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DOING ENVY JUSTICE: EXAMINING THE POLITICS OF ENVY

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Arts and Sciences at the University of Kentucky

By Charles Eric Hoogland

Lexington, Kentucky

Director: Richard H. Smith, Ph.D., Professor of Psychology

Lexington, Kentucky

2016

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ABSTRACT OF DISSERTATION

DOING ENVY JUSTICE: EXAMINING THE POLITICS OF ENVY

Conservatives and liberals disagree about the underlying motivations driving opposition to concentrated wealth. Liberals contend that such objections are often driven by legitimate fairness concerns, whereas conservatives frequently cite envy instead. Research and theory suggest that two particularly important contextual questions with respect to emotional reactions to wealth are its source (inherited or earned), and how that wealth is put to use, which could interactively and differentially influence liberals' and conservatives' reactions to affluent individuals. The current study aimed to empirically address whether liberals actually are more prone to envy than conservatives, both in general and in response to specific wealthy people of different backgrounds.

Participants (N = 800) reported their reactions to ostensibly-real, wealthy entrepreneurs described in articles from a business news website. Liberals tended to respond with slightly more envy than conservatives across conditions, and controlling for several potential confounding factors, liberal political ideology was weakly positively correlated with dispositional envy. People across the political spectrum responded with greater envy in response to wealthy entrepreneurs who harmed others in the pursuit of wealth than entrepreneurs who did not harm others. However, liberals' envy was increased more strongly by entrepreneurial harm-doing than conservatives', and this difference was explained by greater perceived harm and unfairness. On the other hand, only conservatives reacted with greater envy to entrepreneurs who inherited their wealth rather than having earned it through hard work. Especially because, in addition to envy, liberals felt somewhat more resentment, moral disgust, and anger toward the wealthy entrepreneurs, further research will be necessary to fully understand the role of political ideology in reactions to affluent people.

KEYWORDS: Envy, Liberalism, Conservatism, Resentment, Inequality, Justice

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September 30, 2016



DOING ENVY JUSTICE: EXAMINING THE POLITICS OF ENVY

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DEDICATION

This dissertation is dedicated to my wife, Aasha I. Hoogland, who has been extremely supportive, patient, and understanding throughout my graduate studies, and to our daughter, Rosalind, who has been a source of great joy and purpose to us both.



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Chapter One: Introduction

United States President Barack Obama remarked in a 2013 speech that economic inequality "is the defining challenge of our time" and that frustration with that inequality is "rooted in the nagging sense that no matter how hard [average Americans] work, the deck is [unfairly] stacked against them." The speech echoed concerns voiced at the 2012 Democratic National Convention, in which Massachusetts Democrat Elizabeth

Warren declared that "the system is rigged" in favor of the wealthy and against the middle class (ABC News, 2012). That same year, President Obama led a failed effort to institute a "Buffett Rule" to raise taxes on millionaires and billionaires who were "unfairly" paying lower rates on their investment earnings than middle-income Americans were on their wages (Davis, 2012).

Conservatives often claim that liberal complaints about economic inequality and policy proposals aimed at redressing them are not, in reality, driven by the morally-acceptable fairness concerns liberals frequently cite when demanding changes to the existing economic order. During the 2012 Presidential campaign, Republican candidate Mitt Romney was asked to respond to those who criticized substantial wealth disparities in the United States. In his reply, Romney stated, "I think it's about envy. I think it's about class warfare." Columnist Kathleen Parker (2013) expressed a similar opinion quite plainly when she wrote, "Envy is the core emotion driving the current debate about income inequality and the notion that the poor are poor because the rich are rich."

The starkly contrasting views of leading liberals and conservatives typify a longstanding debate in American politics on how one should react to the great financial success of others. Are conservative thinkers often correct in attributing complaints over



disparities to envy? Or, as liberal thinkers suggest, do they more often reflect concerns over justice and fairness? The interpretation of negative reactions to wealth is no trivial matter. Because of envy's repugnant nature (e.g., Smith & Kim, 2007), the motivations of people who seem driven by it are instantly cheapened, even legitimately scorned. By contrast, if expressed concerns about justice and fairness seem valid, then the motivation is honored and legitimized—and corrective action is the logical consequence. Votes are in the balance. Elections, therefore, partly hinge on which party wins this perennial attributional debate.

