

**Perceptions of Rich and Poor People's Efforts
and Public Opinion about
Economic Redistribution**

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PhD Dissertation

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Preface

This summary report presents my PhD dissertation “Perceptions of Rich and Poor People’s Efforts and Public Opinion about Economic Redistribution” conducted at the Department of Political Science, Aarhus BSS, Aarhus University. The dissertation comprises the present summary report and three self-contained research papers. The summary report has two purposes. First, it presents an overview of the dissertation and the broader theoretical framework and outlines how the individual papers fit together. Second, it introduces theoretical arguments that reach beyond the scope of the individual papers and introduces additional empirical analyses that combined with the empirical findings of the papers form a basis for answering the overarching research question of the dissertation. More specific and detailed descriptions of theoretical arguments, methods and empirical results can be found in the three individual research papers accompanying this summary report:

- Paper A. “Who Cares If They Need Help? The Deservingness Heuristic, Humanitarianism and Welfare Opinions”, accepted for publication in *Political Psychology*.
- Paper B. “Hard Work or Lucky Circumstances? Deservingness of the Rich and Public Support for Taxing them”, *Working paper*.
- Paper C. “Public Opinion about Economic Redistribution Is More Concerned with the Efforts of the Poor than the Efforts of the Rich”, *Working paper*.

Chapter 1.

Introduction

How should the goods in society be distributed? This is a fundamental issue in politics and one that humans have dealt with for millions of years (Kaplan & Gurven, 2005). Today, the issue seems as important as ever. Economic inequality is increasing across the globe (Keeley, 2015) and there are heated debates among political elites and citizens about whether more should be done to redistribute economic resources from the better-off to the worse-off. How do people make up their minds about redistribution? Why do some people prefer that economic differences in society are evened out, while others strongly oppose this idea? Understanding the factors that lead citizens to their positions on this fundamental issue of “who should get what, when and how” (Lasswell, 1936) is important, as democracy requires that elected representatives respond to public opinion (Dahl, 1971: 1; Goren, 2001: 159). The broader aim of this dissertation is to shed light on the deeper factors shaping public support for redistribution.

People often have fierce disagreements about economic inequality and whether it should be addressed with redistributive policies – and yet research also suggests that most people can agree on one thing: Economic inequality is fair if it reflects that some people choose to work hard while others decide to work less, and conversely that inequality is unfair if it is determined by brute luck and rigid societal structures that constrain the individual’s ability to pull oneself up by one’s bootstraps (Starmans et al., 2017). In the United States, for example, there is general consensus that people should have equal opportunity to achieve economic success by means of hard work (Kluegel & Smith, 1986; Bartels, 2016: 109; Gilens, 2000: 35; Hochschild, 1981). And large majorities of citizens in 31 out of 31 countries support the notion that income should reflect effort and performance (Evans et al., 2010). Consequently, when people have different attitudes towards economic redistribution, it is hardly because they disagree about whether people ideally *should* have opportunities to get ahead by working hard, but rather because they have different perceptions about whether people actually *can* get ahead through their own efforts.

That people’s perceptions of the role of effort is important for attitudes towards economic redistribution is supported by many studies (e.g. Alesina et al., 2001; Corneo & Grüner, 2002; Fong et al., 2006; Gilens, 2000; Krawczyk, 2010). And it is not difficult to find examples from political debates that illus-

trate that people are concerned about the causes of inequality. Recently, Joachim B. Olsen, a Danish politician from the economic right-wing party Liberal Alliance stated that “the most important determinant of inequality in Denmark is personal choices. For example how much people choose to work (...) This is why inequality is self-inflicted” (Jyllandsposten, 2017). Pelle Dragsted from the Danish economic left-wing party Red-Green Alliance (Enhedslisten) saw things very differently: “Inequality is not just a result of our personal choices. I believe that societal structures and our position in society from birth play a crucial role. And that is not just inequality” (Jyllandsposten, 2017). A discussion between trillionaire Bill Gates and the famous economist Thomas Piketty about how the wealthy on the Forbes 400 had amassed their fortunes is another prominent example. Thomas Piketty argued that wealthy people today typically have benefitted from economic structures including rich family background going back generations. Bill Gates argued that most rich people are not lazy rentiers but innovative entrepreneurs who amass their fortunes themselves (New York Magazine, 2014).

These examples illustrate a key point in this dissertation: Perceptions of whether people get ahead on their own efforts are important for whether people deem economic inequality fair and therefore important for understanding attitudes towards economic redistribution. However, even though an increasing number of studies underline the importance of studying public perceptions of effort, we continue to have a limited understanding of *how* these perceptions affect attitudes towards redistribution and *who* is most affected by information about effort.

This dissertation argues that we can advance existing knowledge if we take into account that there are two distinct psychological mechanisms that respectively shape attitudes towards “redistribution to the worse-off” and “redistribution from the better-off” (Cavaillé & Trump, 2015; Horwitz & Dovidio, 2017; Sznycer et al., 2017). An impressive body of research is devoted to uncovering how citizens form attitudes towards the former, and many studies have demonstrated that a deservingness heuristic prompts people to consider if the poor make an effort to deserve help (e.g. Aarøe & Petersen, 2014; Gilens, 2000; Goren, 2003; Oorschot, 2000; Sniderman et al., 1991). However, the other aspect concerning citizens’ attitudes towards “taking from the better-off” has received scarce attention, which is paradoxical in a time when economic inequality is becoming increasingly top skewed (Atkinson et al., 2011), and unfortunate from a research perspective because it leaves us with a line of important unanswered questions.

First, we have limited insights on how perceptions of rich people’s effort shape attitudes towards redistributing wealth from them. There are two im-

portant aspects pertaining to this limitation. First, we do not know how responsive the psychological mechanism that shapes attitudes towards taking from the better-off is to effort-circumstances cues. By effort-circumstances cues, I mean information about whether economic position can be attributed to (lack of) effort or to (unfortunate) circumstantial factors. Research has shown that public support for policies that redistribute to the worse-off is highly responsive to cues reflecting if the poor are lazy (lack of effort) or struck by unlucky circumstances (Aarøe & Petersen, 2014; Slothuus, 2007). Yet we do not know if public support for taxing the rich will be affected if citizens are exposed to cues that portray the rich as benefitting from circumstantial factors instead of making an effort to become wealthy. Furthermore, in contrast to the carefully crafted and rigorously tested theoretical framework on the deservingness heuristic (e.g. Oorschot, 2000; Petersen, 2015), we have a substantial lack of theory and empirical insight about the psychological mechanism that shapes attitudes towards redistributing from the better-off. What emotions are involved, for instance? This dissertation contributes a theory that can help uncover the heuristic that shapes attitudes towards the wealthy. In outlining the structure of this heuristic, I form novel predictions about how perceived “warmth” interacts with perceived effort in eliciting envy and admiration. I argue that these emotions are important in forming attitudes towards taking from the better-off.

Second, it has rarely been considered that attitudes towards economic redistribution are based on two distinct heuristics. A key question is thus: Are citizens equally concerned about poor and rich people’s efforts when they make up their minds about whether inequality should be reduced? I argue that perceived effort of the poor is more consequential for redistributive preferences than perceived effort of the rich. This prediction is based on the insight that the deservingness heuristic generates attitudes towards the poor on the basis of their efforts. In contrast, I argue that the most important type of information for the heuristic generating attitudes towards taking from the better-off is whether they are warm. In line with this argument, I find that perceived warmth of the rich affects support for taxing them more than whether they are perceived as hardworking.

Third, we currently do not know of any individual-level differences influencing the extent to which citizens are swayed by effort-circumstances cues, neither when it comes to “redistribution to the poor” or “redistribution from the rich”. Current knowledge suggests that people – irrespective of their political values – support social welfare if they are exposed to cues suggesting that welfare recipients’ situation is caused by unlucky circumstances rather than lack of effort. In other words, as of now, we do not know if some people “use” the deservingness heuristic more than others. Moreover, since we do not know

if people are at all affected by effort-circumstances cues about the rich, we also do not know who would be most affected. I extend prior research by identifying important individual-level differences that condition how much citizens are affected by effort-circumstances cues in opinion formation about taking from the better-off. By addressing these limitations in the literature, this dissertation seeks to answer the following overarching research question:

How do perceptions of effort affect attitudes towards redistribution, and who is most affected by effort-circumstances cues?

The project draws on a rich source of experimental and observational survey data. Many of the studies were conducted in two different welfare systems: Denmark and the United States.

The summary report proceeds as follows. Chapter 2 reviews existing research and central gaps in our knowledge about public opinion about economic redistribution and presents the theoretical framework from which I deduce twelve hypotheses. Chapter 3 describes and discusses the methods and data employed to test these hypotheses empirically. Chapter 4 presents the findings of the dissertation and discusses how they conjointly answer the overarching research question. In conclusion, Chapter 5 discusses the broader contributions and implications of the findings and suggests interesting avenues for future studies.

Chapter 2.

Existing research and theoretical framework

This chapter starts with a review of existing research on attitudes towards economic redistribution. This field of research encompasses various disciplines from economy, political science and psychology, which often grapple with the same phenomenon but under different labels. By bringing them together in this chapter, I aim to render visible what we know and what we need to know about how effort perceptions affect redistributive attitudes and who is most susceptible to effort-circumstances cues. Finally, I outline the theoretical framework that I believe can help bring answers to these new questions.

2.1. What we known about perceptions of effort and attitudes towards redistribution

Before addressing how citizens form opinions about economic redistribution, it is worth asking what it is. It can be defined as “the modification of a distribution of resources across a population as the result of a political process” (Sznycer et al., 2017: 8420) (this project refers to economic resources). This definition implies that public opinion about any policy that affects economic inequality in society counts as attitudes towards economic redistribution, for example opinions about social welfare, food stamps, student financial aid, corporate taxes, and minimum wage. More abstract opinions, for example, that government should reduce economic inequality or whether resources should be shared in a small group of people are also covered by this definition.

From various perspectives, researchers have identified different factors that shape public support for redistribution. One stream of research emphasizes macro-level explanations, for example the role of welfare regimes and culture (e.g. Ervasti et al., 2012; Larsen, 2007; Svallfors, 1997). Others investigate how citizens are guided (or biased) by party affiliations (Bartels, 2016; Margalit, 2013; Slothuus & de Vreese, 2010) and sentiments towards ethnic and racial minorities (Alesina et al., 2001; Gilens, 2000; Harell et al., 2016). A prominent approach is to study redistributive preferences through the lens of rational choice theory. However, self-interest often turns out to be a surprisingly weak predictor (Bartels, 2005; Fong, 2001) unless the stakes are very clear, and substantial economic consequences are involved (Citrin & Green, 1990; Margalit, 2013). It is also quite common to find inconsistencies in redistributive attitudes where citizens support lower taxes as well as more public

spending (Cavaillé & Trump, 2015; Roberts et al., 1994; Sears & Citrin, 1985). The perhaps most debated issue in the literature is that the *level* of economic inequality has no clear-cut bearing on public demands for redistribution neither in terms of how citizens respond to the *actual* level of inequality or public *perception* of whether inequality is rising. The classic median voter model argues that most citizens out of self-interest will demand redistribution when the wealth in society becomes more skewed to the top (Meltzer & Richard, 1981), but empirical support for this model has been mixed (e.g. Bartels, 2016; Kenworthy & McCall, 2008; Trump, forthcoming).¹

Recently, one stream of research has gained broader traction by offering new answers to how we can grasp public opinion about redistribution. This literature stresses that people are concerned about *economic fairness* when they make up their minds about whether resources should be redistributed from the better-off to the worse-off. Starmans et al. (2017: 1), who represent this view, argue “there is no evidence that people are bothered by economic inequality itself. Rather, they are bothered by something that is often confounded with inequality: economic unfairness” (2017: 1). Since this concept has different meanings in the literature,² a definition is in order. I define economic fairness – inspired by Starmans et al. (2017: 3)³ – as distribution of resources that corresponds to differences in effort. The corollary of this definition is that an equal distribution of resources is not necessarily a fair distribution. It can be, but only if everyone works equally hard. The definition also ties economic fairness to other prominent concepts that political scientists have found people to be concerned about, like equal opportunity, the American dream, equity and social mobility, because an economically fair society where inequality reflects differences in effort would be characterized by all of these (Hochschild, 1981; Kluegel & Smith, 1986; McCall, 2013; see also DeScioli et al., 2014; Tyler & Van Der Toorn, 2013; Wagstaff et al., 1993; Walster et al., 1978).

¹ To be clear, my argument is not that other perspectives in the literature do not have merit, but that the economic perspective is important and requires further exploration.

