colleagues conducted an experiment where they had 2 warning signs displayed in Arizona's Petrified Forest National Park both saying not to take wood from a national park as well as depicting people stealing said wood. One sign depicted a group of 3 people stealing wood while the second depicted a single person stealing wood. Cialdini and his colleagues were able to conclude that the second sign with the lone thief resulted in lower rates in theft (Cialdini, 2007). In this experiment the signs presented to the visitors of the national park served as social information and said information allowed people to make accurate and efficient decisions based on the social norms of the park. Social information depicts the actions of others and not just what they themselves should do.

Rimal and Real were able to conclude that people are often almost compelled to mimic or follow the behaviors of others. This is specifically the case when people are surrounded by people who are much like themselves (Rimal & Real, 2005). In a social situation they might see

them as a roadmap as to how to act in certain situations (Ajzen & Fishbein, 1980). Previous literature has shown that as a norm develops and becomes more significant, people are more likely to adhere to and follow said norm (Cialdini & Goldstein 2004; Reno et al., 1993). This means that for this study it is important for us to implement a social indication that the housing movement is a significant norm. This is needed in order for us to successfully show how social norms influence collective action.

Cialdini was able to show evidence of descriptive social norms having an effect in lowering the rates of behavior of people, but what about influencing people to participate? Thankfully Cialdini and colleagues also did another experiment doing just that. In this experiment Cialdini's research team worked with a hotel that was trying to have their guests reuse their towels more frequently. The hotel guests would receive a card reminder in their rooms about being sure to use their towels more than once before sending them off to be cleaned. In each of 4 conditions the reminder card would utilize a different reasoning for why the guests should cooperate. The first condition said, "saving the environment". The second said "help save resources for future generations". The third said "partner with us to help save the environment". Then the last said "join your fellow citizens to help us save the environment". Cialdini and his colleagues were able to conclude that the final condition was the only one that saw a significant increase of people reusing their towels (Cialdini, 2007). Another experiment similar to Cialdini's found results regarding towel usage in the context of social norms (Bohner & Schluter, 2014). The results from experiments found in this section show support for both the use of descriptive social norms when both trying to encourage and discourage the real and physical actions of those around us as well as results that support strategic substitutability.

Overall, the literature shows ample support for the use of social norms when influencing the actions of people via social information, but it also shows that ideas such as strategic substitutability are a factor to consider when looking at this topic. This is once again a major justification for this study because it is vital to further contribute to this line of research.

1.2. Collective action

Collective action is often performed by group members who seek to improve the conditions of their disadvantaged situation, this also includes those who may not be members of the disadvantaged group, but people who support the movement in solidarity (Agostini & van Zomeren, 2021). Smith and colleagues define collective action as an action taken to advance the goals and interests of a group of people. These actions can involve engaging in social media campaigns, signing petitions, attending protests and so on (Smith et al, 2021). Many previous studies make a distinction between specific forms of actions and behaviors that make up CA. Some previous literature describes conventional CA as tranquil and acceptable, while on the other hand. non-normative CA are actions that society may consider unacceptable but typically do not result in any form of violence. Violent actions on the other hand typically include some form of violence in addition to them being actions that may be considered unacceptable (Becker et al., 2011; Tausch et al., 2011). Additionally, Becker & Tausch state that normative collective action seeks to adhere to salient social norms, while non-normative collective actions seek to break social norms to enact change (Becker & Tausch, 2017).

This paper has already looked at the relationship between descriptive social norms and action when looking at the experiments by Cialdini, but what about actions involving larger groups of people? In a study by Irwin and Simpson's study, they manipulated cooperative descriptive norms in an experimental setting that involved a "public goods dilemma". From their

study they were able to conclude that cooperative descriptive norms can help solve collective actions problem and promote conformity (Irwin and Simpson, 2013). Additionally, the said “group of people” mentioned by Smith and colleagues varies greatly among the literature. For example, in a study by Fieck and colleagues, they look at women’s collective actions. They then go on to say that they define women’s collective actions as behaviors in which women engage with the goals of promoting, protecting, or enhancing women’s psychological and economic outcomes (Fieck et al, 2020). When looking at collective action it is important to know what specific actions are used, as well as what the goals of the group are.

1.3. Collective action in the context of the USA

At this point it is abundantly clear that this study will not focus on the collective action of women’s rights, or other movements, but rather it will focus on the housing crisis in the USA. Thompson states that there are multiple intersecting and longstanding crises shaping the urban housing environments in the United States and that the term “crisis” suggests that it should be something out of the ordinary. Unfortunately, in many cases it is not an exception, but rather the system is working precisely as designed (Thompson, 2024). When Thompson refers to multiple crises shaping the current housing market in the USA, I think they are referring to three major factors. Those being the 2008 housing crash, the 2019 COVID pandemic, and the overall financialization of the housing market.

In 2018, 20.8 million households that rent lived in housing that cost more than 30% of their income. The COVID-19 pandemic has only increased the affordability challenges that renters face and will likely raise the number and share of cost-burdened renter households (Airgood-Obrycki et al, 2023). With all of this in mind, the literature clearly shows how significant and severe this situation is.

Another significant factor that leads to economic collapses in the housing markets is when housing is used as a means of generating wealth, even though shelter is something that everybody needs and strives to obtain (Maslow, 1987). The effects of turning housing into a way to gain wealth is a major component to what Burns and colleagues discussed in the introduction about the 2008 housing crisis in the USA, and they also talk about the impact of COVID-19. They state that the COVID-19 pandemic has had a major economic impact further contributing to the housing crisis. Housing costs are increasing significantly in many areas that previously might have been considered more affordable as the demand for housing is high. The increased demand is partly resulting from people fleeing small apartments in large cities to less expensive areas, new remote work policies enabling more flexibility in location, and reduced 30-year mortgage rates. In turn, areas that may have been considered more affordable now are plagued with higher prices due to people leaving more densely populated areas (Burns et al, 2021).

1.4. SIMCA as a Mediator

According to Van Zomeren, the Social Identity Model of Collective Action, or SIMCA for short, is a model that proposes that group identification, group efficacy beliefs, and perceived or felt group-based injustice are unique and positive predictors of individuals' willingness to engage in collective actions. They also state that they have reasons to believe that politicized group identity is often intertwined with moral motivations for collective action, or the motivation to protect one's moral beliefs by fighting for what one stands for (Van Zomeren et al, 2018). While this model mentions how concepts such as group identification and efficacy beliefs are related to collective action, this definition doesn't seem to mention social norms of any kind, how might the literature bridge this gap?

When looking at previous studies discussing the relationship between descriptive social norms and collective action, such as the project already mentioned by Irwin and Simpson in the collective action section, they used an experimental model to manipulate cooperative descriptive social norms in the context of a public goods dilemma. They found that their study addressed the concept of long-term collective action outcomes, and they were able to conclude that when participants were able to identify with the movement, it resulted in longer lasting outcomes of conformity. They also found that members of groups with strong descriptive norms reported greater identification than members of groups with lower levels of descriptive norms. Further, results indicated that social identity mediated the relationship between descriptive norms and continued conformity (Irwin and Simpson, 2013). This clearly shows that at the very least, identification with the movement has been shown to be closely related to both social norms and collective action, so it might stand to be an effective mediator between the two variables, along with the other aspects of the SIMCA model.

1.4.1 Identity

The Social Identity Theory tries to convey the idea that when individuals chose to identify with a group, they do so in a context where that identity is meaningful and salient, and thus they align their behaviors and perceive themselves as members of that said group (Tajfel & Turner, 1979). In turn, this results in the emergence of psychological group formation, or close inner circle and results in the group members having heightened levels of perceived identification (Hogg, 2016). Previous literature shows that people of a lesser socioeconomic status or other marginalized group need to see their situation as unwarranted or unreasonable in order to fully take on this group identity (Ellemers, 1993) and thus participate in CA behaviors to change their unfavorable or unreasonable situation (Mummendey et al., 1999). In turn, the

concept of identification, also referred to as identity, (van Zomeren et al., 2018) has been widely regarded in many studies as a vital force in order to motivate people to take a stance and actively participate in CA (van Zomeren & Lyer, 2009). In SIMCA, identity is separated into two major areas according to the literature. They are separated as politicized identification and non-politicized identification (Agostini & van Zomeren, 2021). Typically, the politicized variant generally seems to be the stronger predictor of CA (van Zomeren & Lyer, 2009). This is shown through the fact that a multitude of studies have shown evidence that Politicized identification positively correlates with CA in a variety of different contexts regarding the use of collective action (Uysal et al., 2024). This last point by Uysal and colleagues seems especially important considering the fact that this study is a replication of the study by Cidades, but in a different context. While both studies look at the housing crisis, Cidades's study is about Portugal and this current study is about the USA. While the context may be different, what was said by Uysal and colleagues supports the idea that identity can apply to a wide variety of different situations.

1.4.2 Morality

Some researchers have chosen to include the concepts of morality and moral conviction into the SIMCA model because morality has the ability to serve the same functions as other parts of the SIMCA model. For example, strong moral beliefs created by individuals can result in the formation of group identities that unite people, just like how group identities can cause certain group norms into the moral domain (Agostini and Van Zomeren, 2021). Morality is also considered to be a quintessential psychological predictor of CA as it displays one's attitudes on an issue and these attitudes often reflect a major aspect of who that individual is and what they stand for (Skitka et al., 2005). With this in mind, if these deep emotional beliefs are challenged or not considered it may be seen as a violation of their moral values and thus would greatly

motivate people to advocate and participate in what they believe in (Agostini & van Zomeren, 2021). Another reason why the literature has considered including morality is because of how it can enable people from different status groups to relate to one another. This can be economic or a matter of privilege or status (Klavina & van Zomeren, 2018). A real-life example I can think of is the recent ICE raids in the USA. Many people who are not racial minorities have taken to the streets to protest the unethical rounding up of immigrants and not granting them due process (Williams, 2025). There may be reason to believe these protesters may be motivated by the idea that they believe that this is a moral violation and that it goes against their core moral principles as to how people should be treated. An article from 2008 looks at how the deportation of immigrants affects the morality of those who are part of the process. An interpreter for immigrants who is also a prominent protesters expressed that his participation in the process of taking part in the deportation of immigrants threaten his ethics and morals (Greenberg & Martin, 2008). This is just a real-life example of when moral convictions are challenged or violated, they can greatly motivate people to step up and to fight for what they believe in.

1.4.3 Injustice

The prolific and essential Relative Deprivation theory by Runciman (Tripathi & Srivastava, 1981) has brought to light the idea of shared grievances and disparities between groups or individuals and how they motivate people to enact change to obtain justice or equity among groups (Louis et al., 2020). Perceived injustice sometimes results from a perspective of unequal treatment or unequal material distribution of goods. Anger may also arise due to unreasonable or illegitimate privilege. This feeling of anger has been shown to have a stronger effect on willingness to participate in CA compared to a non-anger form of injustice (van Zomeren & Lyer., 2009). Once again, going back to a real-life example of a protest, there are the

protests about social and economic imbalance in the USA where injustice seems to have a role to play there too. Beer states that in 2011, people nationwide came to protest the “blatant injustices of our times perpetuated by the economic and political elites” (Beer, 2018. P. 2). The example aligns extremely well with the definitions shown by Louis and as well as van Zomeren, so it seems that this is in fact a significant part of collective action.