Political Ideology

Research on conservatism and liberalism reveals a complex, multi-faceted picture (Jost, Glaser, Kruglanski, & Sulloway, 2003a, 2003b; Tetlock & Murphy, 1993; Wojcik, Hovasapian, Graham, Motyl, and Ditto, 2015). Nevertheless, there are consistent themes. For example, in a landmark meta-analytic review of the psychological literature on political conservatism, Jost and colleagues (2003a) concluded that the psychological bases for conservative ideology were (1) perceived threat from the environment, and (2) aversion to uncertainty. These bases ultimately motivate system-justification, authoritarianism, and various other psychological characteristics commonly associated with political conservatives (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Altemeyer, 1981, 1996; Jost & Hunyady, 2005). These factors underpin a "conservative" belief system with two core, related aspects, namely (1) support for or rationalization of inequality, and (2) resistance to change (Jost et al., 2003a, 2003b). This "uncertainty-threat" model of political conservatism not only attempted to identify and tie together common themes in the empirical literature on political ideology, but also suggested



conservatives have a fundamental tendency toward viewing inequality as just and fair.

Notably, core tenets of the uncertainty-threat model were empirically supported in a later set of three cross-sectional studies (Jost, Napier, Thorisdottir, Gosling, Palfai, & Ostafin, 2007).¹

To the extent that liberal and conservative political ideologies represent opposite ends of a bipolar ideological spectrum, liberalism may imply a relative lack of uncertainty-threat, therefore leading to the opposition to inequality and calls for change so often associated with political progressives. Indeed, although definitions and operationalizations of political ideology vary widely and political ideology is a complex topic (Wojcik et al., 2015), a number of scholars have used bipolar measures implying that, to a large extent, liberalism and conservatism may be considered opposites (e.g., Jost, 2006; Napier & Jost, 2008).

Political ideology is also associated with basic personality differences that arguably are in keeping with both the abovementioned differences between liberal and conservative belief systems and the uncertainty-threat model. For example, liberals tend to be greater in openness to experience and one of two aspects of agreeableness, compassion (which is associated with liberal egalitarianism), while conservatives are better organized, conscientious, and polite (the other aspect of agreeableness, which helps in maintaining the social order) (Carney, Jost, Gosling, & Potter, 2008; Hirsh, DeYoung, Xu, & Peterson, 2010). Clearly, conservatives and liberals differ appreciably in terms of a variety of

¹ Specifically, higher levels of uncertainty avoidance (e.g., low openness to experience) and threat management concerns (e.g., perceptions that the world is a dangerous place) correlated positively with conservatism in each study within Jost et al. (2007). In the final study, moreover, the relationships between conservatism and threat and conservatism and uncertainty avoidance were mediated via opposition to equality and resistance to change, respectively.



psychological characteristics, beliefs, and even personality traits. Perhaps the most consequential difference for purposes of the current study is conservatives' tendency to react less negatively to perceived inequality than liberals, consistent with the uncertainty-threat model and empirical research on the psychology of political ideology. However, additional research suggests conservative "endorsement" of inequality may apply more to inequality of outcomes than inequality of opportunity. As fairness concerns are often crucial in the experiences of envy and resentment, differences in how fairness is defined by conservatives and liberals may lead to differences in their levels of envy and/or resentment of wealthy people.

Political Ideology and Perceived Fairness

Both liberals and conservatives value fairness (e.g., Haidt, 2012), but they have different conceptions of what would qualify as "fair" outcomes. Liberals are more likely to view equality of outcomes as a valid basis for fairness judgments (Jost, 2006; Rasinski, 1987). In contrast, conservatives tend to base such judgments on the perceived proportionality between inputs (e.g., the perceived value of a worker's labor) and outcomes (e.g., a worker's salary) (Adams, 1965; Gollwitzer & van Prooijen, 2016; Haidt, 2012; Haidt & Graham, 2007), although the perceived value of such inputs, and thus the "proportional," deserved outcomes, often involves subjective judgment. Of course, such subjective judgments may be systematically influenced in the direction of greater perceived fairness by beliefs (e.g., belief in a just world) and motivated cognitive

² This statement does not imply that conservatives are entirely unconcerned about distributive justice and equality of outcomes. Recent research in both the US (Norton & Ariely, 2011) and Australia (Norton, Neal, Ariely, & Holland, 2014) indicates that Americans and Australians across the political spectrum would prefer greater equality in the national distribution of wealth (or, put another way, greater society-wide distributive justice).



processes, such as system-justification, known to be more common among conservatives (Jost et al., 2003a; Lerner, 1980). A natural consequence of these dynamics is conservatives' greater acceptance of unequal outcomes—some people's inputs are worth more than others, and thus inequality, even substantial inequality, is not necessarily perceived to be unfair.