² It is important to point out that Sznycer et al., (2017) in their seminal article find that preferences for distributional fairness do not affect attitudes towards redistribution. Yet they conceptualize “distributional fairness” as low variance in outcomes. That contrasts with the concept of economic fairness here, where distribution of resources is fair if it is proportional to effort expended. Therefore, equal outcomes are not necessarily economically fair.

³ Their definition is slightly broader as it encompasses effort, ability and deservingness (Starmans et al., 2017: 3).

It has been suggested that people's concerns with effort and the belief that "everybody should have equal opportunities to become unequal" (Hochschild, 1981) is unique to American culture (e.g. Gilens, 2000: 32; Savani & Rattan, 2012). Yet research shows that preferences for economic fairness are not exclusive to specific individuals or cultures (Starmans et al., 2017; see also Aarøe & Petersen, 2014). As mentioned in the introduction, large majorities in 31 out of 31 countries believe that income should reflect effort and performance (Evans et al., 2010). Moreover, research has shown that children from an early age develop economic fairness intuitions and exhibit expectations that more will be given to those who have done more work (Baumard et al., 2012; Kangiesser & Warneken, 2012). These findings suggest that economic fairness intuitions are not a product of culture but more likely universally rooted in human psychology.

If people, as suggested above, generally share the intuition that inequality is fair if it corresponds to differences in effort, then it follows that disparities in public support for redistribution should be caused by disparities in perceptions of effort and that redistributive attitudes change if perceptions of effort change. A line of experiments supports this reasoning. If people are asked to decide whether to share money in a small group, their decisions tend to depend on whether they are placed in an experimental condition where money was earned through effort or allocated randomly (e.g. Chavanne, 2017; Durante et al., 2014; Gee et al., 2015; Krawczyk, 2010; Scott et al., 2001). A recent study even finds that a substantial proportion of participants with both high and low payoff were willing to vote contrary to their self-interest to reward participants who performed better (Lefgren et al., 2016). Furthermore, cross-cultural studies have found clear connections in public attitudes towards redistributive policies and beliefs about whether economic success stems from hard work or circumstances (Alesina et al., 2001; Alesina & Angeletos, 2005; Corneo & Grüner, 2002; C. Fong, 2001; Gaeta, 2011).

In sum, a large body of research suggests that public opinion formation about economic redistribution can be boiled down to one simple decision rule: Economic inequality is unfair and should be reduced if it does not correspond to differences in effort. Table 2.1 illustrates this research perspective, which I label the economic fairness perspective. As the table shows, people are expected to hold different perceptions of rich and poor people and different attitudes towards redistributing from and to them depending on whether they believe that economic inequality is caused by differences in *effort* or by *circumstances*. A person in the middle column who believes that differences in effort account for economic inequality would tend to perceive the rich as deserving, oppose taxing them, perceive the poor as undeserving, oppose helping

them, consider inequality fair, and oppose economic redistribution. For a person who perceives circumstantial factors to be more important, the pattern would be opposite, as the right column depicts. Table 2.1 also lists studies in three categories based on their focus on attitudes towards “redistributing from the better-off”, “redistributing to the worse-off” or “general attitudes towards economic redistribution”. The asymmetry in the existing research is particularly noteworthy. As mentioned in the introduction, only few studies draw the connection between effort beliefs and attitudes towards redistribution from the rich.

Table 2.1. Economic Fairness and Existing Research on Effort Perceptions and Redistributive Preferences

		Cause of inequality: differences in effort →	Cause of inequality: differences in circumstances →
(Ballard-Rosa et al., 2017; Ragusa, 2014; Sadin, 2014; Savani & Rattan, 2012).	Attitudes towards redistributing from the better-off	<ul style="list-style-type: none"> – Perceive the rich as deserving – Oppose taking from the rich 	<ul style="list-style-type: none"> – Perceive the rich as undeserving – Support taking from the rich
(e.g. Aarøe & Petersen, 2014; Cook & Barrett, 1992; Feather & Dawson, 1998; Gilens, 2000; Goren, 2003; Jensen & Petersen, 2017; Larsen, 2007; Oorschot, 2000; Petersen, 2012; Petersen et al., 2011, 2012; Slothuus, 2007; Sniderman et al., 1991)	Attitudes towards redistributing to the worse-off	<ul style="list-style-type: none"> – Perceive the poor as undeserving – Oppose giving to the poor 	<ul style="list-style-type: none"> – Perceive the poor as deserving – Support giving to the poor
(e.g. Alesina et al., 2001; Alesina & Angeletos, 2005; Chavanne, 2017; Corneo & Grüner, 2002; Gaeta, 2011; Gee et al., 2015; Krawczyk, 2010; Lefgren et al., 2016; Savani & Rattan, 2012; Scott et al., 2001)	General attitudes towards economic redistribution	<ul style="list-style-type: none"> – Perceive economic inequality as fair – Oppose economic redistribution 	<ul style="list-style-type: none"> – Perceive economic inequality as unfair – Support economic redistribution

In the next section, I explain how recent findings that citizens comprehend redistribution as two distinct issues can advance our knowledge about attitudes towards redistribution.

2.2. New questions and where to find answers

Any decision to support economic redistribution inevitably involves *two* decisions: Should resources be taken from those who have more, and should they be given to those who have less? Offhand, these two decisions seem to inversely imply each another, but research has found that in practice they do *not*. As mentioned, public support for increased social spending does not necessarily preclude demands for lower taxes (Roberts et al., 1994; Sears & Citrin, 1985). Research has also found that people form distinct evaluations of the rich and the poor, which underscores that they do not comprehend inequality in a unidimensional manner, even though wealth is essentially a continuous dimension (Horwitz and Dovidio, 2017). Cavallé and Trump (2015) have produced important evidence of the dimensionality of redistributive preferences. In cross-cultural factor analyses with various survey questions, they demonstrate that citizens' redistributive preferences comprise two distinct and weakly correlated dimensions: "redistribution to the worse-off" and "redistribution from the better-off".⁴

That people conceive of redistribution as two distinct relationships implies that we know less about redistributive attitudes than we may think. We cannot infer that perceptions of rich people's efforts shape redistributive preferences to the same extent – and through a similar process – as perceptions of poor people's efforts. It also implies that it remains an open question if citizens are equally concerned about the efforts of the poor and the efforts of the rich when they decide whether to support redistribution.

To uncover the mechanism that shapes attitudes towards "redistributing from the better-off" and to gain new insights on who is most susceptible to effort-circumstances cues about the poor and the rich, it is important to consider the deeper roots of human sharing psychology. Consistent with the studies just mentioned, Sznycer et al. (2017) argue that people conceive modern-day redistribution as an ancestral small-scale scene on which the individual interacts with two other players with respectively fewer and more resources.

⁴ Conceiving redistribution as two dimensions helps reconcile two often conflicting perspectives in the literature that have suggested that citizens are either income maximizing or driven by other-oriented concerns. Cavallé and Trump find that while the "redistribution to the worse-off" dimension is associated with other-oriented concerns like compassionate sentiments towards the poor and racial resentment, "redistribution from the better-off" is more tied to economic self-interest.

Given that humans have interacted with better-off others and worse-off others throughout evolutionary history, Sznycer et al. argue that humans universally are endowed with psychological mechanisms specifically tailored to navigate each of these relationships.

Figure 2.1. A simple model of the decisions involved in redistribution

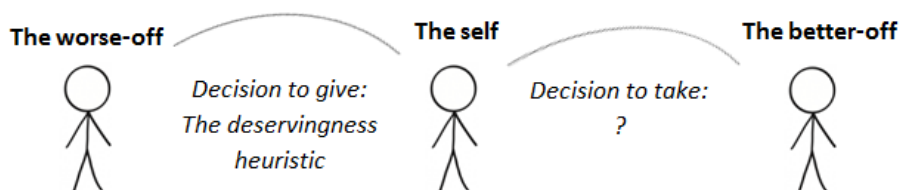


Figure 2.1 provides a simple illustration of these two central relationships that humans evolved to navigate. As is clear from this depiction and based on the literature review in Table 2.1, we know that when it concerns attitudes towards *general* redistribution – whether in a small group or in society – people tend to follow the economic fairness principle, which prompts them to consider whether unequal outcomes in general arise from differences in effort or circumstances. We also know that the psychological mechanism of the deservingness heuristic accounts for the way people make decisions about giving resources to others. But how do citizens decide whether to support taking resources from the better-off? What is the psychological mechanism behind such decisions? What role do perceptions of effort play in the decision-making process? Existing research does not give us an answer. Insights from psychological research have deepened our understanding of how the deservingness heuristic generates help-giving decisions. To hopefully deepen our understanding of the psychological mechanism shaping attitudes towards taking from the better-off, I draw on psychological research.

Before developing the theoretical framework that can help us understand this psychological mechanism, I review existing research on the deservingness heuristic and address the question of *who* is most affected by effort-circumstances cues (deservingness cues) in opinion formation about social welfare.

2.3 The deservingness heuristic and individual-level differences

This section delves into the deeper psychology of the deservingness heuristic. First, as argued above, we may gain important insights that can help form novel predictions about *who* would be most responsive to cues about whether need is caused by lack of effort or circumstantial factors. Furthermore, by un-

folding existing knowledge about the deservingness heuristic – its evolutionary roots and components – the section sets the stage for developing the theoretical framework on the heuristic that regulates attitudes towards taking from the better-off.

As touched upon above, deservingness is the psychological tendency to deem people deserving of help if their situation can be attributed to circumstances beyond their control rather than lack of effort (Gilens, 2000; Oorschot, 2000; Petersen et al., 2012; Sniderman et al., 1991). Researchers have argued that the deservingness heuristic is a universal part of human psychology that came into existence because it was expedient for survival throughout evolutionary history (Cosmides & Tooby, 2005; Petersen, 2015). Ancestrally, humans were highly dependent on cooperation and exchange of important resources such as food to survive. Although exchange of resources increased chances of survival, it also introduced the all-pervasive risk that cheaters would intentionally exploit the cooperative system in order to obtain resources without expending efforts to contribute. The deservingness heuristic is argued to have evolved in response to this adaptive problem by motivating the individual to only help non-cheaters (Cosmides & Tooby, 2005).

Evolved heuristics, like the deservingness heuristic, comprise representational systems and motivational systems that conjointly generate behavior that over evolutionary history have promoted survival. The representational system uses available cues from the environment to detect adaptive problems (e.g. is this food harmless or contaminated?) and motivational systems that through emotions generate intuitions of how to behave in response to these representations (e.g. feeling disgusted by contaminated food) (Bøggild et al., 2016: 22; Petersen, 2015). In response to the adaptive problem with exploitive behavior in instances of social exchange, the deservingness heuristic automatically (i.e. uncontrolled by elaborate cognitive processes) forms representations of whether others are cheaters or unlucky contributors on the basis of their effort. If they are represented as cheaters, the motivational system ignites anger, which induces individuals to refuse to provide help. By contrast, compassion is ignited in response to representations that others are contributors, which motivates the individual to help (Petersen et al., 2012; Sznycer et al., 2017).

Given that the deservingness heuristic is a universal feature of human psychology and because it operates through emotional processes uncontrolled by elaborate considerations, it has been argued – and shown – that it operates independently of political predispositions like ideology and egalitarianism, which in contrast to the deservingness heuristic need to be learned from the

political environment (Petersen et al., 2011, 2012). In other words, current research suggests that people are swayed by cues about whether poor people are lazy or unlucky irrespective of the values they hold.

I propose that humanitarianism constitutes an individual-level factor that conditions susceptibility to effort-circumstances cues when people form help-giving decisions. Humanitarianism prescribes “that one should help those who are in need” (Feldman and Steenbergen 2001, 659). The theoretical argument is that the deservingness heuristic specifically evolved to solve the adaptive problem of cheater detection in help-giving decisions. From an evolutionary perspective, individuals with strong humanitarian values are highly vulnerable to cheaters as they wish to help others in need. Thus, it follows that we should expect the deservingness heuristic to be more readily activated among individuals with strong humanitarian values. Individuals who do not endorse the value of humanitarianism do not need effort-circumstances cues to distinguish cheaters from individuals who are genuinely needy because they do not wish to help others regardless. Furthermore, humanitarianism applies to everyday help-giving decisions just like the deservingness heuristic. This contrasts with ideology and egalitarianism, which especially apply to large-scale politics. Also, while abstract political values and principles have been argued to require cognitive resources (Feldman & Steenbergen, 2001; Petersen et al., 2012), humanitarianism has been argued to be more emotional in nature and more intuitively processed (Feldman & Steenbergen, 2001). These theoretical arguments take us to the first hypothesis:

H1. Humanitarianism amplifies susceptibility to cues about whether welfare recipients are lazy or unlucky in opinion formation about social welfare.