1.4.4 Efficacy

The concept of efficacy is primarily based on the theory of resource mobilization, proposed by McCarthy and Zald. They theorized that the concept of efficacy is derived from the process of weighing potential benefits and consequences before fully committing to a particular action (McCarthy & Zald, 1977). This was then later refined by Klandermans into his Expectancy-value theory. This theory predicts that people will act based on an expected gain from participating in collective action when operating from a rational mindset (Klandermans, 1984). For the purposes of this study, we used the label, “group efficacy”, because when predicting actions taken, it was for the perceived efficacy of the group (the social movement) and not because of some individual cause (Hsiao., 2018; Mummendey et al., 1999). Efficacy is also seen as one of the more significant predictors of CA intentions (Uysal et al., 2024).

1.5. Dual-Chamber SIMCA Model

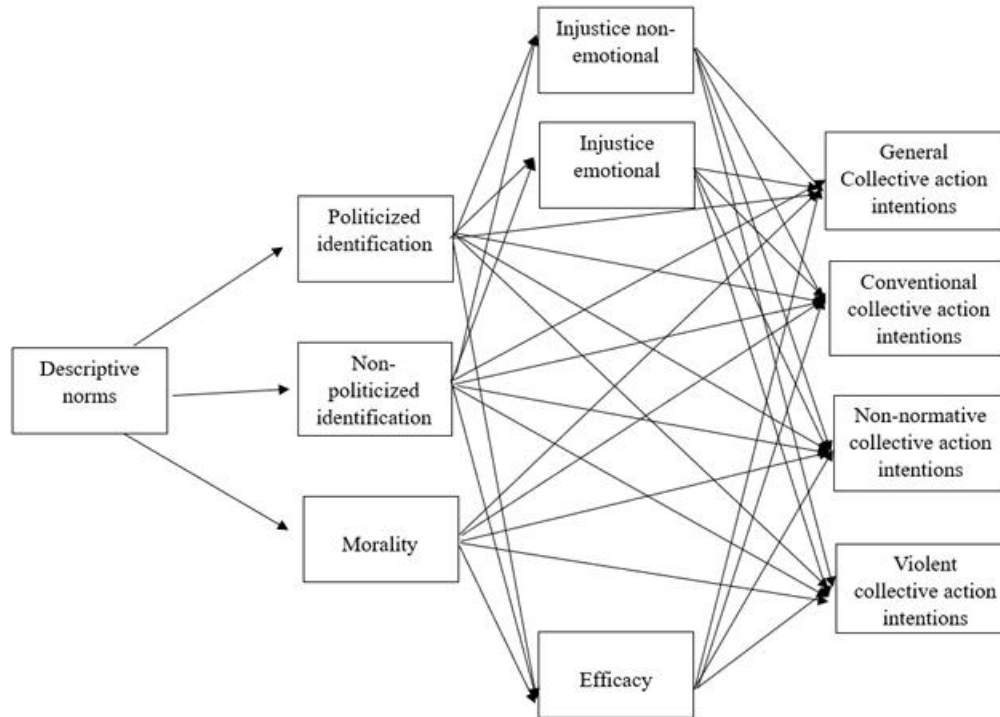
As mentioned before, the current study is a direct replication of the study by Cidades (2024), which was conceptually based on the so called Dual-Chamber SIMCA Model. As previously shown, the SIMCA model hypothesizes that identity, efficacy and injustice are key predictors of CA intentions, with identification at the forefront on significance. Additionally, some studies showed that the aspects, efficacy and injustice from the SIMCA model have the ability to predict various collective action intentions, as well as act as mediators of the

relationship between identification and CA (van Zomeren et al., 2012). The role of morality was not at first acknowledged, but it later then was taken into account and was seen as another key part in the SIMCA model (Agostini & Van Zomeren, 2021). Cidades explains that through different iterations over the years consisting of a meta-analysis, the literature defined morality and identity as “the core engine that fosters instrumental perceptions of efficacy and injustice that in turn facilitates CA intentions” (Cidades, 2024., p. 13).

van Zomeren and colleagues hypothesized that identification and moral convictions had very strong ties to one another, and that when people engage in CA, they consider not only what they are, but what they stand for (van Zomeren et al, 2018). The dual chamber model integrates all 4 variables in a model where identification and morality trigger a “chain” reaction with injustice and efficacy perceptions, which in turn predict an increase of participation in collective actions (Agostini & van Zomeren, 2021). The purpose of this model is to integrate descriptive norms in the field of collective action (see Figure 1).

Figure 1

Conceptual Model



1.5.1 Dual-Chamber Model and the Role of SIMCA with Descriptive Norms

Tajfel & Turner express the idea that when people show a higher level of identity with a group, instead of as individuals, they feel compelled to get into step and blend in with said group (Tajfel & Turner, 1979). A wide variety of studies show the effectiveness of how social identity influences people's actions through following social norms, and this is done through increasing people's levels of identification with the group (e.g., Hogg, 2016). For example, Bamberg and colleagues were able to conclude through their research that perception of social norms is often followed by a strong sense of social identity (Bamberg, 2018). Postmes and colleagues found that identities can influence processes of small groups (e.g., close inner circles), and that these

group processes, such as communication between members, can also influence the development of identity (Postmes et al., 2005) We believe that this can also apply to large protests (e.g., large groups) where the interaction between individuals can result in the group members having a feeling of a shared identity, which in turn further leads people to identify with the group (Rathbone et al., 2023). Additionally, if a certain action, such as brawling or fighting, is being performed by a large number of group members, this can lead to a further increase of individuals doing that same action leading to prototypical behavior among group members (Hogg & Reid, 2006) which then can lead to the “internalization of this identity and participating in CA becomes part of their social identity” (Cidades, 2024., p. 15).

Rathbone and colleagues (2023) conducted a longitudinal study focusing on the alcohol norms among peers in a large group. They were able to conclude that when more people in the group followed the alcohol norms, the actions from the other group members were able to affect group member’s identification, and that this relationship is not static as it changes depending on the context of what the social norm dictates, or in other words, social norms are an ever changing force that influences people’s behaviors. Considering that the housing movement in the USA has been openly active, we suspect the same line of thinking can be applied to this social movement. Stok and colleagues conducted a study where they provided information that most people consume vegetables, in comparison to a minority norm condition, this social information resulted in an increase in the vegetable intake intentions of participants, and they also found that this relationship was mediated by self-identification with their group (Stok et al., 2014). This line of thinking is further supported by a study by Irwin and Simpson in which they found that groups that were exposed to strong descriptive norms identified more with members of the group compared to the individuals from the group that were exposed to weaker descriptive norms

(Irwin & Simpson, 2013). we argue that the same results found in these studies can be expected to be found to the real life social movements such as the housing crisis in the USA via the Dual Chamber Model (Agostini & van Zomeren, 2021) Cidades asserts that identification has the capacity to facilitate efficacy and injustice perceptions, and that the normative behavior of others “triggers a chain of effects via identification, efficacy and injustice on housing movement participation intentions” (Cidades, 2024., p. 15).

1.5.2 Dual-Chamber Model and the role of morality and descriptive norms

To some researchers such as Graham and colleagues, the concept of moral convictions is often considered to be stable and static as people develop (Graham et al., 2011), but some researchers would disagree and state that that depending upon the situation, individuals may experience a shift in their moral convictions. Lindström and colleagues were able to conclude that moral convictions can be influenced by the shared properties of an observed behavior (Lindström et al., 2018). This is an example of how humans sometimes derive moral values from the relative frequency of certain behavior. Cidades explained that as moralization can be understood as “the transformation of descriptive information into injunctive norms” (Cidades, 2024., p. 16). Or in other words, if most people do it, then it must be the correct thing to do. In a study by Rhee and colleagues they found that when people are presented with information about behaviors regarding descriptive norms (the behaviors of others), this may result in the person perceiving said norm as morally sound (Rhee et al., 2019).

Eriksson and colleagues were able to find that people often make snap judgments, and this can result in automatic association between “common” and “moral values” (Eriksson et al., 2015). After the moral aspect is then associated with the social movement, Skitka theorizes that people might develop a strong and absolute stances on the moral issue (Skitka, 2010). For

example, receiving information that people from all over California are participating in protests may trigger the moral status of the movement and its demands if you yourself identify as someone from California. Cialdini & Goldstein state that these processes have the potential to take effect through behavioral conformity (Cialdini & Goldstein, 2004).

The main goal of this study is to analyze the potential association between descriptive norms, the Dual Chamber SIMCA model and CA intentions. We want to see what the main contributors and motivations are for why people chose to act or to not act in situations where change is desired or needed. Descriptive norms have been shown to be a potential powerhouse for social influence that precedes the Dual-Chamber SIMCA model. With this new model it provides a new and innovative way to analyze variables that have been obscured in the past CA literature, as well as providing a connection between different theoretical frameworks. For the purpose of this study, the main components consist of social norm adherence, social influence and the Dual-Chamber SIMCA model. Agostini & van Zomeren describe the combination of identification and morality as the “protester’s beating heart, both in terms of who “we” are and what “we” stand for” that greatly influence motivations resulting in higher intentions to engage in CA regarding the housing crisis (Agostini & van Zomeren, 2021, p. 22).

1.6. Experimental Model

As previously mentioned, the literature shows a significant connection between descriptive social norms and collective action as well as the mediating role of the SIMCA model. The main goal of this study is to examine this relationship in a new context, specifically the housing crisis in the USA. In this study descriptive social norms will act as the input variable and collective action in the housing crisis is the output variable. Additionally, descriptive social norms is the experimental part of the design. The experimental design has 3 different conditions

with 1 of the 3 conditions being the control group. The specific details of each conditions will be fully explained in the “materials” section. Lastly, the SIMCA model is used as a mediator with 4 different aspects to it. The four aspects of the SIMCA model include moral convictions, perceived injustice (along with anger), perceived efficacy, and identification with the movement (along with identification with those effected).

1.7. Question and hypotheses

The main question this study is proposing is what is the relationship between descriptive social norms and collective action, and does the SIMCA model act as a mediator in said relationship? This study hypothesizes that there will be a significant positive relationship between descriptive social norms and collective action and there will be positive indirect effects between descriptive social norms and collective action variables via all mediators. Once again, this study acknowledges that this study is a replication, and thus presented hypotheses are the same as the ones in the study by Cidades (Cidades, 2024., pp. 20-22).

Total effect of descriptive norms on collective action

Hypothesis 1 (H1): Providing information about descriptive high-participation norms, comparing to low-participation norms, predicts more engagement intentions in all different forms of participation in the housing movement (i.e., general (H1a), conventional (H1b), non normative (H1c) and violent (H1d)).

Effect of descriptive norms on SIMCA-predictors

Considering the SIMCA model as a combination of several components (i.e., instrumental and emotional) (e.g., van Zomeran et al., 2018) and the high correlation among them reported in the literature (e.g., Agostini & van Zomeren, 2021), we tested whether the combination of all components of the SIMCA model was affected by descriptive norms:

Hypothesis 2 (H2): The effect of providing information about descriptive high-participation norms, comparing to low participation norms, on the different forms of collective action intentions is mediated by the combination of predictors of collective action proposed by the SIMCA model.