Relative to conservatives, liberals' general way of viewing fairness (often in terms of equality), their beliefs, and motivated cognitive processes likely predispose them to perceiving great disparities in wealth as inherently unfair or unjust (Janoff-Bulman & Carnes, 2013), an unfairness which may enhance envy and resentment of those possessing it (van de Ven, Zeelenberg, & Pieters, 2009; van de Ven, 2015). To be clear, however, liberals also value proportionality, and *desire* a more just world, despite believing the world is less fair than do conservatives (Engel & Martin, 2015; Tyler, 2011). For example, Former Secretary of State Hillary Clinton (2016) voiced her support for a change in overtime rules primarily benefitting lower-middle income workers in declaring that "[W]e need to...restore the basic bargain that built America's mighty middle class—that if you work hard and play by the rules, you can get ahead and stay ahead" (emphasis added). Both conservatives' and liberals' reactions to wealthy people might therefore be sensitive to contextual factors impacting judgments of the wealthy people's advantageous outcomes. Such factors might include whether or not the outcomes were earned through hard work and whether actions taken in pursuit of those outcomes violated the implicit or explicit "rules" governing ethical economic behavior (e.g., not harming others for one's own benefit).



I now address a number of challenges that may arise when investigating how political ideology and contextual factors might influence envious responses to wealth. To fully understand such envy, however, other emotional responses to perceived unfairness or injustice should also be taken into account, most notably resentment, but also anger and moral disgust.

Challenges to Empirically Investigating Emotional Reactions to Wealthy People

In spite of abundant lay commentaries on the subject and its role in the contemporary political debate over inequality in America, there is relatively little psychological research on political ideology and envious reactions to great wealth. A recent correlational study by Harris and Henniger (2013), however, examined the relationship between dispositional envy and political ideology, using an online sample ranging widely in age and income. They found a weak, positive relationship between leftwing ideology and dispositional envy, which became non-significant after controlling for participant age.³ The study therefore provided little evidence for claims by conservatives that complaints against great wealth might be linked to envy inspired by liberal political ideology. As will be seen, however, there are important conceptual reasons one should not assume that similar results would also obtain when examining envy toward specific wealthy people.

Defining envy. Systematically examining liberal and conservative explanations for complaints against concentrated wealth (and income inequality) presents a number of conceptual and methodological challenges. One issue is how to define envy. As with other research on social emotions, including envy, and on related moral judgments (e.g.,

³ Younger participants tended to be higher in dispositional envy and further left on the political spectrum.



perceived injustice), results and conclusions could vary dramatically on the basis of how such phenomena are defined and operationalized (Feather, 2012; Harris & Henniger, 2013; Hoogland, Thielke, & Smith, in press; Miceli & Castelfranchi, 2007; Smith & Kim, 2007). Thus, it is vitally important to delineate what is meant by the rather nebulous term "envy" in the context of the current work.

Although there is considerable definitional debate in current theoretical and empirical research on envy, virtually all definitions of envy are similar in that they posit an upward social comparison as the basic antecedent to envy, and almost all agree that envy is at least somewhat painful or unpleasant (i.e., negatively-valenced) (but see Leach, Spears, Branscombe, & Doosje, 2003). However, much of the disagreement over other aspects of envy comes down to whether envy necessarily includes a degree of hostility toward the envied. The question is so critical that many researchers conclude that envy may assume two distinct forms, hostile envy and benign envy (Smith & Kim, 2007; van de Ven, Hoogland, Smith, van Dijk, Breugelmans, & Zeelenberg, 2015). This distinction has huge implications. Hostile envy clearly is more likely to lead to negative effects for the envied person (e.g., back stabbing, undermining, etc.; Duffy, Scott, Shaw, Tepper, & Aquino, 2012; Foster, 1972) and, indeed, unhappy consequences for the envying person as well (e.g., guilt and shame; Miceli & Castelfranchi, 2007). In fact, failure to clarify the distinction at the conceptual and empirical levels has led to confusion about the role of envy in various outcomes aside from reactions to great wealth (e.g., reactions to the misfortunes of various enviable people, such as schadenfreude⁴).