The next section lays out the theoretical framework for understanding why people should be concerned about the efforts of the rich. After that, I will show how this component concerning perceived effort fits into the larger structure of the heuristic shaping attitudes towards taking from the better-off.

2.4. Do the rich deserve their wealth?

We know that effort is essential in deeming worse-off individuals deserving of help – but what about the rich? Are they conversely deemed deserving of their wealth if they have worked hard to obtain it? The economic fairness framework presented in Table 2.1 clearly leads us to this expectation, but the framework does not offer a psychological explanation for why people should be concerned about the efforts of the wealthy. Such insights are important because

they can help map the structure of the psychological mechanism shaping attitudes towards “redistributing from the better-off”.

Research from ownership psychology suggests that humans are endowed with a culturally universal ownership psychology that shapes intuitions about when resources are legitimately owned or merely possessed. These intuitions have been argued to have evolved in response to the adaptive problem that humans need to obtain resources without igniting costly conflicts with others who feel emotionally attached to the resources (Boyer, Margolis, & Laurence, 2015: 189; Brown, 1991; Kanngiesser & Hood, 2014). A key piece of information from which people infer ownership is whether the person possessing resources has invested hard work in obtaining or producing them (Friedman, 2010; Palamar et al., 2012). People with a strong sense of ownership are generally more reluctant to give them up (Eswaran & Neary, 2014; Boyer et al., 2015: 192). By contrast, resources obtained through lucky circumstances, so-called windfall gains, are less recognized as legitimately owned and more readily spent by the individual possessing them (Epley & Gneezy, 2007; Kameda et al., 2002).

If ownership intuitions account for the way citizens evaluate rich people’s deservingness, we should find that humans universally deem rich people deserving on the basis of cues about whether they have obtained their resources through hard work or through benign circumstances. To my knowledge, there is no research of whether people form deservingness perceptions of the rich on the basis of effort-circumstances cues. This leads us to the second hypothesis:

H2. Citizens perceive the rich as more deserving if they are exposed to effort cues (vs. circumstances cues).

An observable implication of the argument that perceived deservingness of the rich arises from a universal ownership psychology is formulated in hypothesis 3:

H3. Citizens across ideological positions and economic backgrounds are equally susceptible to effort-circumstances cues when forming deservingness perceptions of the wealthy.

The next question is then if effort-circumstances cues can affect attitudes towards taxing the rich. There are two theoretical reasons why we should expect citizens to become more supportive of raising taxes on the wealthy if they are exposed to cues suggesting that the wealth stems from circumstantial factors rather than effort. First, from an evolutionary perspective, individuals who worked hard to obtain their resources have a strong sense of ownership, which motivates them to make it costly for others to try to acquire their resources. In

order to avoid igniting endless conflicts in the group, sharing demands should be directed at individuals who possess “windfall resources” (Kameda et al., 2002). A related argument is that effort also reflects whether individuals in possession of resources are likely to keep obtaining resources in the future – in other words whether they are valuable producers. If substantial resources are taken from hardworking individuals it may harm production incentives in the group. Thus, it is essential to let hardworking individuals benefit from their endeavors to avoid that they feel exploited and thereby sustain work ethics in the social group (Kornhauser, 1995: 122; Rowlingson & Connor, 2011: 444; Sznycer et al., 2017:1). In line with these arguments, experiments have shown that people tend to demand that others share resources obtained by luck (Kameda et al., 2003).

As mentioned, observational studies have found connections between beliefs about whether the rich have made an effort to obtain their wealth and attitudes towards taxing them (Ragusa, 2014; Sadin, 2014), but it is unresolved if public support for raising taxes on the wealthy can be swayed by exposing them to cues reflecting that they worked hard for their resources rather than obtained them by lucky circumstances. Thus, I intend to test the following hypothesis.

H4. Public support for raising taxes on the wealthy decreases if citizens are exposed to cues suggesting that the rich became wealthy through their own efforts (vs. circumstances).

Although all citizens should grant ownership and thus form deservingness perceptions of the wealthy on the basis of effort-circumstances cues, individuals in need of resources, namely citizens with lower income, should hold tax attitudes that are particularly responsive to these cues as they are essential in detecting “the better-off” who can be pressured to give up their resources. Conversely, individuals with high incomes have a strong economic self-interest in rejecting information about effort as a valid basis for raising taxes on the wealthy (DeScioli et al., 2014). This takes us to hypothesis 5:

H5. Low-income citizens’ attitudes towards raising taxes on the wealthy are more responsive to effort-circumstances cues than high-income citizens’ attitudes.

As I have emphasized in this section, effort should be an essential characteristic by which the rich are deemed deserving of their wealth. The next section shows that effort is only one, and not the most consequential, input to the heuristic shaping attitudes towards taking from the better-off.

2.5. Introducing the heuristic shaping attitudes towards redistribution from the better-off

An evolved heuristic that regulates decisions to take resources from others should automatically weigh the costs and benefits of obtaining desired resources. Ancestrally, relative fighting ability has been an important input to assessing the short-term costs of taking resources from others. In line with this logic, it has been demonstrated that physically stronger males are more prone to follow their economic self-interest in forming attitudes towards economic redistribution, also in modern large-scale societies where physical strength is irrelevant (Petersen et al., 2013). For the sake of simplicity, the framework developed here focusses on the long-term consequences of taking resources from others. Specifically, the costs depend on whether the better-off are contributors or competitors. Relationships with contributors provide long-term benefits, they are worth investing in, and it can be costly to put such relationships at risk. If the better-off are met by pervasive demands to share, and if their resources are taken from them by force, it is likely that they will be reluctant to help in the future and they may lose their motivation to obtain resources. As described previously, it is important to give others incentives to produce, for instance by letting them enjoy the benefits of their endeavor.

In contrast, when it concerns competitors, the benefits of taking their resources exceed the costs. First of all, competitors are not socially valuable, so there is no need to facilitate a good relationship with them by respecting their resources. More importantly, their loss constitutes a benefit in itself because their relative social position declines if they lose resources (Sznycer et al., 2017: 2; Smith et al., 1996). Thus, on the basis of the long-term consequences involved in taking resources, I propose that the heuristic regulating attitudes towards taking from the better-off can be formalized as follows:

If the better-off are contributors → do not take resources from them.

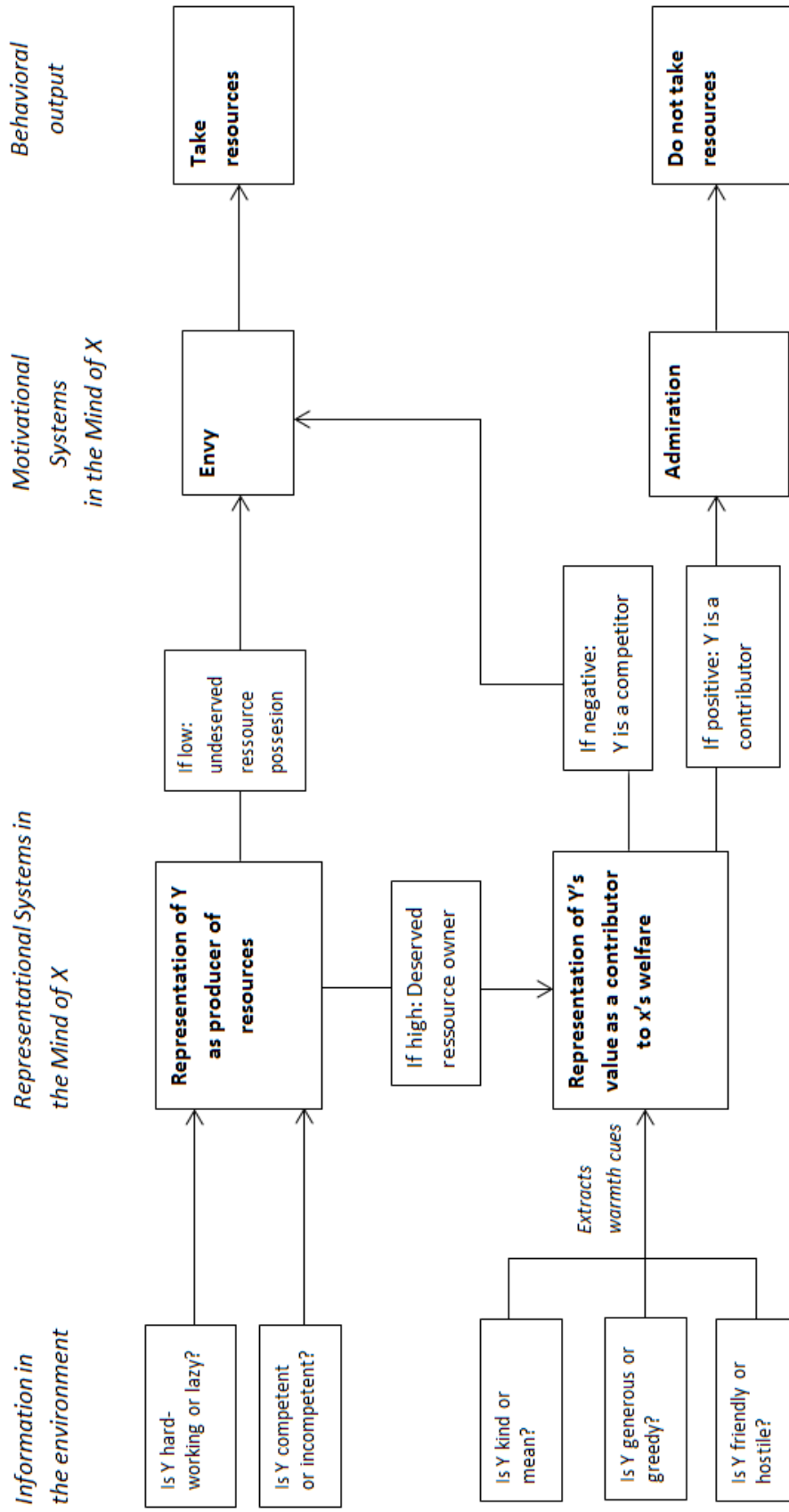
If the better-off are or competitors → take resources from them.

Like the deservingness heuristic, this heuristic requires that reliable representations of the better-off are formed. As depicted in Figure 2.2, two types of information (inputs) are especially important: cues reflecting the warmth of the better-off and cues reflecting their effort and competence. Studies have shown that people universally categorize others along a warmth dimension depending on whether they are perceived as having good or bad intentions. People like warm individuals and dislike cold individuals. By detecting cues of whether others are mean or kind, generous or greedy, prosocial or antisocial, the individual spontaneously forms impressions of other people's warmth (Fiske et al., 2007; Goodwin et al., 2014; Wojciszke et al., 1998). The universal

human tendency to like and dislike others by forming impressions of their warmth is argued to have evolved in response to the need to be able to distinguish friends from foes (Fiske, Cuddy, & Glick, 2007).

I argue that perceived warmth is the most crucial factor regulating attitudes towards taking from the better-off because in forming impressions of whether others are warm or cold, the individual also distinguishes contributors from competitors. Cues of effort (and competence) are also relevant in assessing the social value of the better-off because they reflect how valuable others are as producers of resources, but they only determine degrees, that is, how valuable the better-off are as contributors and how fierce they are as competitors (see Fiske et al., 2007: 78 for a related argument).

Figure 2.2. The structure of the heuristic shaping attitudes towards “taking from the better-off”



Note: Adapted from Figure 2 in Petersen (2015) depicting the structure of the deservingness heuristic.

Importantly, research has shown that people experience emotions of envy and admiration towards individuals who rank above them in the socio-economic hierarchy depending on impressions of whether they are warm or cold (Fiske, 2010; Fiske et al., 2007). These emotions promote very different behaviors towards other people's resources. While envy motivates the individual to take desired resources (Fiske, 2010; Smith et al., 1996, Sznycer et al., 2017), admiration motivates the individual to social bonding and cooperation with the admired individual (Onu et al., 2016). This implies that the individual is discouraged to take resources from them. In line with these arguments, cross-cultural research has demonstrated that dispositional envy is associated with general support for redistribution (Sznycer et al., 2017). This leads me to the following two hypotheses:

H6. The more people envy the rich, the more they support policies that redistribute from them.

H7. The more people admire the rich, the more they oppose policies that redistribute from them.