Apart from this general hypothesis of a combined mediation by all SIMCA-factors, the current research also had to consider that the Dual-Chamber model of collective action (i.e., the more recent version of the SIMCA-model, (Agostini & van Zomeren, 2021) attributes different roles to the different SIMCA factors in a mediation chain. We therefore also tested specific hypotheses for each of the SIMCA factors. More precisely, to ascertain the individual impact of the variables that compose the SIMCA-model we hypothesized a specific pathway for each of them.

Hypothesis 3 (H3): Descriptive high-participation norms activate more politicized (H3a) and non-politicized (H3b) identification, as well as higher levels of moral convictions (H3c). Simple mediation effects as recent research results imply that morality and identity have the biggest influence on collective action intentions (Agostini & van Zomeren, 2021), we believe that those are first level mediators of the effects of descriptive norms on collective action:

Hypothesis 4 (H4): Providing descriptive high-participation norms, comparing to low participation norms, leads to stronger politicized identification (H3a), which in turn leads to more participation intentions in the housing movement. Thus, the effects predicted in H1a, b, c and d should be partially mediated by politicized identification.

Hypothesis 5 (H5): Providing descriptive high-participation norms, comparing to low participation norms, increases non-politicized identification (H3b), which in turn leads to more

participation intentions in the housing movement. Thus, the effects predicted in H1a, b, c and d should also be partially mediated by non-politicized identification.

Hypothesis 6 (H6): Providing descriptive high-participation norms, comparing to low participation norms, increases moral convictions (H3c), which in turn lead to more participation intentions in the housing movement. Thus, the effects predicted in H1a, b, c and d should also be partially mediated by moral convictions.

Chain mediation effects

Furthermore, following the logic of the SIMCA-model (e.g., Agostini & van Zomeren, 2021; van Zomeren & Lye., 2009) we hypothesize that the effects predicted in H3, H4 and H5 are themselves partially mediated by injustice appraisals, injustice emotions and efficacy perceptions:

Hypothesis 7 (H7): It is expected that descriptive high-participation norms activate stronger politicized identification (H3a) which in turn results in higher levels of perceived non emotional injustice, injustice emotions and efficacy perceptions. Each of the latter three variables should lead to stronger intentions to participate in the housing movement. Thus, H7 predicts overall 12 possible chain mediations, four via non-emotional injustice, four via injustice emotions and four via efficacy perceptions.

Hypotheses 8 (H8) and 9 (H9) predict similar effects as those predicted in H7, with the only difference that the first step in the chains is a mediation by non-politicized identification (H8) and moral convictions (H9) instead of politicized identification.

Chapter 2

Methods

2.1 Participants and survey

To calculate a proper sample size size for our analysis we used Qin's (2024) shiny app, with the Monte Carlo confidence interval method, long with directions from both Qin and Cicadas (Qin., 2024: Cidades., 2024) on how to navigate the program. The results found that for a power of 0.85, a sample of 400 would be considered a sufficient number of participants. For the purposes of this analysis, a small effect size of 0.14 was used between descriptive norms and collective action intentions, or in other words, the effect of X on Y, as well as descriptive norms on politicized identification, non-politicized identification and moral convictions, since there is still a small amount of literature on this specific subject. A medium size effect of 0.4 was estimated for the relationship between the variables from the SIMCA model and collective action. The variance explained both in the mediators of politicized identification, non-politicized identification and moral convictions, and collective action intentions was estimated as 7%. No interaction between X and the mediators was assumed (0.00). Once again, this preliminary analysis was guided through the steps provided by Qin and Cicadas particularly because as previously mentioned, there is still not an ample amount of literature on this subject and how to effectively do this kind of analysis with a model of this complexity (Qin., 2024: Cidades., 2024).

The participants in this study were gathered to answer an online questionnaire through two major strategies. The first included reaching out to people through social media on platforms such as Instagram, and discord. If they were willing to participate, we utilize the snowball technique and would ask if they would also spread the survey to those who might be interested in participating. The second method involved using websites like Survey Circle to gather

participants. The three websites I used were Survey Circle, Survey Swap, and Poll Pool. These websites help people get participants for surveys by giving you points for helping other people with their surveys. The more surveys you take, the more likely people will participate in your survey.

The number of participants for this study initially consisted of 462 participants, but for various reasons many of them needed to be excluded. Exclusion criteria include not wanting to participate, not currently living in the USA, not considering any US state to be their “home” state, and if they finish the survey in under 120 seconds. Additionally, if the participants neglected to answer questions about what kind of collective actions they would be willing to participate in, they also would be excluded. With these parameters set we end up with 278 participants for our final sample size.

2.2. Demographics and Covariates

The demographics and covariate section of the survey gathered information in 5 main areas. They include gender, age, political orientation, education, and social economic status, along with trust and satisfaction. Just as in Cidades’s study, political orientation, perceived social status trust in institutions, and satisfaction with the country were used as covariates. Cidades states that the reason these specific points were included was because they are related to collective action intentions (Cidades,2024). Political orientation was measured on a single item using a 10-point Likert scale where 0 represented most left and 10 represented the most right. Perceived status was operationalized as participant’s perceived social status. Participants had to evaluate their social status on a continuous slider ranging from 0 to 100. 0 on the scale corresponds to people that are in a very bad financial situation which have less money, less education and worst jobs. Then the higher the number (all the way up to 100) indicates a higher

level in those three areas. The last two measures were adapted from the source questionnaire of the European Social Survey (2023), where trust in institutions ranged from 1= no trust at all to 5= complete trust and satisfaction with the country measuring satisfaction with democracy and satisfaction with the government (1=very low satisfaction and 5= very high satisfaction).

The results show that the majority of the sample identified as female (55%), had a college degree (42%), tended to be more left leaning on the political spectrum (53%, 0-4), was mostly in the younger age group (47%,18-24), and social economic status was mostly in the moderate to high ranges. (Table 1 and Table 2 for a more detailed overview of the sample).

Table 1

Sample demographic characteristics

| Gender | | | Age | | |
|------------------|-----|-------|------------------|-----|-------|
| Male | 107 | 38.5% | 18-24 | 132 | 47.5% |
| Female | 153 | 55% | 25-34 | 86 | 30.9% |
| Non binary | 12 | 4.3% | 35-44 | 33 | 11.9% |
| Did not say | 5 | 1.8% | 45-54 | 17 | 6.1% |
| Other | 1 | .4% | 55-64 | 3 | 1.1% |
| | | | 65+ | 2 | 0.7% |
| | | | Did not say | 5 | 1.8% |
| Education | | | Political | | |
| Elementary | 1 | 0.4% | 0 (left) | 31 | 11.2% |
| Middle | 3 | 1.1% | 1 | 20 | 7.2% |
| High | 64 | 23% | 2 | 31 | 11.2% |
| College | 119 | 42.8% | 3 | 42 | 15.1% |
| Master's | 72 | 25.9% | 4 | 24 | 8.6% |
| Other | 12 | 2.5% | 5 | 40 | 14.4% |
| PHD | 7 | 4.3% | 6 | 26 | 9.4% |
| | | | 7 | 18 | 6.5% |
| | | | 8 | 10 | 3.6% |
| | | | 9 | 6 | 2.2% |
| | | | 10 (right) | 11 | 4% |
| | | | Did not say | 19 | 6.8% |

*N= 278

Table 2

Economic status

| <i>Social status</i> | | | | | |
|----------------------|----|-------|--------|----|-------|
| 0-24 | 18 | 6.4% | 65-74 | 50 | 17.9% |
| 25-44 | 59 | 21.2% | 75-84 | 35 | 12.5% |
| 45-54 | 43 | 15.4% | 85-94 | 12 | 4.3% |
| 55-64 | 52 | 18.7% | 95-100 | 8 | 2.8% |

* $N= 278$

*0 indicates low social status where 100 indicates high social status

2.3. Materials and procedure

All materials mentioned in this section were approved by the ISCTE-IUL ethics committee (06/01/2025). The materials included for this research project are a single online survey created via Qualtrics. All questionnaires started with a consent form and ended with a debriefing. Additionally, all measures occurred in the same order as they are presented in the measures section (i.e. starting with descriptive social norms, then morality, then perceived injustice, then efficacy, identification, and last the collective action measures). The order of the items within each measure were randomized, except for the measure of concrete collective actions. The consent form section included a small explanation of how this survey is about collective action within the USA. Participants were asked if they currently live in the USA (it is important because we were only looking for people who live in the USA). If they select “no” then they were sent to the very end of the survey. Participants were then be asked what US State they consider to be their “home” (details about state demographics can be found in Table 3). This was important for the manipulation of descriptive norms. Next, participants were asked a set of

demographic questions. These include gender, age, highest level of education, social economic status, political orientation, trust, and satisfaction (details in tables 1 and 2).

Then participants were randomly assigned to one of three conditions. The two experimental conditions had an extra instruction telling them that the state they consider to be their “home” is either more active, or less active in the social movement for housing compared to other states. Then they were asked to explain why they think that is. The control condition did not have either of these instructions and questions and participants in this condition proceeded to the next set of questions. The following sections will discuss the various measures tested in the questionnaire (details about each variable can be found in table 4).

Table 3

State demographics

| <i>State</i> | | | <i>State</i> | | |
|---------------|----|-------|----------------|----|------|
| Alabama | 5 | 1.7% | Montana | 1 | 0.3% |
| Alaska | 2 | 0.7% | Nebraska | 3 | 1% |
| Arizona | 6 | 2.1% | Nevada | 1 | 0.3% |
| Arkansas | 3 | 1% | New Hampshire | 1 | 0.3% |
| California | 48 | 17.2% | New Jersey | 5 | 1.4% |
| Colorado | 4 | 1.4% | New Mexico | 1 | 0.3% |
| Connecticut | 5 | 1.4% | New York | 26 | 9.3% |
| Delaware | 2 | 0.7% | North Carolina | 8 | 2.8% |
| Florida | 17 | 6.1% | North Dakota | 1 | 0.7% |
| Georgia | 12 | 4.3% | Ohio | 5 | 1.4% |
| Hawaii | 3 | 1% | Oklahoma | 2 | 0.7% |
| Idaho | 1 | 0.3% | Oregon | 1 | 0.3% |
| Illinois | 7 | 2.5% | Pennsylvania | 5 | 1.4% |
| Indiana | 12 | 4.3% | Puerto Rico | 1 | 0.3% |
| Iowa | 2 | 0.7% | South Dakota | 2 | 0.7% |
| Kansas | 1 | 0.3% | Tennessee | 13 | 4.6% |
| Kentucky | 1 | 0.3% | Texas | 17 | 6.1% |
| Louisiana | 2 | 0.7% | Utah | 4 | 1.4% |
| Maryland | 4 | 1.4% | Vermont | 2 | 0.7% |
| Massachusetts | 10 | 3.5% | Virginia | 6 | 2.1% |

| | | | | | |
|-------------|---|------|------------|---|------|
| Michigan | 8 | 2.8% | Washington | 8 | 2.8% |
| Minnesota | 3 | 1% | D.C | 1 | 0.3% |
| Mississippi | 2 | 0.7% | West | 1 | 0.3% |
| Missouri | 2 | 0.7% | Virginia | | |
| | | | Wisconsin | 1 | 0.3% |

* $N= 278$

2.3.1 Manipulation

Before talking about the manipulation, it is important to point out that the participant's response to the question "what state do you consider your home state" is integrated into the manipulation. As previously mentioned, participants were randomly assigned to one of three different conditions and then asked to answer a follow-up question (if not assigned to the control condition).

2.3.2 Descriptive social norms (manipulation check)

The first item in the questionnaire (after the covariates and demographic questions) was descriptive social norms. Descriptive social norms were measured on a 5-point scale (1 being completely false and 5 completely true) with a total of 5 items. Examples of questions include "I think my close circle is sympathetic to the housing movement" and "I think my close circle would actively participate in the housing movement". Adapted from a scale made by Lay and colleagues (Lay et al, 2020). Upon performing a reliability test we found that it had a more than acceptable reliability score ($\alpha = .83$). Additionally, all items were presented in a fixed pattern for all participants.

2.3.3 Moral convictions

This variable was measured on a 5-point scale (1 totally disagree to 5 completely agree) with a total of 6 items. Example questions include "I believe that my opinion about increasing rents has a moral character" and "My opinion about rising rents reflects an important part of who

I am”. Adapted from a scale made by van Zomeren and colleagues (van Zomeren et al, 2018). Then after performing a reliability test it resulted in an acceptable reliability score ($\alpha = .85$).

1.3.4 Perceived injustice + Anger

Perceived injustice was measured on a 5-point scale (1 totally disagree to 5 completely agree) with a total of 4 items adapted from a scale by Verbena and colleagues (Verbena et al, 2023). Example questions include “At the moment I feel like rent prices are socially unfair” and “At the moment I feel like the rise of rent is justified [reverse scored]”. Anger was then measured on a 5-point scale (1 “not” to 5 “extremely”) with a total of 3 items. Example questions include “Considering the current housing situation in the USA, I am ____ Angry about rent prices”, and “Considering the current housing situation in the USA, I am ____ Outraged by rent prices”. These items were adapted from a scale by van Zomeren and colleagues, along with literature about Group based Anger (van Zomeren et al, 2018). For perceived injustice and anger, when performing a reliability test for both it resulted in an acceptable score for perceived injustice ($\alpha = .76$) and another acceptable score for anger ($\alpha = .90$).

1.3.5 Perceived Efficacy

These items were measured on a 5-point scale (1 totally disagree to 5 completely agree) with a total of 4 items. Example items include “As someone from [state selected by participant at beginning of the survey], I think we can change the increase in rent prices’ and “As someone from [state selected by participant at beginning of the survey], we can successfully defend our interests together”. Adapted from a scale made by Odağ and colleagues (Odağ et al, 2016). For perceived efficacy, when running factor analysis with a varimax rotation, we found there to be only one factor on the scree plot that had an Eigenvalue that was greater than one, meaning there

was a single component. That was also confirmed by the scree-plot analysis. Then after we ran a reliability test and it resulted in an acceptable score ($\alpha = .90$).

1.3.6 Politicized identification + Identification with the effected group

Politicized identification was measured on a 5-point scale (1 totally disagree to 5 completely agree) with a total of 4 items. Example items include “I see myself as a housing movement activist” and “I am proud of the group of activists who belong to the housing movement”. Adapted from a scale made by Odağ and colleagues (Odağ et al, 2016). Then identification with the effected group was measured on a 5-point scale (1 totally disagree to 5 completely agree) with a total of 4 items. Example items include “I identify with the people from [state selected by participant at beginning of the survey] affected by the housing crisis” and “I feel strong ties with the group of people from [state selected by participant at beginning of the survey] who are affected by the housing crisis”. Items were adapted from a scale made by van Zomeren and colleagues (van Zomeren et al, 2018). When performing the reliability test for politicized identification it resulted in an acceptable alpha score ($\alpha = .87$). On the other hand, the score for identification with the effected group resulted in an alpha score that was not within the acceptable range ($\alpha = .654$). The item that was causing reliability issues was the final item, which needed to be recoded because it’s directionality was the opposite of the 3 other questions, but even that was not enough to gain an acceptable reliability score. Upon removal of this item, the final number of items was three and the reliability score fell within the acceptable range ($\alpha = .86$).

2.3.7 General action + Concrete collective action

Before going over the details of how we measured collective actions, it is important to mention that in this study there were 4 main measures of collective action. The first section covers general collective action while the second section covers 3 different types of collective action. These three areas include conventional actions, violent behaviors, and non-violent but non-normative behaviors.

General willingness to participate in collective actions was measured on a 5-point scale (1 totally disagree to 5 completely agree) with a total of 4 items. Example items include “I am willing to dedicate some time to participate in the housing movement” and “I am willing to spend some of my energy on the housing movement”. Items were adapted from a scale made by Franc and colleagues (Franc et al, 2023). Intentions to participate in more specific actions were measured on a 5-point scale (1 extremely unlikely to 5 extremely likely) with a total of 12 items. Example items include “I am willing to Express my opinion about the housing movement on social media” and “I am willing to Participating in a protest that escalates into a physical confrontation”). Items were adapted from a scale by Carvone and colleagues (Cervone et al, 2023). Another thing to consider is that in this study, much like Cidades’s experiment, we also make a distinction between 3 different aspects for the 12 specific collective actions. The three groups consist of conventional actions (e.g., signing a petition), non-violent but non-normative behaviors (e.g., occupy an empty building) and violent behaviors (e.g., fighting with the police). The order in which participants were asked about their willingness to participate in these kinds of actions was fixed and began with General CA, conventional CA, non-violent non-normative CA, and lastly violent CA. With the general readiness for CA and the three different types of specific CA we measured with 4 different forms of collective action (Cidades, 2024). Then when

performing a reliability test for all 4 measures, general action resulted in an acceptable alpha score ($\alpha = .90$) along with another acceptable score from conventional collective action ($\alpha = .91$), then another from non-normative collective action ($\alpha = .93$), then lastly one more from violent collective action ($\alpha = .90$).

Table 4*Correlations +
reliability*

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---------------------------|------|------|------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Descriptive norms | - | - | - | | | | | | | | | | | | | | | |
| 2. Trust | 2.54 | 0.82 | .00 | (.81) | | | | | | | | | | | | | | |
| 3. Political Orientation | 5.45 | 3.13 | .00 | .43** | - | | | | | | | | | | | | | |
| 4. Perceived Status | 56.5 | 20.6 | -.05 | .11 | .18** | - | | | | | | | | | | | | |
| 5. Satisfaction | 2.16 | 1.10 | .01 | .66** | .56** | .17** | (.87) | | | | | | | | | | | |
| 6. Manipulation check | 3.11 | 0.86 | .14* | .09 | -.10 | .00 | .03 | (.83) | | | | | | | | | | |
| 7. Pol ID | 2.93 | 1.02 | .11 | -.06 | -.17** | -.09 | -.07 | .56** | (.87) | | | | | | | | | |
| 8. Non-pol ID | 3.28 | 1.11 | .07 | -.13* | -.17** | -.26** | -.13* | .49** | .58** | (.86) | | | | | | | | |
| 9. Morality | 3.13 | 0.91 | .04 | -.23** | -.23** | -.07** | -.25** | .15* | .30** | .18** | (.85) | | | | | | | |
| 10. Emotional Injustice | 3.29 | 1.14 | .14* | -.17** | -.20** | -.20** | -.24** | .33** | .51** | .52** | .28** | (.90) | | | | | | |
| 11. Non-Emotion Injustice | 3.68 | 0.89 | .03 | -.26** | -.39** | -.22** | -.38** | .25** | .39** | .41** | .30** | .56** | (.76) | | | | | |
| 12. Efficacy | 3.31 | 1.00 | .09 | .00 | -.11* | -.11* | -.03 | .40** | .51** | .42** | .17** | .31** | .29** | (.90) | | | | |
| 13. CA General | 3.10 | 1.08 | .14* | -.07 | -.24** | -.09 | -.15** | .52** | .71** | .55** | .29** | .39** | .39** | .52** | (.90) | | | |
| 14. CA Conventional | 3.13 | 1.01 | .10 | -.08 | -.25** | -.11 | -.20** | .54** | .73** | .55** | .36** | .46** | .40** | .52** | .80** | (.91) | | |
| 15. CA non-normative | 2.03 | 1.04 | .04 | .01 | -.07 | -.04 | -.03 | .29** | .46** | .31** | .17** | .30** | .17** | .28** | .44** | .55** | (.93) | |
| 16. CA violent | 1.59 | 0.92 | .06 | .17** | .03 | -.01 | -.15* | .21** | .36** | .18** | .03 | .19** | .04** | .17** | .28** | .34** | .78** | (.90) |

Reliability scores on diagonal

* $p < .05$ ** $p < 0.01$

Chapter 3

Results

3.1. Initial Analysis

The latest version of SPSS (SPSS 29) was utilized to conduct all analysis before the main mediation analysis. Such tests included reliability analysis, UNIANOVA tests for seeing if the manipulation (of descriptive social norms) showed any variation between the three conditions, and lastly statistical correlations were used to see the overall correlation between the main variables in our study. These variables included the measures commonly associated with collective action (trust, political orientation, satisfaction, perceived status), both the manipulation and manipulation check of descriptive social norms, SIMCA variables (injustice, morality, efficacy, identity), and different forms of collective action (general, conventional, non-normative, and violent). All of these statistical processes were used with a bootstrapping technique with confidence intervals at 95% and with a total of 1000 bootstrap samples, which are the parameters that are suggested by the literature (i.e., Hayes, 2018). Table 4 gives a more detailed display of the aforementioned correlational processes that happened after data imputation mentioned in section 3.1.1.

3.1.1. Missing Data Imputation

Prior to executing all functions in the “Results” section, missing data imputation was conducted to maintain a cleaner data set. After applying the filter/exclusion criteria described previously, the data was analyzed for missing values using SPSS 29. Additionally, previous to the missing values analysis for measuring gender, all options other than male or female were counted as missing variables, this was done because there were not enough participants in the

other categories. The same is true for other covariate variables (satisfaction, education, status, trust) when a “does not apply” response was given. While including all available data in the analysis, Little’s missing completely at random (MCAR) test (Little & Rubin, 2019) showed that data was missing completely at random, as Little’s test was not significant $\chi^2 (60.273, N = 322) p = .358$. With this in mind, missing values were replaced by the Expectation Maximization method (EM) of SPSS, which significantly increases the likelihood of the imputed value with a 2-step iterative model (Graham, 2009). If we were to use a deletion-based treatment it would have caused us to lose valuable data from certain participants, which in turn would have compromised the statistical validity of our experiment (Lang & Little, 2018) along with issues with data interpretation. The Data in this study was imputed at the item level.

3.1.2. Factor analysis

Our study makes a differentiation between conventional, non-normative and violent forms of collective action. Additionally, just like Cidades, when we used the Maximum Likelihood Extraction method in SPSS with a varimax rotation on intentions to participate in concrete collective actions, we found that the twelve items measured only loaded on two factors with Eigenvalues bigger than one values as opposed to the expected 3 factors. That result was confirmed by looking at the scree-plot analysis. In Cidades study they did a confirmatory factor analysis via AMOS29 and were able to conclude there were indeed three factors to this variable that consisted of 12 items, thus justified the use of the three separate factors in this measure (Cidades, 2024., p. 33).