How does perceived effort and perceived warmth of the rich interact in eliciting envy and admiration? Figure 2.2 illustrates the structure and content of the "taking heuristic". If we start from the upper-left corner, effort cues (along with competence cues) are central in forming representations of other individuals' value as producers of resources and whether their resources are deserved or not. Researchers have argued that if people perceive others as having an undeserved position, they tend to envy them (Smith et al., 1996: 159). This is shown by the arrows in the top of the figure. As the figure also shows, the process through which envy is ignited is more complex than simply envying individuals who did not make an effort to deserve their resources. As mentioned, research has found that people above the self in the social hierarchy are envied if they are represented as cold competitors, and envy only becomes stronger when competitors do well (Fiske, 2010; Fiske et al., 2007). Thus, if they are competent and hardworking competitors who earned their position through hard work, it should magnify the envy that people tend to feel towards cold rich people (Smith & Kim, 2007). This leads to the following hypothesis:

H8. The more people perceive the rich as cold, the more they tend to envy them if they are perceived as hardworking

Research suggests that the key elicitor of admiration is the excellence and accomplishments of others (Algoe & Haidt, 2009; Onu et al., 2016), for example getting rich through own effort and talent. Importantly, the extent to which rich people are admired for being in an elevated position, and consequently whether the individual becomes motivated to create social bonds, depends on

whether the rich are perceived as warm or cold (Fiske et al., 2007). Thus, we can form the following hypothesis:

H9. The more people perceive the rich as warm, the more they admire them if they are perceived as hardworking.

Let me stress that this depiction of the “taking heuristic” is a very simplified model of how highly complex representational and motivational systems interact in regulating attitudes towards taking from the better-off. Note in particular that the model excludes components pertaining to representations of relative fighting ability (e.g. physical strength or number of allies), which from an evolutionary perspective is important because it is only expedient for survival to take resources from individuals who do not in turn inflict costs that exceed the value of the desired resources (Petersen et al., 2013).

Still, I believe that this model is a useful first step to shed light on the heuristic responsible for generating attitudes towards taking from the better-off, as it enabled me to deduce a line of novel hypotheses.

2.6. The implications of taking both heuristics into account and overview of the hypotheses in the dissertation

As outlined above, the deservingness heuristic and the “taking heuristic” are fundamentally different and they address different problems involved with redistribution. By definition, the worse-off lack resources. The deservingness heuristic specifically addresses the problem of whether the worse-off will start obtaining resources in the future once circumstantial constraints have been removed or whether they will continue to free-ride. To make this distinction, effort cues are most important because a person who does not make an effort is a free-rider even if he is otherwise perceived as warm. By contrast, better-off individuals by definition already have resources, and it is therefore more consequential to detect their warmth as this reflects how they are likely to *expend* their resources: in a way that benefits or harms the self. Thus, as argued previously, warmth serves as the primary input to the heuristic regulating decisions to take resources.

Based on the theoretical argument that effort is the most important input to the deservingness heuristic and that warmth is the most important input to the “taking heuristic” that conjointly shape attitudes towards redistribution, I deduce three additional hypotheses:

H10. Attitudes towards economic redistribution are more influenced by perceptions of poor people's efforts than by perceptions of rich people's efforts.

H11. Attitudes towards policies redistributing from the better-off are more influenced by perceived warmth than by perceived effort of the rich.

H12. Attitudes towards policies redistributing to the worse-off are more influenced by perceived effort than by perceived warmth of the poor.

To briefly conclude on the theory chapter, the overarching research question of the dissertation is: *How* do perceptions of effort affect attitudes towards redistribution, and *who* is most affected by effort-circumstances cues? I argued that we can gain novel insights by drawing on psychological research. This approach gave rise to a theoretical framework from which I deduced 12 hypotheses, which are summarized in Table 2.2 with a note about where they are tested empirically. By testing these 12 hypotheses in the three research papers and in this summary report, I seek to answer the research question and extend existing research on public opinion about economic redistribution.

Table 2.2. Overview of hypotheses in the dissertation

No.	Description	Tested in
H1	Humanitarianism amplifies susceptibility to cues about whether welfare recipients are lazy or unlucky in opinion formation about social welfare.	Paper A
H2	Citizens perceive the rich as more deserving if they are exposed to effort cues (vs. circumstances cues).	Paper B
H3	Citizens across ideological positions and economic backgrounds are equally susceptible to effort-circumstances cues when forming deservingness perceptions of the wealthy.	Paper B
H4	Public support for raising taxes on the wealthy decreases if citizens are exposed to cues suggesting that the rich became wealthy through their own efforts (vs. circumstances).	Paper B
H5	Low-income citizens' attitudes towards raising taxes on the wealthy are more responsive to effort-circumstances cues than high-income citizens' attitudes.	Paper B
H6	The more people envy the rich, the more they support policies that redistribute from them.	Section 4.4.
H7	The more people admire the rich, the more they oppose policies that redistribute from them.	Section 4.4.
H8	The more people perceive the rich as cold, the more they tend to envy them if they are perceived as hardworking.	Section 4.4.
H9	The more people perceive the rich as warm, the more they admire them if they are perceived as hardworking.	Section 4.4.
H10	Attitudes towards economic redistribution are more influenced by perceptions of poor people's efforts than by perceptions of rich people's efforts.	Paper C
H11	Attitudes towards policies redistributing from the better-off are more influenced by perceived warmth than by perceived effort of the rich.	Paper C
H12	Attitudes towards policies redistributing to the worse-off are more influenced by perceived effort than by perceived warmth of the poor.	Paper C

Chapter 3.

Research design and data

After presenting the framework for understanding how citizens form attitudes towards economic redistribution, I will now test it empirically. As any endeavor to grasp public opinion, the project faces various methodological challenges that need to be addressed. This chapter describes the research strategies and data sources used in the project and discusses their advantages and limitations. The chapter proceeds as follows: First, I provide an overview of the different datasets and individual studies of the dissertation. Second, I discuss how experimental and observational survey data have been used in the project and the implications of these choices. Third, I outline four issues pertaining to the potentials for generalizing the results and the strategies I have employed to address these issues.

3.1. Data sets and studies in the dissertation

The dissertation draws on eight different datasets (see overview and descriptions in Table 3.1). Most of the studies are based on nationally representative samples collected by YouGov, but two datasets are based on convenience samples; one recruited on Facebook and one on Amazon's Mechanical Turk. All datasets were collected using Computer Assisted Web Interviews (CAWI).

To test the prediction that humanitarianism is an individual-level factor that conditions the extent to which citizens' social welfare opinions are affected by effort-circumstances cues, I used dataset 1 and 2, which combined comprise three survey experiments. The treatment material consisted of manipulated news articles in which welfare recipients as a group were portrayed as lazy or unlucky and vignettes describing a specific welfare recipient as lazy or unlucky.

Paper B tests the impact of effort-circumstances cues on public perception of rich people's deservingness and whether public opinion can be swayed in favor of higher taxes on the wealthy if cues suggest that the rich amassed their fortunes by working hard rather than through benign circumstances. An important argument in this paper is that people universally recognize wealth as deserved if it is obtained through individual effort instead of circumstances, and therefore the hypotheses were tested in two different cultural settings, Denmark and the US, by collecting dataset 3-6.

Table 3.1. Overview of data sets in the dissertation

No.	Applied in	Description	Respondents	Data collection period
1	Paper A	Experiment with fictitious newspapers article about welfare recipients' motivation to work.	Convenience sample of Danish Facebook users (n = 574)	May 2011
2	Paper A	Two experiments where welfare recipients' efforts are manipulated. The first experiment in fictitious newspaper articles, the second in vignettes.	Representative** Danish citizens (n = 1939) (same survey as study 3)	December 2015- January 2016
3*	Paper B	Vignette experiment where rich people's efforts are manipulated	Representative** American citizens (n = 1723)	April 2016
4*	Paper B	Two experiments where rich people's efforts are manipulated. The first is a question wording experiment, the second is a vignette experiment	Representative** Danish citizens (n = 1828)	July-August 2016
5*	Paper B	Question wording experiment where rich people's efforts are manipulated	Representative** Danish citizens (n = 1063)	February 2017
6	Paper B	Question wording experiment where rich people's efforts are manipulated	Convenience sample of American citizens recruited through MTurk (n = 808)	August 2017
7*	Paper C	Observational data on perceptions of poor and rich people and attitudes towards economic redistribution	Representative** Danish citizens (n = 2339)	December 2016
8	Paper C and empirical chapter	Observational data on perceptions of poor and rich people, envy and admiration towards the rich and attitudes towards economic redistribution	Representative** US citizens (n = 1509)	November- December 2017

Note: The table is adopted from Bøggild, 2016 & Slothuus, 2008. A large part of the data collection was generously funded by Aarhus University Research Foundation and the Department of Political Science at Aarhus University.

* Data collected in collaboration with colleagues. All measures and designs of the specific studies were constructed by the author.

** Approximately representative based on quota sampling on age, sex, education, and region.

The experiments in Paper B consist of vignette experiments in which a specific rich person was described and question wording experiments in which the whole group of rich people was presented as having worked their way up or benefited from circumstantial factors.

Paper C investigates the relative associations between redistributive attitudes and perceptions of rich and poor people's warmth and effort. The results in this paper draw on dataset 7 and 8, which are based on nationally representative observational survey data from both Denmark and the US. Finally, to test the hypotheses about how emotions of admiration and envy are associated with perceptions of rich people's warmth and effort and attitudes towards redistributing wealth from them, the empirical section 4.4 draws on dataset 8, which is nationally representative. It is observational and includes measures of American citizens' emotions towards the rich, perceptions of their warmth and attitudes towards taxing the rich.

3.2. Data types and interval validity

The aim of this dissertation is essentially to grasp the causal relationship between perceptions of effort and attitudes towards redistribution. To this end, I have employed both observational and experimental data (see Table 3.1). In contrast to observational data, experimental data is characterized by an intervention in the data generation process through which respondents are randomly assigned to different experimental conditions on the independent variables, for example whether welfare recipients are lazy or unlucky. Afterwards, the potential effect on the dependent variable is observed: Did attitudes towards social welfare differ between the experimental conditions? (Druckman et al., 2011: 16). Random assignment to experimental conditions implies that the differences between the groups of respondents in the conditions are leveled out as the number of respondents increases (Agresti & Finlay, 2009: 15). In this way, the experimental approach can rule out the possibility that an association between perceptions of welfare recipients' effort and support for social welfare arises from other observable or unobservable factors like income, values and personality traits (McDermott, 2002: 33). Also, given that respondents were exposed to the treatment before the dependent variable was measured, we can be sure that citizens' impressions of welfare recipients are not a consequence of a post-hoc rationalization strategy where people for example first decide to oppose social welfare and then justify their position by adapting the impression that welfare recipients do not bother to fend for themselves. Thus, the experimental approach is unmatched in its ability to infer causal relationships by establishing causal order between the independent

and dependent variables and by controlling for the possible effects of any other underlying factors (Cook & Campbell, 1979: 37).

Both experimental and observational data are useful to investigate the hypothesized associations between perceptions of rich and poor people and redistributive preferences, because an association between an independent and a dependent variable is a prerequisite for causality (Bryman, 2008: 32). Yet using observational data implies certain reservations with respect to causal order and possible uncontrolled confounding factors, but it has advantages with respect to the external validity, to which I will return. In general, I have sought to prioritize an experimental approach where associations between effort perceptions and economic redistribution have been established in existing work. For example, a couple of studies have drawn connections between citizens' beliefs about the effort of the rich and attitudes towards taxing them (Ragusa, 2014; Sadin, 2014). However, these studies are not experimental, and we do not know how responsive public opinion is to cues about whether the rich made an effort or benefitted from circumstances. Therefore, it was important to employ an experimental approach to extend existing research in Paper B. By contrast, it has not, to my knowledge, been investigated, for example, if emotions of envy and admiration towards the rich are associated with attitudes towards taxing them.⁵ Given the lack of studies in this area, using observational data to test predicted patterns is an important first step in gaining insights about how the opinion formation process accounts for how people form attitudes towards redistributing from the rich. Furthermore, it can be difficult to experimentally manipulate emotions. By exploiting natural variation in emotions and perceptions in the population, the observational data is a well suited basis for testing my hypotheses. Later, it would of course be worthwhile to employ experiments to build on the results obtained with observational data to further explore the hypothesized mechanisms.

Next, I discuss external validity and my strategies to strengthen it in the project.

3.3. Strategies to strengthen the external validity

External validity refers to the extent to which a “causal relationship holds over variation in persons, settings, treatments, and outcomes” (Shadish et al., 2001: 464). It is an important consideration in my research design, especially because most of the studies in this project use experiments, which often is crit-

⁵ It should be noted that Sznycer et al. (2017) have found that dispositional envy and general support for redistribution are associated.

icized for maximizing internal validity at the expense of external validity (Barabas & Jerit, 2010; McDermott, 2002: 35). I have employed four strategies to strengthen the external validity of the project.