3.1.3. Correlations

As shown in table 4, the majority of the variables associated with the SIMCA model (injustice, morality, efficacy, identity) were all significantly correlated with one another. On the

other hand, the manipulation of descriptive norms (1 equaling high participation, 0 equaling the control, and -1 equaling low participation) had very little significant correlations. There was no correlation of the manipulation of descriptive norms with the remaining SIMCA measures with the exception of Injustice (anger). On the other hand, descriptive norms (not the manipulation) significantly correlated with the SIMCA variables in addition to the various forms of collective action and the variables associated with collective action (trust, political orientation, satisfaction, perceived status). Additionally, these variables that are associated with collective action resulted in some correlations with the SIMCA variables, but many less with the CA variables, and in the case of satisfaction, there were many negative correlations. Additionally, the only variables the manipulation of descriptive social norms had significant correlations with were the manipulation check, emotional injustice, and general collective action. see Table 4 for more detailed results.

3.1.4. Manipulation check

Prior to testing the manipulation, the means of each condition was used to see if there was a linear increase from the norm condition associated with low participation ($M = 2.97, SD = 0.92$) to the control condition ($M = 3.05, SD = 0.77$) to the norm condition associated with high participation ($M = 3.30, SD = 0.87$). The purpose of this analysis is to see if the manipulation of descriptive norms could be analyzed as a linear variable. Since from this analysis it seems to be the case, a one-way ANOVA with a linear contrast was used to show that there was a significant difference between the conditions and their perceptions of their “inner circle” participation from the low participation to the high participation, $F(2,691) = 3.54, p = .030$. and with a contrast analysis in the linear section resulted in a significant P value $p = .011$.

Additionally, another test (Scheffe Post-hoc analysis) showed that participants in the norm condition associated with high participation reported higher values of their “inner circle”

participation than in the norm condition associated with low participation (95% *CI* [0.06, 0.57]. On the other hand, no differences were found between control and high participation (95% *CI* [-0.48, 0.00] in addition to the differences between control and low participation norm conditions (95% *CI* [-0.16, 0.33]. Another thing to consider is that while we found some evidence of the manipulation being successful, these results show that the manipulation was not able to tell the difference between the effects of the high participation norm and the low-participation norm, when compared to the control condition. Since we did not hypothesize anything for this specific situation, we decided to carry out the analysis with the linear contrast model.

3.2 Mediation results

In our study, we used SPSS AMOS to create a model that used the concept of descriptive social norms and various forms of collective action as the main effect, and then we used the SIMCA model as mediators to see what the underlying effects of the main relationship might be. To see the model see Figure 1. In AMOS, we used a path model (similar model used by Cidades, but with some slight changes) that predicted that both forms of identification (politicized and non-politicized), in addition to moral convictions, predict the proposed forms of collective action directly and indirectly, through efficacy and injustice. The two identification dimensions (politicized and non-politicized) and morality were expected to be predicted by the descriptive norms manipulation. The model also predicted effects of all four variables associated with collective action (trust, satisfaction, status, political orientation) on all SIMCA variables and measures of collective action, which can be found in Appendix I. Correlations between all forms of collective action (general, conventional, non-normative, violent) were used, in addition to correlations between the identification measures (politicized and non-politicized) and of both of them with morality, between the two injustice measures (emotional and non-emotional) and of

both of them with efficacy, and among the four covariates (Cidades, 2024). An important detail to mention is that while the mediation path model for this study was very similar to the one used by Cidades, there were some differences made. We added paths from the manipulation on the second-level mediators as well (i.e. Injustice measures and efficacy). Because of the correlation between the contrast coded manipulation and injustice measures, we decided to modify the model by including these paths. These modifications are not found in figure 1, but they can be found in the image of our path model (see appendix I). Lastly, according to Byrne, the results from looking at the model fit results, this model was incredibly well fitted for the data ($\chi^2 = 1.108$, $df = 4$, $p = .98$; $CFI = 1$, $GFI = .999$, $RMSEA < .000$) (Byrne, 2010).

Total Effect of descriptive norms and collective actions

For the analysis of total effects, H1 was not fully supported. The results indicated that there was only one significant total effect of descriptive norms on 1 of the four collective action measures, thus H1 was partly supported (see Table 5.1).

Table 5.1

Total effects of descriptive norms on collective action intentions (N=278)

| Hypothesis | Path between variables | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|------------------------|------------------|----------|-----------|---------------|
| H1a | Descriptive norms | General CA | 0.20** | 0.08 | [0.05,0.34] |
| H1b | | Conventional CA | 0.12 | 0.07 | [-0.02,0.26] |
| H1c | | Non-normative CA | 0.05 | 0.08 | [-0.10,0.19] |
| H1d | | Violent CA | 0.07 | 0.07 | [-0.06,0.20] |

* $p < .05$ ** $p < .01$

Overall Indirect Effect

The overall indirect effects of descriptive norms on all forms of collective action were significant, or in other words, the indirect effect of all SIMCA variables working together. With this in mind, H2 was fully supported. General CA ($B = 0.106$, $SE = 0.06$, $CI [-0.02, 0.20]$, $p = .07$) had the second strongest result, conventional CA ($B = 0.115$, $SE = 0.06$, $CI [0.00, 0.22]$, $p = .04$) had the strongest result, non-normative CA ($B = 0.090$, $SE = 0.04$, $CI [0.02, 0.17]$, $p = .02$) had the third strongest result, and violent ($B = 0.059$, $SE = 0.03$, $CI [0.00, 0.12]$, $p = .04$) had the weakest result out of the 4 collective action intentions. (see Table 5.2).

Table 5.2

General indirect effects (N=278)

| Hypothesis | Path between variables | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|------------------------|------------------|----------|-----------|---------------|
| H2a | Descriptive norms | General CA | 0.11* | 0.06 | [-0.02, 0.21] |
| H2b | | Conventional CA | 0.12* | 0.06 | [0.00, 0.22] |
| H2c | | Non-normative CA | 0.09* | 0.04 | [0.02, 0.17] |
| H2d | | Violent CA | 0.06* | 0.03 | [0.00, 0.12] |

Effects of Descriptive Norms on Identification and Morality

In some level of concordance with H3, the manipulation of descriptive norms marginally influenced (approaching significance) politicized identity ($p = .06$) (H3a) but did not result in a significant effect on morality ($p = .35$) (H3c). Additionally, there was no significant effect on non-politicized identification ($p = .23$), leading to H3b not being supported (Table 5.3).

Table 5.3*effects of descriptive norms on identification and morality (N=278)*

| Hypothesis | Paths between | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|-------------------|--------------------|----------|-----------|---------------|
| H3a | Descriptive norms | Politicized ID | 0.14 | .07 | [-0.00,0.26] |
| H3b | | Non-Politicized ID | 0.09 | .08 | [-0.07,0.25] |
| H3c | | Morality | 0.06 | .07 | [-0.06,0.20] |

p* < .05 *p* < .01*Preliminary analysis of the SIMCA model*

Politicized identification and non-politicized identification had a significant effect on all measures including both measures of injustice (emotional and non-emotional), as well as on efficacy and the rest of the SIMCA variables. However, when morality was tested in the same way, it only resulted in 2 significant effects on injustice and anger. Morality had no significant results for all forms of collective action intentions. Efficacy had significant effects on general and conventional collective action only, and injustice (emotional) had no significant effects on all forms of CA (Table 5.4).

Table 5.4*SIMCA variable relationships (N=278)*

| Paths between variables | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|-------------------------|------------------|----------|-----------|---------------|
| Politicized ID | Injustice- Anger | 0.31** | 0.07 | [0.17,0.45] |
| | injustice | 0.18** | 0.06 | [0.07,0.29] |
| | Efficacy | 0.38** | 0.07 | [0.24,0.50] |
| | General CA | 0.54** | 0.07 | [0.40,0.67] |
| | Conventional CA | 0.51** | 0.06 | [0.40,0.62] |
| | Non-normative CA | 0.39** | 0.08 | [0.24,0.55] |
| Non-Politicized ID | Violent CA | 0.34** | 0.07 | [0.21,0.47] |
| | Injustice- Anger | 0.30** | 0.07 | [0.17,0.43] |
| | injustice | 0.15* | 0.05 | [0.05,0.26] |
| | Efficacy | 0.17** | 0.06 | [0.05,0.30] |

| | | | | |
|------------------|------------------|--------|------|---------------|
| | General CA | 0.17** | 0.06 | [0.06,0.28] |
| | Conventional CA | 0.14** | 0.05 | [0.05,0.23] |
| | Non-normative CA | 0.05 | 0.07 | [-0.10,0.18] |
| | Violent CA | -0.01 | 0.06 | [-0.12,0.10] |
| Morality | Injustice- Anger | 0.15* | 0.08 | [0.01,0.32] |
| | injustice | 0.10* | 0.06 | [0.00,0.21] |
| | Efficacy | 0.05 | 0.06 | [-0.06,0.16] |
| | General CA | 0.09 | 0.06 | [-0.02,0.20] |
| | Conventional CA | 0.14** | 0.05 | [0.05,0.24] |
| | Non-normative CA | 0.05 | 0.07 | [-0.10,0.20] |
| | Violent CA | -0.03 | 0.08 | [-0.19,0.10] |
| Injustice- Anger | General CA | -0.07 | 0.05 | [-0.18,0.04] |
| | Conventional CA | 0.01 | 0.05 | [-0.08,0.10] |
| | Non-normative CA | 0.12 | 0.07 | [-0.01,0.27] |
| | Violent CA | 0.11 | 0.07 | [-0.01,0.24] |
| injustice | General CA | 0.06 | 0.06 | [-0.04, 0.18] |
| | Conventional CA | -0.00 | 0.06 | [-0.11, 0.11] |
| | Non-normative CA | -0.13 | 0.08 | [-0.30,0.03] |
| | Violent CA | -0.09 | 0.09 | [-0.25,0.08] |
| Efficacy | General CA | 0.16** | 0.06 | [0.05,0.28] |
| | Conventional CA | 0.17** | 0.05 | [0.07,0.26] |
| | Non-normative CA | 0.06 | 0.06 | [-0.06,0.18] |
| | Violent CA | -0.04 | 0.05 | [-0.15,0.06] |

* $p < .05$ ** $p < .01$

Indirect Effects of Descriptive Norms

Since there was no effect of the descriptive norm manipulation on non-politicized identification and moral convictions, H5 and H6 were not supported. However, since there was a marginal indirect effect of Politicized ID via the direct effect between Politicized ID and general collective action(bypassing efficacy and the injustice measures), H4 is partly supported (Table 5.5).

Table 5.5*Indirect effects of descriptive norms on collective action intentions via Politicized ID (N=278)*

| Hypothesis | Path between variables | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|------------------------|-----------------------------|----------|-----------|---------------|
| H4 | Descriptive norms | -<Pol ID>- General CA | 0.08 | 0.04 | [-0.00,0.15] |
| H4 | Descriptive norms | -<Pol ID>- Conventional CA | 0.07 | 0.04 | [-0.00,0.14] |
| H4 | Descriptive norms | -<Pol ID>- Non-normative CA | 0.05 | 0.03 | [-0.00,0.12] |
| H4 | Descriptive norms | -<Pol ID>- Violent CA | 0.05 | 0.03 | [-0.00,0.10] |

p* < .05 *p* < .01

The estimates of the indirect effects (the values listed below H7), which were the only two effects that were close to being significant (still not significant), demonstrated that there were two marginal chain mediation effects, which marginally increased politicized identification via manipulation of descriptive norms, which then was associated with an increase to efficacy, which finally would predict general CA ($B = 0.009$, $SE = 0.006$, $[0.00, 0.02]$, $p = .06$). The other process was the same, but the final outcome variable was conventional CA ($B = 0.009$, $SE = 0.006$, $[0.00, 0.02]$, $p = .06$). No other of the chain-mediations predicted in H7, H8 or H9 were close to being significant (see annex J and k). Overall, the main significant findings of this study can be found in the significant Total and general indirect effects along with the fact that we were unable to find any direct effects of norms on CA (see table 5.6).

Table 5.6*Total effects of descriptive norms on collective action intentions (N=278)*

| Hypothesis | Path between variables | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|------------------------|------------|----------|-----------|---------------|
| H1a | Descriptive norms | General CA | 0.20** | 0.08 | [0.045,0.34] |

General indirect effects (N=278)

| Hypothesis | Path between variables | | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|------------------------|------------|----------|-----------|---------------|
| H1a | Descriptive norms | General CA | 0.11* | 0.06 | [-0.02, 0.21] |

| | | | | |
|-----|------------------|-------|------|--------------|
| H1b | Conventional CA | 0.12* | 0.06 | [0.00, 0.22] |
| H1c | Non-normative CA | 0.09* | 0.04 | [0.02, 0.17] |
| H1d | Violent CA | 0.06* | 0.03 | [0.00, 0.12] |

Effects of descriptive norms on identification and morality (N=278)

| Hypothesis | Paths between | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|------------|------------------------------------|----------|-----------|---------------|
| H3a | Descriptive norms → Politicized ID | 0.14 | .06 | [-0.00,0.26] |
| H3b | Non-Politicized ID | 0.08 | .07 | [-0.07,0.25] |
| H3c | Morality | 0.06 | .06 | [-0.06,0.20] |

* $p < .05$ ** $p < .01$

Chapter 4

Discussion

4.1. General Discussion

As mentioned, many times before, this study is a replication of the study by Cidades, and while both studies found some similar results, there were also some major differences that could be attributed to the differing contexts. Agostini and van Zomeren mention that the concept of descriptive social norms is often very context specific, and it seems this notion is very relevant when comparing results from this study and the study by Cidades (Agostini & van Zomeren, 2021). In the end, both studies attempted to take a closer look into how people interpret and react to ideas regarding the future participation in the housing movement, as well as what may be the key aspects that cause people to engage in different forms of action. Cidades's study looked at the Portuguese context and our study looked at the American context, thus we believe that the present study contributes to both a better understanding of the housing movement as well as to the literature of CA with the possible addition of descriptive norms to future research.

This study attempted to see what factors contribute to the relationship between social norms (descriptive social norms) and all forms of tested collective actions. Throughout this study we have concluded that some of our hypotheses were supported throughout our analysis, some were either only partly supported or fully not supported. This study brings four major findings. First (A), there was a single significant total effect between descriptive norms on general CA intention. Secondly (B) there was a general indirect effect between descriptive norms via the combination of all SIMCA factors. Thirdly (C) we found very little significant indirect effects when looking at the SIMCA variables on their own, and lastly (D) the Dual-Chamber SIMCA was not supported (with the exception of some marginal results) for the housing movement.

A) In this study we were able to find a single significant total effect between descriptive social norms and general collective action. This is supported by evidence that suggests that descriptive norms have the potential to have more significance when the social norm is seen as being prevalent among people that individuals establish close ties with (Glynn et al., 2009; Wang & Chang, 2013). This can be because there is some level of trust (Sicilia et al., 2020), or possibly because they desire some sort of conformity to those around them (Rimal & Real, 2005). Another avenue to consider is that their membership to said group is a significant aspect of their identity, and to go against the group's action would put their identity into question (e.g., Rinker & Neighbors, 2014). While our study was able to find a significant total effect, the study by Cidades's was not. We think a potential reasoning for this could be from how this study handled the manipulation. For example, we attempted to make the manipulation more personal and to instill a deeper feeling that those who are from your "home state" are actually participate in collective action. Cidades's study compared Portugal's level of activity to the activity of other countries, while this study compared people "home state" to other states in the USA. Our intension was to try and make the social information (participate less/ participate more) seems as if there was some real weight to it. Meleady and colleagues (2013) are a huge inspiration behind how we and Cidades's manipulated social norms with the idea of participants "imagining their close circle", and in the case of this study, the people of the "home state" (Meleady et al., 2013). Lastly, it is important to acknowledge that Countries have so many different regions and sections that may or may not have special meanings to each individual and by trying to narrow the scope of comparison, we attempted to try and use people's (as Rinker & Neighbors mentioned) identification to their "home state" as a means to make our manipulation seem more real.

B) The overall significant effect that resulted from this study further strengthens our reasoning about the relationship between descriptive norms and CA through the Dual-Chamber SIMCA model. This provides further evidence of the model for future studies looking to analyze the relationship between CA and the SIMCA model. Analyzing all three elements of social norms, collective action, and SIMCA leads to a clearer picture as the mediation variables (SIMCA) allows us to see what underlying factors contribute to the relationship between descriptive social norms and collective action.

C+D) The norm of High participation had an effect on politicized identification but resulted in very few other significant results in regard to the other variables. Additionally, the chain mediation effect only resulted in marginal results through politicized identification and efficacy on general CA and conventional CA. These results are supported by the literature, but our other non-significant results by no means reflect it (Rathbone et al., 2023; Postmes et al., 2005). Participants in the condition associated with high participation reported higher values of politicized identification, resulting in an increased willingness to participate in the housing movement. This was done by triggering specific SIMCA variables. However, when they acted as mediators individually in this relationship, they did not result in any kind of significant indirect effect.

While politicized identification and moral convictions, seem to be the strongest the strongest predictors of CA according to the literature, (Agostini & van Zomeren, 2021; Stürmer & Simon, 2004; van Zomeren et al., 2018), our findings found that non-politicized identification, efficacy, injustice, and morality did not live up to these standards. Additionally, Morality did not seem to play as big of a role in this context (the USA context), but politicized identifications still seemed to exhibit strong effects. When looking at the indirect effects predicted with a three-path

mediation model, we found there was not enough significant data to show any support, showing that the Dual Chamber SIMCA model (Agostini & van Zomeren, 2021) had no clear impact when it came to the housing movement in the USA.

4.2. Limitations and Future Directions

A major concern for this study was how weak the majority of the indirect effects were. While we found some significant total and indirect effects, they tended to be on the weaker side. While, we found significant indirect effects via general SIMCA variables, when looking at the variables individually most of them did not result in significant indirect effects. Lastly, almost all total effects involving descriptive social norms were not significant with the exception of the relationship between descriptive social norms and general collective action.

Next is the issue of our sample. Firstly, our initial sample size was 462 participants, which based on the study by Cidades would have been a proper number of participants for a study of this size, but much as the same as Cidades, we had to exclude many participants from the final sample and our final sample resulted in 278. Considering Cidades had a final number of 330 participants, and they also mentioned number of participants being a problem in their limitations section, I think this current study suffers even more from participant exclusion.

Additionally, regarding the participants, we think future studies about the housing movement in the USA should try to have a wider demographic. A large majority of our participants tended to be highly educated and left leaning. Future studies may want to have an equal distribution of participants from every state and territory to get a better representation of the USA. The majority of participants came from the most populous states in the USA (California, Texas, New York, etc.), while states with lower population (Iowa, Kansas, Arizona, etc.) got only one or two participants representing that state. With a wider representation of each

state hopefully the demographics of the participants won't be so skewed and better represent the entire USA. Another factor that may have affected the demographics of our participants was the use of online websites to gather participants. The majority of people who use websites such as Survey Circle, Poll Pool, and Survey Swap are fellow undergraduate or masters' students who are also trying to find participants for their study. This is a possible factor that may explain the skewed demographics.

Next. An important area to rethink in future studies is the manipulation of descriptive social norms. Compared to the study by Cidades, the manipulation used in the study was a little more in depth in terms of trying to instill a sense of social identity and to have the participants identify with said specific group (I.e. home state) to a greater extent. In the study by Cidades, they mention in their limitations section that they would have liked to include a section of their survey that asked the participants some geographical questions and seeing how that might affect people's responses to future questions. They specifically mentioned how people from rural and large cities might respond differently and we think this study would benefit from this inclusion as well. While this study attempts to partly remedy this problem, it was still highly limited. The only question that was asked regarding geography was at the beginning of the survey that asked the participant what their "home" state was. This was purely used as a criteria exclusion (if they chose the "I do not consider any state to be my home") and to possibly make the manipulation more effective (the state they chose was implemented into the manipulation). Future studies could take this concept even further in order to try and make the manipulation more effective. Of course, this study was able to conclude that the manipulation of descriptive social norms was significant, but it was fairly weak. Not only was the manipulation somewhat weak in terms of statistical analysis, but some of the written responses from participants clearly showed they did

not believe the information that was shown to them. Some of these responses included “Do not make sense. Relatively, the housing prices in Nebraska is lower than in other states” or “I don't think is true”. These kinds of responses were infrequent, but it is important to acknowledge some participants outright did not believe what the manipulation had to say. Many participants talked about political climates and housing situations in their state so it could be that the manipulation could have been more effective in convincing people that their state participated more or participated less than other states. Perhaps the scope of future studies needs to be even more narrow and focus on one state as opposed to the USA as a whole considering how radically different the economic and political climate of each state can be. We think there are many different approaches to how to manipulate descriptive social norms, and it is encouraging that a study as small as this was able to at least get some significant results even if the effect wasn't large.

4.3. Conclusion

While the findings of this study may be somewhat limited and confined, we still believe it contributes to the ever-growing literature behind the relationship between descriptive social norms and collective action. This study also seems to support the idea that the struggle for housing is not specific to one part of the world seeing as this study is a replication, but in a different context. In some way this study can act as a proof of concept that this model can work in both the European and North American context.

Perhaps this will encourage other studies to apply this model to other regions of the world or to further explore both Europe and North America. For example, in the original study in Portugal, Moral convictions seemed to play a significant role in the relationship between descriptive social norms and collective action, but in the USA context that role almost seemed

completely absent. It was very interesting seeing how both studies shared many similarities, while also having some variation in their results. This study really does show how important context is when it comes to doing research and how it can greatly shape the results. We believe this study pushes further the general understanding of what motivates people to take part in collective action and to see what underlying mechanisms foster that relationship.

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Appendix A- Informed Consent

Consent information

This study is part of a research project taking place at Iscte – (Instituto Universitário de Lisboa, Portugal). The study aims to investigate collective actions taking place in The United States, with the movement for affordable housing as the specific example. Your participation in the study, which is highly valued as it will contribute to the advancement of knowledge in this field of science, consists of answering a few questions about your personal vision and perspective on the social movement for housing. The survey takes between 10 and 15 minutes to complete. As a reward for your participation, we offer you the chance to take part in a prize draw among all our study participants in which one winner will win a 50\$ Walmart gift card. You can take part in the study without taking part in the draw, but if you decide to take part in the draw, we will request that you provide an Email Address. If you are interested, at the end of the questionnaire you will be redirected to another page where you can provide your details. Your contact details are collected after participation in a separate form and cannot be linked to your answers in the questionnaire. Your answers are therefore anonymized. Iscte is the controller of your personal data that are collected and processed exclusively for the purposes of the study, legally based on Article 6 (1) (a) of the General Data Protection Regulation

The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal Your personal data will be kept for up to 3 months before the winner of the lottery is chosen, after which they will be destroyed or anonymized, with their anonymity being assured in the study's results, being disclosed only for purposes of statistics, teaching, communication in scientific meetings, books or articles. There are no expected significant risks associated with

participation in the study. Iscte does not disclose, or share with third parties, information related to its personal data. Iscte has a Data Protection Officer who may be contacted by e-mail: dpo@iscte-iul.pt. If you consider this necessary, you also have the right to submit a complaint to the Portuguese Data Protection Authority (CNDP). This study is conducted by Kyler Haskins (hksry@iscte-iul.pt) and Sven Waldzus (sven.waldzus@iscte-iul.pt), who you may contact to clear up any doubts, share comments or exercise your rights in relation to the processing of your personal data. You may use the contact indicated above to request access, rectification, erasure or limitation of the processing of your personal data. Your participation in this study is confidential. Your personal data will always be processed by authorized personnel bound to the duty of secrecy and confidentiality. Iscte assures the use of appropriate techniques, organizational and security measures to protect personal information. All investigators are required to keep all personal data confidential. In addition to being confidential, participation in the study is strictly voluntary: you may choose freely whether to participate or not. If you have decided to participate, you may stop your participation and withdraw your consent to the processing of your personal data at any time, without having to provide any justification.