Studies in political opinion formation often use experiments based on convenience samples. This naturally begs the question of whether the results can be generalized to the population we really are interested in obtaining knowledge about. A very simple but expensive way to minimize this problem is by embedding experiments in surveys that are fielded to nationally representative samples of the population (Slothuus, 2008: 38). I have sought to employ representative samples as much as possible throughout the project and to replicate the individual studies in each paper. Although the importance of replication should be evident at all times, awareness about this issue has increased in the last couple of years in the wake of the so-called replication crisis (Open Science Collaboration, 2015). A way forward is simply to give higher priority to replication. Paper A, for example, conducts an initial test of hypothesis 1 using a convenience sample obtained through Facebook, and the results were then replicated with two other experiments embedded in a nationally representative sample. Likewise, the hypotheses of Paper B and Paper C are tested in more than one study. In brief, the fact that 6 out of 8 studies are based on representative data and most of the studies have been replicated in multiple studies generally strengthens the generalizability of the dissertation's findings.

Second, low ecological validity has often been highlighted as a substantial threat to external validity. If, for example, respondents are placed in settings that are too far removed from the settings in which they naturally would form their political attitudes, then we should be concerned about ecological validity (Bryman 2008: 33). In sterile labs or unfamiliar and uncomfortable research surroundings, there is a pertinent risk that the treatment effects become contaminated (Gaines et al., 2006: 16). In this project, all surveys were fielded to respondents through online platforms that enabled respondents to read the stimulus material, questions and form their opinions in a context chosen by them. Research settings chosen by respondents are more likely to resemble a natural environment where the respondents would normally read the news and form their political attitudes.

The third important concern is whether the results that are obtained are tied to a specific cultural context or whether they are generalizable across different cultures. This issue is particularly pertinent to this dissertation as the theoretical framework rests on the notion that intuitions about giving to the worse-off and taking from the better-off are based on universal psychological mechanisms. Therefore, I have collected data in two different welfare systems:

Denmark and the US. Although both are WEIRD⁶ countries, they differ on important cultural and institutional parameters that could serve as important alternative explanations for the way citizens reason about redistribution. Researchers have for example argued that the United States has a unique individualistic culture with strong commitment to equal opportunity, laissez-faire economy and individual freedom (Gilens, 2000: 32), whereas Denmark with its universalistic welfare regime has been seen as adhering to collectivistic values with high tax levels and extensive public spending (Esping-Andersen, 1990). Denmark and the US are also very far apart with respect to economic inequality, with Denmark being one of the most equal countries in the world (OECD, 2015). The cross-cultural datasets not only strengthen the generalizability of the project, it also addresses the alternative explanation that the causal relationships between effort perceptions and redistributive preferences arise from exposure to distinct cultural mindsets of certain welfare systems rather than from deeper psychological systems.

Fourth, external validity is not just a matter of identifying a causal relationship across different persons and setting, it is also a matter of whether the causal relationship holds across different measures of the independent and dependent variable (Shadish et al., 2001: 464). To address this issue, this project has employed various measures of effort, for example with vignettes in Paper A and Paper B. Vignettes are: “short descriptions of a person (...) which contain precise references to what are thought to be the most important factors in the decision-making or judgment-making processes of respondents” (Alexander & Becker, 1978: 94). Employing vignettes as treatment material has allowed me to expose respondents to very clear and unambiguous cues about whether poor and rich people’s economic situations can be attributed to effort or circumstances. While vignettes constitute very clean treatment material, their hypothetical nature raises the question of whether similar effects can be obtained with treatment material that seeks to manipulate perceptions of real social groups in society. Thus, I also employed question wording experiments and experiments with realistic news articles in which the whole group of poor or rich people was presented as being economically worse-off or better-off due to (lack of) effort or circumstances. Third, I exploited how citizens naturally vary in their perceptions of rich and poor people and their emotions using observational survey data (dataset 7 and dataset 8). In this way, the use of observational data strengthens the external validity of the results, because it captures respondents’ emotions and perceptions rather than artificially induced emotions and perceptions.

⁶ Western Educated Industrialized Rich and Democratic

I sum, by combining experimental and observational survey data I have generally sought to strengthen the external validity of the findings. Furthermore, the generalizability of the findings was strengthened by measuring the key independent variable in various ways: 1) by manipulating the effort of specific poor and rich people, 2) by manipulating the effort of the whole social group of respectively poor and rich people, and 3) by obtaining measures of natural variations in people's perceptions of poor and rich people's effort using observational data.

Chapter 4.

Findings

The aim of this chapter is to answer the overarching research question the dissertation set out to answer: How do perceptions of effort affect attitudes towards economic redistribution, and who is most affected by effort-circumstances cues? The chapter presents the findings generated by the empirical tests of the 12 hypotheses summarized in Table 2.2 in the theory chapter. Most of the findings are from the individual papers and more detailed descriptions about measurement, analytical strategies and empirical tests can be found there. Section 4.4 presents additional findings pertaining to hypotheses 6-9 about how the emotions of envy and admiration are connected to perceptions of rich people's effort and attitudes towards redistributing from them. Hypotheses 6-9 are not tested in the papers, but so more detailed descriptions about measurement and analytical strategies are provided in section 4.4.

4.1. Humanitarianism moderates susceptibility to effort-circumstances cues in opinion formation about helping the poor (H1)

The first findings concern the deservingness heuristic. As discussed in Chapter 2, an impressive number of studies have demonstrated that the deservingness heuristic is essential for the way citizens form attitudes towards welfare policies and helping the needy. One question that remains unanswered is whether the extent to which citizens are affected by cues about whether poor people are lazy (lack of effort) or unlucky (circumstances) differs at the individual level. Current knowledge suggests that all citizens are affected regardless of their values. Based on three survey experiments utilizing news articles about welfare recipients as a social group and vignettes about a specific welfare recipient, Paper A yielded the following findings.

First, consistent with previous research, the results show that effort-circumstances cues are highly effective in swaying public support for social welfare – both when it concerns social welfare to a specific welfare recipient and social welfare in general. Also in line with existing research, abstract political values like egalitarianism, individualism and ideology do not influence responsiveness to effort-circumstances cues (see Fig. 1, Fig. 2 and Fig. 3 in Paper A). These results add empirical support for the notion that the deservingness heuristic is a strong force in shaping public support for social welfare.

Second, by replicating these findings from the literature on the deservingness heuristic as just described, the experiments form a solid basis for testing the central theoretical argument of Paper A: that humanitarianism (the belief that others in need ought to be helped) constitutes an individual-level factor that amplifies susceptibility to effort-circumstances cues in opinion formation about social welfare (H1). Across the three experiments, I find strong empirical support for H1. The stronger humanitarian values people hold, the more their attitudes towards social welfare are swayed by effort-circumstances cues. Thus, Paper A contributes to the existing literature by identifying an individual-level factor that conditions the extent to which people use the deservingness heuristic (see Fig. 1, Fig. 2 and Fig. 3 in Paper A).

4.2. The impact of effort-circumstances cues on perceived deservingness of the rich and attitudes towards raising taxes on them (H2-H5)

The second line of findings concern the effects of exposing citizens to cues about whether the rich worked hard to obtain their wealth or whether they benefitted from societal structures. The findings in Paper B support the two central conclusions that effort-circumstances cues substantially affect citizens' perception of whether the rich deserve to be wealthy and that citizens from low-income groups become more supportive of raising taxes on the wealthy in response to effort-circumstances cues. More specifically, the tests of hypotheses 2 to 5 gave rise to the following findings.

First, the empirical tests of H2 show that citizens perceive the rich as markedly more deserving if they are exposed to cues suggesting that their wealth can be attributed to effort than if they are exposed to cues suggesting that the wealth stems from benign circumstances. These results are found in both an American and a Danish context (Paper B, top panel of Figure 1 and middle panel of Figure 2).

Second, citizens across different ideological positions and across different income groups do not differ in the extent to which they deem the rich deserving in response to effort-circumstances cues (Paper B, top panel of Figure 1 and middle Panel of Figure 2). These results support H3, which is based on the theoretical arguments advanced in ownership psychology that humans universally recognize that people are deserved owners of resources if they have worked hard to obtain or produce them (Boyer et al., 2015; Friedman, 2010; Palamar et al., 2012).

Third, the empirical tests of the prediction that citizens become more supportive of raising taxes on the wealthy if they are exposed to circumstances

cues (vs. effort cues) generated mixed results. One experiment in Denmark found that citizens become substantially more supportive of raising taxes on the wealthy in response to circumstances cues (vs. effort cues) (Paper B, top panel of Figure 2); two other experiments found no effect (Paper B, bottom panel of Figure 2, top panel of Figure 3). One American experiment found no effect (Paper B, bottom panel of Figure 3); the other found a small and marginally significant impact of effort-circumstances cues on support for raising taxes on the rich (Paper B, bottom panel of Figure 1). Given these mixed results, H4 can only be partially supported.

Fourth, despite mixed evidence for H4 that public opinion about taxing the wealthy on the whole is affected by effort-circumstances cues, the results show that one social group, namely low-income citizens, is generally affected. In four out of 5 experiments, they became significantly more supportive of raising taxes in response to circumstances cues (vs. effort cues). By contrast, citizens from the highest income groups are unresponsive to effort-circumstances cues across all experiments (Paper B, Bottom of Figure 1, Top and bottom panel of Figure 2 and Figure 3). These results are consistent with the prediction that people with few economic resources are most responsive to effort-circumstances cues in opinion formation about taking from the rich. H5 is thus supported.

4.3. The poor should make an effort, and the rich should be warm (H10-H12)

An important argument of the dissertation is that there are two substantially different heuristics that shape attitudes towards “redistribution to the worse-off” and “redistribution from the better-off”. While cues about effort serve as a key input to the deservingness heuristic concerning the poor, I argued that cues about warmth serve as the most important input to the heuristic shaping attitudes towards taking from the better-off. The empirical findings in Paper C support this theoretical argument as redistributive preferences are more strongly associated with perceived effort of the poor than perceived effort of the rich. More specifically, the results support the following conclusions.

First, public support for general redistribution in society (the view that inequality in society is too large and should be reduced) is about three times more strongly associated with perceptions of poor people’s effort than perceptions of rich people’s effort in both countries (Paper C, Figure 1B and Figure 3B), which provides strong support for hypothesis 10.

Second, the findings support the conclusion that public opinion about redistribution is more concerned with the warmth of the rich than with their

effort. Whether it concerns general support for economic redistribution in society or support for policies that redistribute wealth from the rich, the results consistently provide strong support for hypothesis 11 that perceived warmth of the rich is more consequential than perceived effort of the rich – in both countries (Paper C, Figure 1B, Figure 2B, Figure 3B and Figure 4B).

Third, citizens' impressions of whether the poor are hardworking or lazy are more strongly associated with public support for policies redistributing wealth to the poor (Paper C, Figure 2B, Figure 4B). I find this in both countries, which is consistent with the deservingness theory that effort is the key input to the deservingness heuristic. In terms of *general* support for redistribution, H12 is only supported in the US (Paper C, Figure 1B and Figure 3B)

4.4. Envy and admiration shape attitudes towards redistribution from the rich (H6-H9)

So far, this chapter has presented the central findings of the three individual papers of the dissertation. On the basis of the theoretical framework, I also deduced hypotheses 6 to 9 about emotions being central to the heuristic shaping attitudes towards taking from the better-off. These hypotheses were not tested in the papers, but this empirical section conducts some initial tests. Specifically, I predicted that the more people *envy* the rich, the more they support policies redistributing wealth from them (H6), and the more people *admire* the rich, the more they oppose policies redistributing wealth from them (H7). H8 and H9 furthermore predict that perceived warmth of the rich conditions the impact of perceived effort on emotions. H8 predicted that the more people perceive the rich as cold, the more they tend to envy them if they perceive them as hardworking. H9 predicted that the more people perceive the rich as warm, the more they tend to admire them if they perceive them as hardworking.

Since H6-H9 are only tested in this empirical section, data, measurements and analytical strategies will be more thoroughly described.

Data and measures

Dataset 8 is used to test hypotheses 6-9. This is a nationally representative sample of American citizens collected by YouGov in November and December 2017 (n = 1509). To measure attitudes towards redistribution from the rich, I use two questions: (1) Should taxes on the wealthy be increased, decreased or kept about the same? Answers were obtained on a 7-point scale and rescaled to range from 0-1 with higher values indicating support for increased taxes (M = 0.68, SD = 0.30). (2) Does the upper class pays too much or too little in

income taxes? Answers were obtained 5-point scale that subsequently was rescaled from 0-1 with higher values indicating that they pay too little in taxes ($M = 0.69$, $SD = 0.32$).