I declare that I have understood the aims of what was proposed to me, as explained by the investigator, that I was given the opportunity to ask any questions about this study and received a clarifying reply to all such questions. I accept participating in the study and consent to my personal data being used in accordance with the information that was given to me.

Yes, I accept

No, I do not accept

Appendix B- Demographics and Covariates

Do you currently reside within the USA?

- Yes
- No

State

Which do you consider to be your home state?

Variáveis Demográficas

Please indicate your gender

- Female
- Male
- Non binary
- Other
- Rather not say

Please indicate your age range

- Between 18 and 24 years
- Between 25 and 34 years
- Between 35 and 44 years
- Between 45 and 54 years
- Between 55 and 64 years
- 65+ years
- Prefer not to say

Please indicate your Highest level of education

- Elementary
- Middle school
- Highschool
- College degree
- Masters degree
- Doctoral degree
- Other, what kind?

Please indicate your social status where 0% means less money; less education; lower paying jobs and 100% meaning individuals that have more money, have more education and higher paying job

| | |
|--|---|
| 0=very low | 100=very high |
| 0 10 20 30 40 50 60 70 80 90 100 | |
| Social status | <input style="width: 50px; height: 15px;" type="text"/> |

Please state your Political orientation: 0 meaning more left leaning and 10 more right leaning politically

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-------------------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------|--|-----------------------------|--|-------------------------|
| | 0= most left leaning | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10=Most right leaning | | Prefer not to say |
| Political orientation | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> | | <input type="radio"/> |

Next, please tell us the degree of confidence you have in the institutions mentioned below.

| | completely distrust | Partly distrust | Neither trust or distrust | somewhat trust | completely trust |
|---------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| The police | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Political parties | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Legislators | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The Judicial system | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Think about the American government and American democracy. Then, tell us how much you agree or disagree with the following statements

| | completely disagree | somewhat disagree | Neither agree or disagree | agree somewhat | completely agree |
|--|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| Overall, I feel satisfied with the American government | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Overall, I feel satisfied with American democracy | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Appendix C- High Participation Condition

Next, you will read an excerpt about evidence about the social movement for housing, please respond carefully:

People from across all states in the USA have taken part in collective action demanding lower rents and demonstrating their discontent with their government. Recent data has shown that $\{q://QID1320227029/ChoiceGroup/SelectedChoices\}$ has had higher levels of participation in the social movement for housing, compared to other states in the USA

Please briefly give us your opinion on the reasons why the people in $\{q://QID1320227029/ChoiceGroup/SelectedChoices\}$ tend to participate more in the social movement for housing compared to other states. Remember that there are no right or wrong answers.

Appendix D- Low Participation Condition

Next, you will read an excerpt about evidence about the social movement for housing, please respond carefully:

People from across all states in the USA have taken part in collective action demanding lower rents and demonstrating their discontent with their government. Recent data has shown that [this state](#) has had lower levels of actively in the social movement for housing, compared to other states in the USA

Please briefly give us your opinion on the reasons why the people in [this state](#) tend to participate less in the social movement for housing compared to other states. Remember that there are no right or wrong answers.

Appendix E- Manipulation Check

Now imagine the people of $\{q://QID1320227029/ChoiceGroup/SelectedChoices\}$ (perhaps people with whom you establish connections with such as acquaintances, family and friends). Then, estimate the frequency of the behaviors presented below:

| | completely false | somewhat false | Neither true or false | somewhat true | completely true |
|--|-----------------------|-----------------------|--------------------------|-----------------------|-----------------------|
| I think my close circle has sacrificed a lot for the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think my close circle is part of the housing movement organization | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think my close circle would actively participate in the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think my close circle is sympathetic to the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think my close circle supports the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Appendix F- SIMCA

Next, in this part of the questionnaire we are interested in understanding your opinion and feelings about this movement.

At the moment, I feel like...

| | totally agree | Somewhat agree | neither agree or disagree | somewhat disagree | Completely disagree |
|---|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| My opinion about raising rents is a universal moral value that should apply worldwide | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| My opinion about rising rents reflects an important part of who I am | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| There is only one true position on this issue and it is my position. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| My opinion on rising rents is an important part of my moral standards and values | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| My opinion on rent increases is important to me | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I believe that my opinion about increasing rents has a moral character | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

At the moment, I feel like...

| | Totally disagree | Somewhat disagree | Neither agree or disagree | somewhat agree | Totally agree |
|---------------------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| Rising rents are unfair | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Rent prices are socially unfair | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Rising rents are not legitimate | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The rise in rents is justified | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Considering the current housing situation in the USA, I am

| | not | a little bit | indifferent | quite | Extremely |
|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Angry about rent prices | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Furious about rent prices | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Outraged by rent prices | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Considering the current housing situation in the USA,...

| | totally disagree | Somewhat disagree | Neither agree or disagree | somewhat agree | completely agree |
|--|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| As someone from \${q://QID1320227029/ChoiceGroup/SelectedChoices}, I think we can influence this situation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| As someone from \${q://QID1320227029/ChoiceGroup/SelectedChoices}, we can successfully defend our interests together | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| As someone from \${q://QID1320227029/ChoiceGroup/SelectedChoices}, we can change this situation together | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| As someone from \${q://QID1320227029/ChoiceGroup/SelectedChoices}, I think we can change the increase in rent prices | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |




Considering the current housing situation in the USA. At the moment...

| | Totally disagree | Somewhat disagree | Neither agree or disagree | Somewhat agree | Completely agree |
|---|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| I am proud of the group of activists who belong to the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I feel strong ties with housing movement activists | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I see myself as a housing movement activist | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I identify with the activists of the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Considering the current housing situation in the USA. At the moment...

| | Totally disagree | Somewhat disagree | Neither agree or disagree | somewhat agree | Compl |
|---|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| I identify with the people from \${q://QID1320227029/ChoiceGroup/SelectedChoices} affected by the housing crisis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I feel strong ties with the group of people from \${q://QID1320227029/ChoiceGroup/SelectedChoices} who are affected by the housing crisis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I see myself as someone from \${q://QID1320227029/ChoiceGroup/SelectedChoices} affected by the housing crisis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I'm not proud to belong to the group of people from \${q://QID1320227029/ChoiceGroup/SelectedChoices} affected by the housing crisis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



Appendix G- Collective Action Intentions

Now, we would like to better understand the different forms of action that movements can embody. Please read the following items carefully.

| | totally disagree | somewhat disagree | Neither agree or disagree | somewhat agree | Completely agree |
|---|-----------------------|-----------------------|------------------------------|-----------------------|-----------------------|
| I am willing to spend some of my energy on the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am willing to donate some money to the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am willing to dedicate some time to participate in the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am willing to expend some effort for the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

I am willing to

| | Extremely unlikely | Unlikely | Neither unlikely nor probable | likely | extremely likely |
|---|-----------------------|-----------------------|-------------------------------------|-----------------------|-----------------------|
| Sign a petition | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Donate money to the housing movement organization | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Participate in a peaceful protest | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Express my opinion about the housing movement on social media | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Accept online invitations to participate in the social housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Block entrance to real estate agency buildings | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Disrupting events regarding support for local accommodation (e.g., holding a "counter demonstration") | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Occupy an empty building | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breaking the law to fight rising rents | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Participating in a protest that escalates into a physical confrontation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fight with the police at a demonstration of the housing movement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Burn down private real estate properties | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Appendix H- Debriefing



Thank you very much for taking part in this study. As stated at the beginning of your participation, the study focuses on collective actions in the USA, but it also has other aspects that were not mentioned during the consent portion.

In the context of your participation, some participants were assigned to experimental conditions where they were told that the state they considered their “home” either participated more or participated less in the housing movement in the USA. Additionally, some participants were assigned to the “control” group and did not receive any information regarding how much their home state participated. We will compare the responses of these different versions to test whether people’s willingness to participate in collective actions, such as the struggle for more affordable housing within the USA, depends on how much others already participate. Please note that for this purpose we had to give you standardized but fabricated information: Any mentions of how much states participated in collective action were not based on factual information and were purely used to convince you that others do participate a lot or not that much. Unfortunately, we could not give you all this information during the consent portion because it would have influenced your responses. Should you recommend this study to someone else, please keep in mind that we can only use the data if participants do not know that in advance. We hope you understand and apologize if that has caused you any inconvenience.

We would also like to emphasize that some of our questions referred to problematic behavior, such as violent or non-normative actions. Please understand that this does not in any way mean

that these actions are usual or acceptable. This study does not condone the use of violence or illegal activities to enact social change.