I use self-reported measures of emotions. It is a very common approach in the literature, but it comes with different validity issues. Some people may for instance experience social desirability pressure and be unwilling to admit to envying others. The approach also requires that people are able to identify their own emotions, which can be difficult because emotions to a large extent operate subconsciously. Still, while implicit measures of emotions can help overcome some of these issues, self-reported measures are the best approach when the goal is not simply to measure if emotions are positive or negative, but to identify discrete emotions as here (Brader & Marcus, 2013: 187). Respondents were asked the following question: “How do you feel when you hear or read about rich people?” Measures of “Envy” and “Admiration” were then obtained on a 7-point scale with the endpoints “Not at all” to “Very strongly”. The measures were rescaled to range from 0-1 with higher values indicating strong emotions (Admiration: $M = 0.35$, $SD = 0.29$; Envy: $M = 0.31$, $SD = 0.29$). To measure perceived efforts of the rich, a standard measure from American National Election Studies was employed. Respondents were asked on a 7-point scale whether they think that most rich people are “hardworking” or “lazy” with these words as endpoints. The measures were rescaled to range from 0-1 with higher values indicating effort ($M = 0.52$; $SD = 0.32$). Two items were used to measure perceived warmth of the rich. First, respondents were asked to place the rich (along with other social groups) on a scale from 1 to 7 (1 = “dislike the group very much”, 7 = “like the group very much”). Respondents were also asked to place the rich on a scale from 1-7 (1 = most people in the group tend to be *cold*, 7 = most people in the group are *warm*). These questions were collapsed into a reliable scale ranging from 0-1 with higher values indicating warmth ($\alpha = 0.72$; $M = 0.43$; $SD = 0.26$).

Results

To test if admiration and envy are associated with attitudes towards taxing the rich as predicted in H6 and H7, I used OLS regression with age, gender, education, race and income as control variables. To avoid post-treatment bias,⁷ I did not control for ideology because sentiments towards different social groups are essential in shaping ideological identification (Converse, 1964; Kluegel & Smith, 1986; Schaffner, MacWilliams, & Nteta, 2016).

⁷ The results are substantially the same if ideology is included as control variable, and H6, H7 and H9 are still supported. See the appendix.

The results in Table 4.1 show that emotions are associated with attitudes towards taxing the rich. In both Model 1 and Model 2, envy is positively associated with support for raising taxes on the wealthy. This lends support to H6. The results also reveal that admiration is very strongly associated with opposition to taxing the wealthy. In fact a move from 0 to 1 on the warmth scale is associated with about a 40 percentage point decrease in support for redistributing wealth from the rich. Thus, based on the results in Table 4.1, H7 is also supported.

Table 4.1. Envy and admiration and support for redistributing from the better-off

	Upper class taxes	Tax the rich
Envy	0.150*** (0.031)	0.162*** (0.030)
Admiration	-0.419*** (0.031)	-0.355*** (0.029)
Age	0.000 (0.001)	0.001 (0.001)
Gender (Male)	-0.056*** (0.017)	-0.072*** (0.016)
Income	-0.006* (0.003)	-0.002 (0.003)
Education	0.019 (0.018)	0.009 (0.017)
Race (White)	-0.032+ (0.019)	-0.023 (0.018)
Intercept	0.860*** (0.036)	0.778*** (0.034)
<i>n</i>	1216	1224
Adjusted <i>R</i> ²	0.145	0.123

Note. Entries are unstandardized OLS regression coefficients. Standard errors in parentheses. All variables are coded as 0-1 except age in years and income where 1 scale point is \$10,000. For education, some college and above is coded as 1, and less than college is coded as 0. Two-sided tests of significance. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The next part of the analyses concerns how the emotions of envy and admiration are associated with perceptions of rich people's effort and warmth. I argued that the extent to which citizens admire and envy the rich for their efforts depends on whether people find them warm or cold.

The first step is testing H8 (the more people perceive the rich as cold, the more they tend to be envy them if they are perceived as hardworking).

Table 4.2. The association between perceived effort of the rich and admiration and envy moderated by perceived warmth of the rich

	Model 1	Model 2	Model 3	Model 4
	Envy	Admiration	Envy	Admiration
Effort	0.047 (0.033)	0.185*** (0.029)	0.091+ (0.052)	0.079+ (0.042)
Warmth	0.031 (0.041)	0.378*** (0.036)	0.103 (0.076)	0.206*** (0.061)
Age	-0.003*** (0.001)	-0.001 (0.000)	-0.003*** (0.001)	-0.001+ (0.000)
Gender (Male)	0.009 (0.016)	0.022 (0.014)	0.010 (0.016)	0.021 (0.014)
Income	-0.004 (0.003)	-0.002 (0.002)	-0.004 (0.003)	-0.001 (0.002)
Education	-0.023 (0.018)	-0.012 (0.016)	-0.024 (0.018)	-0.010 (0.016)
Race (White)	-0.002 (0.018)	-0.057*** (0.016)	-0.003 (0.019)	-0.056*** (0.016)
Effort × warmth			-0.122 (0.110)	0.294*** (0.087)
Intercept	0.472*** (0.033)	0.175*** (0.030)	0.451*** (0.041)	0.226*** (0.034)
<i>n</i>	1268	1268	1268	1268
Adjusted. <i>R</i> ²	0.034	0.240	0.034	0.246

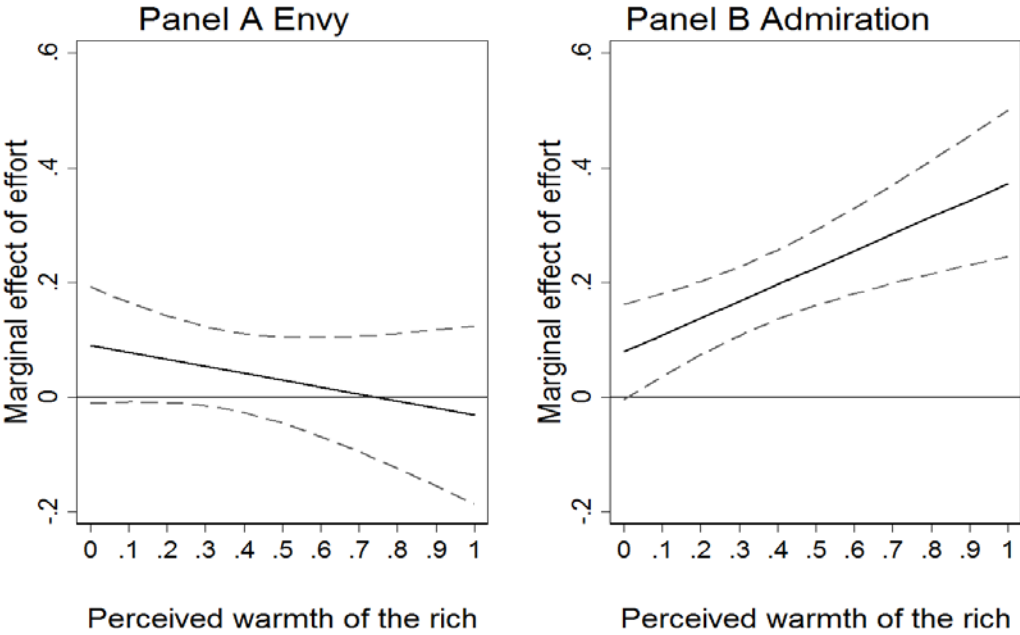
Note. Entries are unstandardized OLS regression coefficients. Standard errors in parentheses in Model 1 and Model 2. Robust standard errors in parentheses in Model 3 and Model 4. All variables are coded as 0-1 except age in years and income where 1 scale point is \$10,000. For education, some college and above is coded as 1, and less than college is coded as 0. Two-sided tests of significance. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

In Table 4.2, Model 3, I regressed envy on perceived effort and perceived warmth of the rich along with a two-way interaction term between effort and warmth. For ease of interpretation, the interactions are also depicted in Figure 4.1 Panel A. The results show that there is no statistically significant interaction between perceived effort and warmth of the rich on envy towards the rich. Still it is interesting that the trend is as we would expect, where perceived effort of the rich is positively associated with envy if citizens perceive the rich as cold. Model 3 reveals that for respondents who score 0 on the warmth dimension, there is a positive association between perceived effort and envy, and it

is marginally significant ($b = 0.091$). All in all, the results do not support H8, however.

The last step is testing H9. The results are presented in Table 4.2, Model 4 and in Figure 4.1, Panel B.

Figure 4.1. How perceptions of rich people’s effort are associated with admiration and envy depending on whether the rich are perceived as cold or warm



Note. The estimates are derived from Table 4.2; Panel A from Model 3; Panel B from Model 4. 95 % confidence intervals.

As Model 4 reveals, there is a statistically significant interaction between perceived effort and perceived warmth of the rich on admiration of the rich. Panel B in Figure 4.1 shows that perceiving the rich as hardworking is positively associated with admiring the rich across the whole warmth scale, but this connection is strongly conditioned by perceived warmth of the rich. People who perceive the rich as cold feel very modest degrees of admiration although they have the impression that they are hardworking. By contrast, there is a very strong positive association between perceiving the rich as hardworking and admiring them among citizens who like the rich. This means that there is support for H9.

In sum, the findings in this section generally support the theoretical argument that the emotions of envy and admiration are important in shaping attitudes towards redistributing wealth from the rich. The more people envy the rich, the more they support taxing them, and the more people admire the rich, the more they oppose taxing them. Furthermore, the results show that people

do not admire rich people unconditionally if they have the impression that they are hardworking. In fact, people who think that the rich are cold and unlikable feel very modest degrees of admiration if they perceive them as hardworking. This illustrates the theoretical point advanced in social psychology that perceived warmth is essential in regulating admiration (and envy) towards individuals higher up in the social hierarchy (Fiske, 2010; Fiske et al., 2007).

Combined, these results provide some initial support for the theoretical framework about how envy and admiration constitute central components of the heuristic shaping attitudes towards taking from the better-off. Of course, the results are based on observational data, which involves some caveats pertaining to the direction of the causal arrow and confounding factors that have not been controlled for. An important future step in testing the framework would be to employ an experimental approach where emotions are manipulated or where implicit measures of emotions are employed. Envy is an emotion that people may not admit to (Smith and Kim, 2007: 47) and it is possible that the generally weaker associations I have found with envy compared to admiration reflect that it is not socially acceptable to envy others. Although much more research is needed to explore how the heuristic transforms perceptions of rich people's efforts into attitudes towards economic redistribution, I believe that the empirical tests in this chapter constitute some valuable first steps.

4.5. How the empirical findings conjointly answer the research question

In sum, the empirical findings generated through the tests of the 12 hypotheses can provide an answer to the overarching research question about how perceptions of effort affect attitudes towards redistribution and who is most affected by effort-circumstances cues. Table 4.3 lists the hypotheses and whether they gained empirical support. As the table shows, all hypotheses, except H8, were either fully or partly supported.

The dissertation found that all citizens, across welfare regime, ideology and income groups deem rich people deserving of their wealth if they obtained it through their own effort rather than through circumstantial factors (H2-H3). In this way effort-circumstances cues are important for evaluating the deservingness of both the poor and the rich. Importantly, only citizens from low-income groups become systematically more supportive of raising taxes on the wealthy if they are exposed to effort-circumstances cues (H4-H5). Thus, the results support the conclusion that income is an important individual-level factor that conditions whether attitudes towards raising taxes on the wealthy

are swayed by effort-circumstances cues. When it concerns opinion formation towards social welfare, humanitarianism – the value that people in need ought to be helped – amplifies susceptibility to effort-circumstances cues (H1).

Through the further exploration of how effort perceptions are associated with support for redistributing wealth from the rich, the results demonstrated that the emotions of envy and admiration are important. Specifically, the results showed that envy is positively associated with support for taxing the rich (H6), while people who admire the rich tend to oppose taxing them (H7). The results did not support H8 that people who perceive the rich as cold tend to envy the rich if they perceive them as hardworking. But the results did show that the positive association between perceiving the rich as hardworking and admiring them becomes stronger the more people perceive the rich as warm (H9).

The last findings of the dissertation concerned the relative effects of perceptions of rich and poor people's warmth and effort in shaping attitudes towards redistribution. In line with the theoretical argument that effort is the key input to the deservingness heuristic and that warmth is the key input to the taking heuristic, it was demonstrated that public opinion about redistribution is more concerned with the efforts of the poor than with the efforts of the rich (H10). That perceived warmth of the rich is more consequential for attitudes towards redistributing from them than perceptions of whether they are hardworking (H11). And last, public opinion about policies redistributing to the worse-off is more influenced by perceived effort of the poor than by perceived warmth of the poor.

Table 4.3. Overview of hypotheses that gained empirical support

No.	Description	Test results
H1	Humanitarianism amplifies susceptibility to cues about whether welfare recipients are lazy or unlucky in opinion formation about social welfare.	Supported
H2	Citizens perceive the rich as more deserving if they are exposed to effort cues (vs. circumstances cues).	Supported
H3	Citizens across ideological positions and economic backgrounds are equally susceptible to effort-circumstances cues when forming deservingness perceptions of the wealthy.	Supported
H4	Public support for raising taxes on the wealthy decreases if citizens are exposed to cues suggesting that the rich became wealthy through their own efforts (vs. circumstances).	Partly supported
H5	Low-income citizens' attitudes towards raising taxes on the wealthy are more responsive to effort-circumstances cues than high-income citizens' attitudes.	Supported
H6	The more people envy the rich, the more they support policies that redistribute resources from them.	Supported
H7	The more people admire the rich, the more they oppose policies that redistribute resources from them.	Supported
H8	The more people perceive the rich as cold, the more they tend to envy them if they are perceived as hardworking.	Not supported
H9	The more people perceive the rich as warm, the more they admire them if they are perceived as hardworking.	Supported
H10	Attitudes towards economic redistribution are more influenced by perceptions of poor people's efforts than perceptions of rich people's efforts.	Supported
H11	Attitudes towards policies redistributing from the better-off are more influenced by perceived warmth of the rich than by perceived effort of the rich.	Supported
H12	Attitudes towards policies redistributing to the worse-off are more influenced by perceived effort of the poor than by perceived warmth of the poor.	Supported

Chapter 5.

Conclusion and discussion

This dissertation has contributed theory and generated a line of empirical findings that conjointly advance our understanding of *how* perceptions of effort shape attitudes towards redistribution and *who* is most affected by cues reflecting whether economic positions can be attributed to (lack of) effort or to (un)fortunate circumstances. The main theoretical argument guiding the investigation was that people comprehend redistribution as two distinct relationships: one with the worse-off others and one with the better-off others. And that two substantially different mechanisms shape opinions about giving to the worse-off others and taking from the better-off others. Building on this theoretical argument, the dissertation made three main contributions that I would like to elaborate on in this concluding chapter. First, I discuss the novel theoretical framework for understanding the heuristic shaping attitudes towards redistribution from the rich and the new questions it raises for future research. Second, I discuss the role of individual-level differences in conditioning susceptibility to effort-circumstances cues in opinion formation about redistributing to the poor and redistributing from the rich, respectively. Third, the chapter discusses how incorporating two heuristics into a theoretical model of economic redistribution has broader implications for the literature and for the conditions under which we should expect citizens to demand redistribution in response to rising economic inequality.

5.1. A new heuristic in opinion formation about redistribution from the better-off

A central contribution of the dissertation is the novel theoretical framework for understanding how citizens form opinions about redistribution from the rich. Generally, the issue of wealth and citizens' views of the affluent have constituted a substantial gap in the otherwise rich cross-disciplinary literature on redistributive preferences. As Orton and Rowlingson noted: "social science tends to have its eyes down on the poor rather than looking up at the rich" (2007: 74).

A key feature of the "taking heuristic" is that it prompts people to support redistribution from the rich based on whether they are perceived as warm people who intend to use their elevated economic position in a way that benefits others or whether they are cold and self-seeking people who do not care about

others. The fact that warmth is the key input to the “taking heuristic” is noteworthy considering how preoccupied citizens otherwise are with the principle that people should be rewarded on their effort when they form attitudes towards redistribution. It also has implications for which rhetorical tools we should expect to be most effective in persuading citizens to support (or oppose) policies that target the fortunes of the rich. Media stories portraying rich people as greedy, as someone who spend lots of money on excessive luxury goods and are motivated to avoid paying taxes should in particular ignite public demands for policies that temper the economic uprise of the rich. By contrast, stories about philanthropic rich people who donate massive amounts of money to charity, create lots of jobs and pay their workers well should foster opposition to heavy taxation on the affluent. Interestingly, discussions about trickledown economics tend to point to these two different images of the rich. Will the CEOs and the large corporations invest tax cuts in ways that trickle down to benefit everybody in society or will they, as critics assert, only get richer themselves as a consequence of lower taxes?

While the theoretical framework and the findings in Paper C highlight warmth as the most important input to the “taking heuristic”, citizens’ perceptions of rich people’s effort are also important as demonstrated in Paper B and Paper C. Yet effort is not as consequential as warmth. People do not unconditionally admire the rich if they have the impression that they are hardworking. That very much depends on the extent to which people perceive them as warm (see section 4.4). In fact, the impression that rich people are hardworking is only associated with modest admiration if people perceive the rich as cold.

Of course, much more research is needed to obtain a level of knowledge about the “taking heuristic” that matches the impressive body of insights we have about the deservingness heuristic. I believe that the theoretical framework and the empirical tests devoted to understanding the “taking heuristic” in this dissertation constitute fruitful first steps. Still, in order to strengthen the empirical foundation of this heuristic, it would be worthwhile for future studies to experimentally manipulate both warmth and effort of the rich to test how they interact in making people envy or admire the rich. In this project, I narrowly focused on effort,⁸ which is just one characteristic on a broader competence dimension that is related to being skillful and intelligent (Fiske et al., 2007: 78)⁹. By contrast, I employed a broad operationalization of warmth using questions of whether people like or dislike the rich and whether they find

⁸ Fiske et al., 2007 use the term industrious, which is basically the same as hardworking.

⁹ See Petersen, 2015: 64 for a discussion of competence as an input to the deservingness heuristic.

them warm or cold. There are subcomponents of warmth like greedy/generous, friendly/unfriendly, moral/immoral that would be interesting to investigate in greater detail (Fiske et al., 2007; Ragusa, 2014; Wojciszke et al., 1998). Exploring the relative impacts of these more specific characteristics and how they interact in shaping attitudes towards taxing the rich would be a promising way to further test the theoretical model of the “taking heuristic”.

On a broader level, in order to move research on attitudes towards redistribution from the better-off forward, I believe it would be fruitful not just to address the *proximate* explanation for the “taking heuristic”, that is *how* it works, but also the *ultimate* explanation for *why* humans are endowed with this mechanism (Scott-Phillips et al., 2011). Evolutionary psychology has demonstrated the usefulness of drawing on insight about the origins and purposes of psychological mechanisms – why they exist – to generate novel hypotheses about how they work (e.g. Bowles & Gintis, 2013; Boyer & Petersen, forthcoming; Cosmides & Tooby, 2000; Sidanius & Kurzban, 2013). The deservingness heuristic serves as a great example where researchers have drawn on insights about the adaptive problem of cheater-detection in cooperative systems to map the functioning of the deservingness heuristic (Cosmides & Tooby, 1992; See Petersen, 2015 for an overview). This dissertation has been inspired by this approach, where theory about the adaptive function of the “taking heuristic” has served as an important means to achieve the goal of providing a proximate account of how the mechanism works.

Granted, the research designs of the dissertation do not provide evidence that enable me to claim that the “taking heuristic” is an evolved part of human psychology rather than a reasoning style that people adapt from their cultural environments. Importantly, my motivation of drawing on evolution theory has not been to provide evidence in favor of an evolutionary account, but rather to use this approach to piece together a framework from which novel hypotheses could be deduced and tested. Yet the fact that I find similar patterns in the way citizens form opinions about taxing the rich across two very different welfare systems favors the explanation that the mechanism is rooted in deeper psychological systems rather than culturally learned reasoning strategies. This notion could be further strengthened by testing the hypotheses in non-WEIRD countries. Furthermore, given that the theoretical framework suggests that the mechanism evolved to regulate decisions to take resources in small-scale settings, we should find that the mechanism operates beyond the domain of large-scale economic redistribution and applies to the way people in general make decisions about whether to claim resources from others.

5.2. Individual-level differences in susceptibility to deservingness cues

The second contribution of the dissertation has been to identify individual-level differences in responsiveness to deservingness cues reflecting if people's position in the economic hierarchy can be attributed to (lack of) effort or to (un)fortunate circumstances; both when it concerns how people form opinions about redistributing to the poor and from the rich. In exploring individual differences, the dissertation adds to a growing trend in evolution-informed political science where researchers aim to incorporate systematic individual-level differences into models of psychological mechanisms that shape political behavior (Hatemi & McDermott, 2011; Hibbing et al., 2013; Sidanius & Kurzban, 2013). Although evolutionary psychology typically focuses on mapping universal psychological mechanisms (Buss, 2012: 414), it is also a useful approach to forming predictions about individual-level differences in psychological mechanisms (e.g. Kenrick et al., 2010; Laustsen, 2014). In Paper A, for example, humanitarianism was identified as an individual-level moderator of the deservingness heuristic. This paper draws on the notion that people who are most inclined to help others in need (individuals with humanitarian values) are also most vulnerable to be taken advantage of by cheaters. Hence, I predicted that humanitarianism should amplify the degree to which people rely on the deservingness heuristic, as this heuristic specifically evolved to solve the problem of cheater detection in help-giving situations. When it concerns opinion formation about taking from the better-off, individuals in most need of resources, namely citizens from low-income groups, were found to become most supportive of raising taxes on the wealthy in response to effort-circumstances cues (Paper B).

Since the dissertation has identified how people differ in responsiveness to effort-circumstances cues, the next question is how these individual differences arise. What is the deeper dynamic between humanitarianism and the deservingness heuristic? Is humanitarianism a deep-seated psychological predisposition in some people that develops along with a correspondingly sensitive deservingness heuristic, or is humanitarianism a product of cultural learning that, once acquired from the environment, recalibrates the strength of the deservingness heuristic in return? I do not have an answer to this question, but I still believe it is important as it speaks to the broader social science discussion of why some psychological mechanisms are more pronounced among some people than among others (e.g. Hibbing et al., 2013).

Moreover, given that the dissertation builds on the notion that differences in citizens' beliefs about effort matter, another important question is: How do people arrive at their various perceptions of the role of effort in the first place?

One possibility is that people pick up cues when interacting with worse-off and better-off others in their daily lives and then arrive at the conclusion that some people are lazy and others are hardworking (Bisgaard et al., 2016; Dinesen & Sønderskov, 2015). People may also form these perceptions through exposure to news media stories about rich and poor people (Gilliam Jr & Iyengar, 2000; Iyengar, 1991; Morris, 2007). A third explanation is that the perceptions arise from psychological biases. It has been suggested that some people are more psychologically prone to correspondence bias, that is, the tendency to attribute social outcomes such as poverty and wealth to dispositional factors, like effort, rather than situational factors (Scopelliti et al., forthcoming; See Bauman & Skitka, 2010 for a discussion). Or people come up with explanations for why some people are rich and poor depending on what reflects well on them or their party's position on redistributive issues. A self-serving bias would for example motivate a rich person to explain wealth as a matter of hard work, while a poor person should be motivated to attribute his situation to circumstances beyond his control (Deffains et al., 2016; Suhay et al., 2017). There is also ample evidence in favor of partisan-motivated reasoning suggesting that people simply adopt attitudes, perceptions and beliefs that reflect well on their party and ideological affiliations (e.g. Leeper & Slothuus, 2014; Morgan et al., 2010). In brief, given that effort perceptions are strongly tied to citizens' redistributive preferences, understanding how and under what conditions people form these effort perceptions is an important avenue for future research.

5.3. Taking both heuristics into account: The two faces of economic fairness in opinion formation about redistribution

A key contribution of the dissertation is that it breaks with the unidimensional understanding of redistribution and takes into account that people psychologically conceive of redistribution as two distinct relationships: one with the worse-off others and one with the better-off others. The integration of the “taking heuristic” into research on attitudes towards redistribution has important implications that I will conclude this chapter by discussing.

First, the findings underscore the notion that rich and poor people are assessed on different characteristics and that very different emotions are ignited in response to these characteristics. While emotions of disgust, compassion and pity are central for understanding whether people help the poor (Clifford

& Piston, 2017; Fiske et al., 2007; Petersen et al., 2012), emotions of admiration and envy are important to explore to gain insights about attitudes towards public support for taxing the rich (see section 4.4).

Second, the different heuristics have implications for the way citizens apply the widely cherished economic fairness principle. Offhand, it seems straightforward that people would be equally concerned about the efforts of all people in society. After all, economic fairness implies that resources are allocated proportionally to the work people have done. However, the findings of this dissertation challenge this perspective. Paper C supports the conclusion that citizens apply the economic fairness principle unequally. Public opinion about redistribution is simply more concerned about the efforts of the poor than the efforts of the rich, as effort is the prime input to the deservingness heuristic but only a secondary input to the “taking heuristic”. We could even say that Orton and Rowlingson’s observation that “social science tends to have its eyes down on the poor rather than looking up at the rich” (2007: 74) also rings true for the way citizens employ the economic fairness principle to form attitudes towards economic redistribution. This is important to consider in future research on how economic fairness influences how citizens evaluate whether inequality is a problem and should be addressed by redistribution.