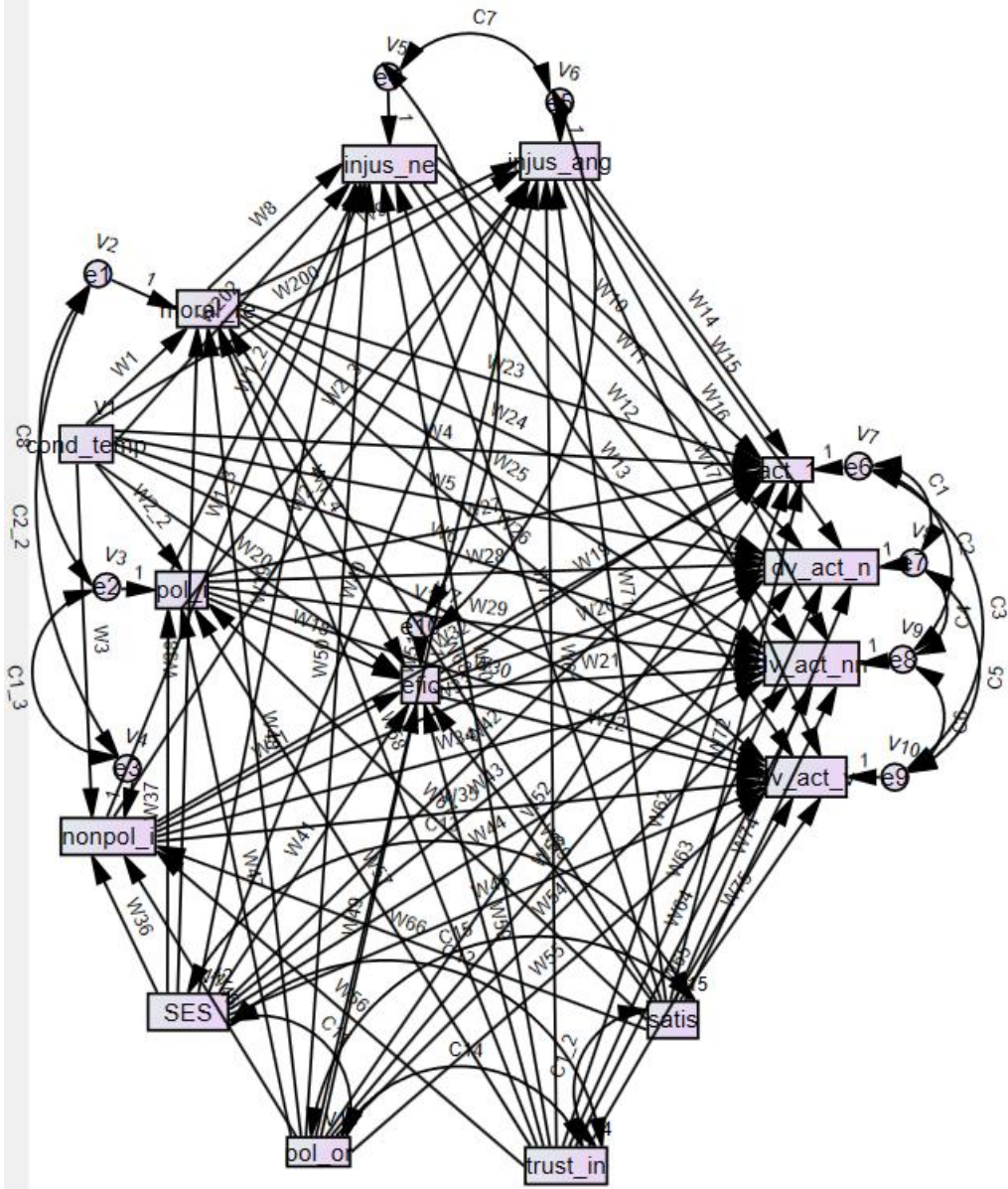
We would like to reinforce the contact details you can use should you have any questions, wish to share any comments, or signal your intention to receive information about the main results and conclusions of the study: Kyler Haskins- khsry@iscte-ul.pt and Sven Waldzus- sven.waldzus@iscte-ul.pt

Survey Swap code:NEU1-TSX0-9RMJ

Survey circle Code: RU5W-561R-PBM4-PSRX

Thank you again for your participation.

Appendix I- Path Model AMOS



Appendix J- Dual Chamber SIMCA Model Mediations

Table J1

Dual- SIMCA Mediation on collective action intentions (N=278)

| Path between variables | <i>B</i> | <i>SE</i> | <i>CI 95%</i> |
|---|----------|-----------|----------------|
| moral -<Injustice Anger>- General CA | -0.010 | 0.010 | [-0.034,0.005] |
| moral -< Injustice Anger >- Conventional CA | 0.001 | 0.008 | [-0.015,0.017] |
| moral -< Injustice Anger >- Non-normative CA | 0.018 | 0.016 | [-0.002,0.058] |
| moral -< Injustice Anger >- Violent CA | 0.015 | 0.015 | [-0.003,0.049] |
| moral -<Injustice>- General CA | 0.007 | 0.008 | [-0.006,0.028] |
| moral -< Injustice >- Conventional CA | 0.000 | 0.007 | [-0.014,0.015] |
| moral -< Injustice>- Non-normative CA | -0.013 | 0.011 | [-0.039,0.004] |
| moral -< Injustice>- Violent CA | -0.009 | 0.010 | [-0.032,0.012] |
| moral -< Efficacy >- General CA | 0.008 | 0.011 | [-0.008,0.035] |
| moral -< Efficacy >- Conventional CA | 0.008 | 0.010 | [-0.010,0.032] |
| moral -< Efficacy >- Non-normative CA | 0.003 | 0.006 | [-0.007,0.018] |
| moral -< Efficacy >- Violent CA | -0.002 | 0.005 | [-0.013,0.006] |
| Pol ID -< Injustice Anger>- General CA | -0.021 | 0.017 | [-0.054,0.011] |
| Pol ID -< Injustice Anger >- Conventional CA | 0.003 | 0.015 | [-0.028,0.033] |
| Pol ID -< Injustice Anger >- Non-normative CA | 0.038 | 0.024 | [-0.003,0.093] |
| Pol ID -< Injustice Anger >- Violent CA | 0.033 | 0.022 | [-0.004,0.083] |
| Pol ID -< Injustice>- General CA | 0.011 | 0.012 | [-0.007,0.040] |
| Pol ID -< Injustice >- Conventional CA | 0.000 | 0.010 | [-0.020,0.023] |

| | | | |
|---|--------|-------|-----------------|
| Pol ID -< Injustice>- Non-normative CA | -0.023 | 0.017 | [-0.061,0.004] |
| Pol ID -< Injustice>- Violent CA | -0.016 | 0.017 | [-0.055,0.011] |
| Pol ID -< Efficacy >- Non-normative CA | 0.022 | 0.025 | [-0.025,0.071] |
| Pol ID -< Efficacy >- Violent CA | -0.013 | 0.021 | [-0.059,0.025] |
| non-Pol ID -< Injustice Anger>- General CA | -0.021 | 0.018 | [-0.060, 0.010] |
| non-Pol ID -< Injustice Anger >- Conventional CA | 0.003 | 0.015 | [-0.029, 0.032] |
| non-Pol ID -< Injustice Anger >- Non-normative CA | 0.037 | 0.024 | [-0.003, 0.094] |
| non-Pol ID -< Injustice Anger >- Violent CA | 0.032 | 0.023 | [-0.004, 0.086] |
| non-Pol ID -< Injustice>- General CA | 0.010 | 0.011 | [-0.008, 0.035] |
| non-Pol ID -< Injustice >- Conventional CA | 0.000 | 0.009 | [-0.018, 0.021] |
| non-Pol ID -< Injustice>- Non-normative CA | -0.020 | 0.016 | [-0.059, 0.003] |
| non-Pol ID -< Injustice>- Violent CA | -0.014 | 0.015 | [-0.048, 0.010] |
| non-Pol ID -< Efficacy >- Non-normative CA | 0.010 | 0.012 | [-0.012, 0.039] |
| non-Pol ID -< Efficacy >- Violent CA | -0.006 | 0.010 | [-0.030, 0.011] |

Appendix K- Mediations

Table K1

Chain mediations of descriptive norms on collective action (N=278)

| Hypothesis | Path between variables | B | SE | CI 95% |
|------------|--|--------|-------|----------------|
| H9 | Descriptive Norms->moral->Injustice Anger->General CA | -0.001 | 0.001 | [-0.004,0.001] |
| H9 | Descriptive Norms->moral->Injustice Anger ->Conventional CA | 0.000 | 0.001 | [-0.002,0.002] |
| H9 | Descriptive Norms->moral->Injustice Anger ->Non-normative CA | 0.001 | 0.002 | [-0.001,0.006] |
| H9 | Descriptive Norms->moral->Injustice Anger->Violent CA | 0.001 | 0.002 | [-0.001,0.006] |
| H9 | Descriptive Norms->moral->Injustice->General CA | 0.000 | 0.001 | [-0.001,0.003] |
| H9 | Descriptive Norms->moral->Injustice->Conventional CA | 0.000 | 0.001 | [-0.001,0.001] |
| H9 | Descriptive Norms->moral->Injustice->Non-normative CA | -0.001 | 0.001 | [-0.005,0.001] |
| H9 | Descriptive Norms->moral->Injustice->Violent CA | -0.001 | 0.001 | [-0.004,0.001] |
| H9 | Descriptive Norms->Moral->Efficacy->General CA | 0.000 | 0.001 | [-0.001,0.003] |
| H9 | Descriptive Norms->Moral->Efficacy->Conventional CA | 0.000 | 0.001 | [-0.001,0.003] |
| H9 | Descriptive Norms->Moral->Efficacy->Non-normative CA | 0.000 | 0.000 | [-0.001,0.001] |
| H9 | Descriptive Norms->Moral->Efficacy->Violent CA | 0.000 | 0.000 | [-0.001,0.001] |
| H7 | Descriptive Norms->Pol ID->Injustice Anger->General CA | -0.003 | 0.003 | [-0.009,0.002] |
| H7 | Descriptive Norms->Pol ID->Injustice Anger ->Conventional CA | 0.000 | 0.003 | [-0.005,0.006] |
| H7 | Descriptive Norms->Pol ID->Injustice Anger ->Non-normative CA | 0.005 | 0.005 | [-0.001,0.017] |
| H7 | Descriptive Norms->Pol ID->Injustice Anger->Violent CA | 0.005 | 0.004 | [-0.001,0.014] |
| H7 | Descriptive Norms->Pol ID->Injustice->General CA | 0.002 | 0.002 | [-0.001,0.007] |

| | | | | |
|----|---|--------|-------|----------------|
| H7 | Descriptive Norms->Pol ID->Injustice->Conventional CA | 0.000 | 0.002 | [-0.003,0.004] |
| H7 | Descriptive Norms->Pol ID->Injustice->Non-normative CA | -0.003 | 0.003 | [-0.011,0.001] |
| H7 | Descriptive Norms->Pol ID->Injustice->Violent CA | -0.002 | 0.003 | [-0.010,0.002] |
| H7 | Descriptive Norms->Pol ID->Efficacy->General CA | 0.009 | 0.006 | [0.00,0.022] |
| H7 | Descriptive Norms->Pol ID->Efficacy->Conventional CA | 0.009 | 0.006 | [0.00,0.021] |
| H7 | Descriptive Norms->Pol ID->Efficacy->Non-normative CA | 0.003 | 0.004 | [-0.004,0.013] |
| H7 | Descriptive Norms->Pol ID->Efficacy->Violent CA | -0.002 | 0.004 | [-0.010,0.004] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice Anger ->General CA | -0.002 | 0.003 | [-0.008,0.002] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice Anger ->Conventional CA | 0.000 | 0.002 | [-0.004,0.004] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice Anger ->Non-normative CA | 0.003 | 0.004 | [-0.002,0.015] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice Anger ->Violent CA | 0.003 | 0.004 | [-0.002,0.015] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice->General CA | 0.001 | 0.001 | [-0.001,0.005] |
| H8 | Descriptive Norms->non-Pol ID->Injustice->Conventional CA | 0.000 | 0.001 | [-0.002,0.003] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice ->Non-normative CA | -0.002 | 0.002 | [-0.008,0.001] |
| H8 | Descriptive Norms->non-Pol ID ->Injustice->Violent CA | -0.001 | 0.002 | [-0.007,0.001] |
| H8 | Descriptive Norms->non-Pol ID->Efficacy->General CA | 0.003 | 0.003 | [-0.002,0.009] |
| H8 | Descriptive Norms->non-Pol ID->Efficacy->Conventional CA | 0.003 | 0.003 | [-0.002,0.009] |
| H8 | Descriptive Norms->non-Pol ID->Efficacy->Non-normative CA | 0.001 | 0.002 | [-0.002,0.005] |
| H8 | Descriptive Norms->non-Pol ID->Efficacy->Violent CA | -0.001 | 0.001 | [-0.004,0.001] |