This brings me to the last point concerning the widely studied puzzle of how public opinion is affected by rising inequality. A rational choice perspective fosters the expectation that citizens at the aggregate level would demand redistribution in response to a wealth distribution that becomes more skewed towards the top (Meltzer and Richard, 1981). An economic fairness perspective only strengthens the expectation that people should become more supportive of redistribution in a time when inequality expands as a consequence of an economic system that generates more returns on capital than on hard work and labor (Atkinson, Piketty, & Saez, 2011; Piketty, 2014). A few studies are consistent with this notion (e.g. Franko et al., 2013; Hayes, 2014), others find that people do not respond to rising inequality (Bartels, 2005, 2016), and a third line of research suggests that citizens become more skeptical towards redistribution in response to rising inequality (Kelly & Enns, 2010; Sands, 2017; Trump, forthcoming). A key avenue for future research is to reconcile these conflicting perspectives. Franko (2016) has argued that the relationship between inequality and support for redistribution depends on the social context and whether redistributive policies address “outcome” redistribution like social welfare and taxes or “opportunity” redistribution like healthcare and education. I believe that a promising way forward is to recognize that people are hardly psychologically wired to comprehend and respond to abstract up- or downward trends in the Gini coefficient and varying distances between

themselves and people in other income brackets (Norton & Ariely, 2011). People rather tend to form impressions of who the worse-off and better-off others are in the social hierarchy. Thus, the way we should expect rising economic inequality to affect citizens' redistributive preferences should depend on how inequality affects these impressions of the worse-off and better-off others. If rising inequality is accompanied by a discourse that the poor are lazy free-riders who exploit the social system and that the rich use their money and economic position to help others, I would expect citizens to oppose redistribution. Vice versa, if people believe that the poor work hard to get ahead but are constrained by factors beyond their control while self-seeking rich people only care about feathering their own nest, we should expect a public outcry in favor of economic redistribution. I believe that taking public perceptions of the rich and poor into consideration is the key to understanding how people respond to rising inequality and form redistributive preferences.

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English Summary

Perceptions of whether economic inequality stems from differences in effort are central to our understanding of public support for redistribution. If citizens believe that economic inequality in society reflects that some people work harder than others, they deem inequality fair and oppose redistribution. If they believe that inequality is determined by circumstantial factors like luck and societal structures, they find inequality unfair and support redistribution. Even though a growing body of research underscores the importance of citizens' perceptions of effort, our knowledge about *how* these perceptions shape attitudes towards redistribution is scarce. We also know little about *who* is most affected by cues reflecting whether people's position in the economic hierarchy can be attributed to (lack of) effort or to (un)fortunate circumstances.

This dissertation contributes with theory and empirical findings to shed light on these unanswered questions in the literature and in turn advance our understanding of public support for redistribution. The general argument of the dissertation is that it is crucial to take into account that two fundamentally different psychological mechanisms shape redistributive attitudes: the so-called deservingness heuristic, which prompts people to support redistribution to the poor, if they made an effort to deserve help, and another underexplored mechanism that shapes attitudes towards redistribution from the rich.

The first central contribution is a theoretical framework for understanding this underexplored mechanism that shapes attitudes towards redistribution from the rich. Specifically, I argue that a "taking heuristic", as I call it, shapes attitudes towards redistribution from the rich by prompting people to consider if the rich are warm and prosocial or cold and ill-intended. While perceived warmth of the rich is the most essential input to this heuristic, perceived effort is also important. Conjointly citizens' perceptions of whether rich people are warm and hardworking shape attitudes towards redistribution from the rich through the emotions of envy and admiration.

Second, by building on the argument that the deservingness heuristic prompts people to support redistribution to the poor if they made an effort to deserve help and that the "taking heuristic" shapes attitudes towards redistribution from the rich by prompting people to consider if they are warm, it is demonstrated that perceived effort of the poor is more consequential for public opinion about redistribution than perceived effort of the rich. In line with this argument, it is also demonstrated that perceived warmth of the rich is more strongly associated with support for redistributing wealth from them than whether they are perceived as hardworking.

Third, the dissertation identifies individual-level differences in responsiveness to deservingness cues – that is cues reflecting if people’s position in the economic hierarchy can be attributed to (lack of) effort or to (un)fortunate circumstances. When it concerns opinion formation about “redistribution to the poor”, it is demonstrated that humanitarianism, the belief that others in need should be helped, is an individual-level factor conditions the deservingness heuristic. Specifically, humanitarianism amplifies susceptibility to deservingness cues in opinion formation about social welfare. When it concerns opinion formation about redistribution from the rich, all citizens across ideology and income deem rich people deserving on the basis of cues reflecting if their wealth can be attributed to effort rather than benign circumstances. Yet only citizens from low-income groups become more supportive of raising taxes on the wealthy in response to effort-circumstances cues.

The findings of the dissertation are based on rich sources of experimental and observational survey data from Denmark and the United States. The dissertation consists of three research papers, and this report summarizes the project and contains theory and empirical analyses that go beyond the individual research papers.

Dansk resumé

Opfattelser af hvorvidt økonomisk ulighed i samfundet skyldes forskelle i folks arbejdsindsats er afgørende for at forstå borgernes holdninger til økonomisk omfordeling. Hvis borgerne har opfattelsen af, at økonomisk ulighed skyldes, at nogle arbejder hårdere end andre, så finder de økonomisk ulighed fair og er imod omfordeling. Omvendt, hvis de ser ulighed som en konsekvens af ydre omstændigheder såsom (u)held og sociale strukturer, så synes de, at ulighed er unfair og støtter op om økonomisk omfordeling. Men til trods for en voksende litteratur på dette område, så har vi stadig en begrænset viden om, *hvordan* disse opfattelser af arbejdsindsats former borgernes omfordelingsholdninger. Desuden mangler vi viden om, *hvilke borgere* der bliver mest påvirkede af informationer om, hvorvidt folks økonomiske positioner i samfundet skyldes (mangel på) indsats eller (u)heldige omstændigheder.

Denne afhandling bidrager med teori og empiriske resultater, der kaster lys over disse ubesvarede spørgsmål i litteraturen og herved forbedrer vores forståelse af borgernes holdninger til økonomisk omfordeling. Det centrale teoretiske argument i afhandlingen er, at det er nødvendigt at tage højde for, at to substantielt forskellige psykologiske mekanismer former borgernes omfordelingsholdninger. Henholdsvis den velbelyste fortjenstfuldhedsheuristik, der foranlediger folk til at lægge vægt på, om de dårligt stillede i samfundet har gjort en indsats for at fortjene hjælp, samt en anden hidtil underbelyst holdningsdannelsemekanisme, der former folks holdninger til at omfordele fra de velstillede.

Det første centrale bidrag i afhandlingen er udviklingen af en teoretisk ramme til at forstå netop denne sidstnævnte psykologiske mekanisme. Konkret argumenterer jeg for, at denne mekanisme (tage-heuristikken) foranlediger folk til at tage stilling til at tage fra de rige på baggrund af, om de anser dem for at være sympatiske mennesker, der vil andre det godt eller usympatiske mennesker, der har ondt i sinde. Resultaterne viser, at opfattelserne af om de rige er sympatiske påvirker støtten til at beskatte de rige i samspil med opfattelserne af, om de rige er hårdtarbejdende via følelser af misundelse og beundring.

På baggrund af det teoretiske argument om, at fortjenstfuldhedsheuristikken foranlediger folk til at lægge vægt på, om de fattige har gjort en indsats for at fortjene hjælp, mens "tage-heuristikken" foranlediger folk til at lægge vægt på, om de rige er sympatiske, viser afhandlingen desuden, at borgernes opfattelser af de fattiges indsats er mere tungtvejende for borgernes opbakning til

økonomisk omfordeling end om de rige gør en indsats. Til gengæld er opfattelsen af om de rige er sympatiske mere afgørende for folks støtte til omfordeling end deres opfattelse af, om de rige er hårdtarbejdende.

For det tredje identificerer afhandlingen individfaktorer i påvirkelighed over for informationer om, hvorvidt de fattige og riges økonomiske positioner skyldes (mangel på) indsats eller på grund af ydre omstændigheder. Når folk tager stilling til at omfordele til de mindre bemidlede borgere, så viser afhandlingen, at humanitarisme (værdien, at man bør hjælpe folk i nød) udgør en individfaktor, der betinger fortjenstfuldhedsheuristikken. Konkret bliver borgere mere påvirkede af informationer om, hvorvidt kontanthjælpsmodtageres situation skyldes uheld eller dovenskab, jo stærkere humanitære værdier de har. Når det gælder stillingtagen til at omfordele fra de velstillede i samfundet, så viser resultaterne, at alle borgere på tværs af ideologi og indkomst har opfattelsen, at de rige har fortjent at være rige, hvis deres velstand kan tilskrives indsats og ikke ydre omstændigheder. Men det er hovedsageligt borgere fra de laveste indkomstgrupper, der kan påvirkes til at øge deres opbakning til hårdere beskatning af de rige, hvis de udsættes for informationer om, at de riges velstand skyldes omstændigheder fremfor indsats.

Afhandlingens empiriske fund er baseret på en rig samling af både eksperimentelt og observationelt spørgeskemadata fra både Danmark og USA. Afhandlingen består af tre artikler samt denne rapport, der dels sammenfatter projektet og dels bidrager med teori og empiriske analyser, der rækker udover de enkelte artikler.

Appendix. Robustness tests

Table A1. Envy and admiration and support for redistributing from the better-off

	Model 1	Model 2	Model 3	Model 4
	Upper class taxes	Upper class taxes	Tax the rich	Tax the rich
Envy	0.170*** (0.029)	0.106*** (0.029)	0.167*** (0.028)	0.120*** (0.028)
Admiration	-0.431*** (0.029)	-0.297*** (0.030)	-0.361*** (0.027)	-0.244*** (0.029)
Age		0.001+ (0.001)		0.002** (0.001)
Gender (Male)		-0.031+ (0.016)		-0.047** (0.015)
Income		-0.007** (0.003)		-0.002 (0.002)
Education		0.014 (0.017)		0.005 (0.016)
Race (White)		-0.004 (0.017)		0.002 (0.017)
Ideology		-0.414*** (0.029)		-0.385*** (0.028)
Intercept	0.794*** (0.013)	0.981*** (0.035)	0.755*** (0.013)	0.891*** (0.033)
<i>n</i>	1401	1216	1417	1224
Adj. <i>R</i> ²	0.138	0.265	0.110	0.241

Note. Entries are unstandardized OLS regression coefficients. Standard errors in parentheses. All variables are coded as 0-1 except age in years and income where 1 scale point is \$10,000. For education, some college and above is coded as 1, and less than college is coded as 0. Two-sided tests of significance. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A2. The association between perceived effort of the rich and admiration and envy moderated by perceived warmth of the rich

	Model 1	Model 2	Model 3	Model 4
	Envy	Envy	Admiration	Admiration
Effort	0.076 (0.049)	0.094 ⁺ (0.052)	0.072 ⁺ (0.040)	0.055 (0.042)
Warmth	0.140 ⁺ (0.072)	0.107 (0.076)	0.234 ^{***} (0.056)	0.180 ^{**} (0.061)
Effort × warmth	-0.180 ⁺ (0.103)	-0.123 (0.110)	0.253 ^{**} (0.082)	0.300 ^{***} (0.087)
Age		-0.003 ^{***} (0.001)		-0.001 [*] (0.000)
Gender		0.011 (0.016)		0.013 (0.014)
Income		-0.004 (0.003)		-0.001 (0.002)
Education		-0.025 (0.018)		-0.007 (0.016)
Race		-0.002 (0.019)		-0.062 ^{***} (0.016)
Ideology		-0.023 (0.032)		0.143 ^{***} (0.028)
Intercept	0.264 ^{***} (0.024)	0.456 ^{***} (0.042)	0.143 ^{***} (0.018)	0.192 ^{***} (0.034)
<i>n</i>	1484	1268	1484	1268
Adj. <i>R</i> ²	0.002	0.034	0.226	0.262

Note. Entries are unstandardized OLS regression coefficients. Robust Standard errors in parentheses. All variables are coded as 0-1 except age in years and income where 1 scale point is \$10,000. For education, some college and above is coded as 1, and less than college is coded as 0. Two-sided tests of significance. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.