⁴ For example, finding a link as intuitively "obvious" as that between envy of an advantaged person and schadenfreude following his or her status-leveling downfall depends on researchers' understanding and measurement of envy. Specifically, envy containing hostility and ill-will toward the advantaged person does lead to schadenfreude, whereas non-hostile, benign envy, and coveting (i.e., merely wanting what another

In the present research, I largely focus on hostile envy. Hostile envy corresponds to the more traditional sense of how envy, sometimes called "envy proper," is understood in most religious, philosophical, and literary traditions (for a review, see Smith & Kim, 2007). To illustrate with one very early example, in Aristotle's *Rhetoric* (350 B.C.E./1924; Book II, Chapter 10), the ancient Greek philosopher's discussion of envy repeatedly highlighted its hostile aspects: "We feel [envy]...not with the idea of getting something for ourselves, but because the other people have it [implying that the other people seem unworthy of that thing];" "We also envy those whose possession of or success in a thing is a reproach to us;" "[Enviable people who have suffered a misfortune] will feel no pity from us [i.e., those who envy them]." Also, envy proper corresponds more closely to how envy appears to be conceived of in everyday political debates. Returning to Mitt Romney's appraisal of liberal complaints against wealth concentration as "class warfare." it is clear that his view is that liberals often have envy-based ill will against well-moneyed people because of wealthy people's superior outcomes and liberals' presumed desire for them to lose their advantages. That is, the focus is less on wanting what the others have and much more on a hostile desire for them to lose their advantages.

In sum, my primary approach to investigating the possible link between political ideology and envy entailed defining envy in terms similar to how it is conceived traditionally, by many contemporary envy scholars, and by political conservatives, such as Mitt Romney, who question the motives of those who actively oppose wealth

has), do not (Smith, Thielke, & Powell, 2014; van de Ven et al., 2015; cf. Feather & Sherman, 2002; Hareli & Weiner, 2002; Leach et al., 2003; Leach & Spears, 2008). In contrast, Harris and Henniger (2013) found similar associations between political liberalism and two different measures of dispositional envy, namely the full Dispositional Envy Scale (DES; Smith, Parrott, Diener, Hoyle, & Kim, 1999) and an ad hoc, dispositional "materialistic envy" scale, which focused on the desire for physical goods and was comprised of 3 items from the DES.



concentration in the United States. That is, I define envy as a begrudging, hostility-laden emotion. Doing so allowed for a more direct investigation of whether liberals actually are more prone to "envy" wealthy people in the particularly socially-undesirable sense of the term used more typically by laypeople and scholars—as well as those who claim that liberals are feeling the emotion.⁵

Examining trait vs. state envy. Another challenge to studying envy concerns whether it is being examined from a trait or state perspective. Indeed, envy has been studied as both an enduring disposition and a fleeting emotional state (Lange & Crusius, 2015; van de Ven et al., 2015), as well as a conscious or unconscious experience (e.g., Miceli & Castelfranchi, 2007). For instance, research by Harris and Henniger (2013) focused on self-reported general tendencies toward envy and did not measure real-time emotional reactions to specific enviable people. For a variety of reasons, the distinction between envy as a disposition and envy as an emotional state is a particularly important one to make when examining whether envy differs as a function of political ideology. For one, even people very low in the dispositional tendency to feel envy may experience powerful feelings of (state) envy given the right circumstances. It is also possible that liberals or conservatives do not differ at all in terms of their dispositional tendencies toward feeling envy but that liberals (or conservatives) might still feel more state envy in specific circumstances. Envy of wealthy people could be one such circumstance, given that liberals and conservatives differ considerably in terms of their perceptions of concentrated wealth and, presumably, those who possess it (Janoff-Bulman, 2009; Janoff-

⁵ Nonetheless, although not the primary topic of investigation, this study also explored whether and how other forms of envy (such as "benign envy") were associated with political ideology, given the ongoing scholarly debate over how envy, in whatever form(s), should be defined and measured (Smith & Kim, 2007; Smith, 1991, 2013; van de Ven, Zeelenberg, & Pieters, 2009).

Bulman & Carnes, 2013). Such perceptions might, of course, tend to either exacerbate or ameliorate liberals' and/or conservatives' envy of specific wealthy people.

The pattern of results across dispositional and state envy could also be instructive. For example, if the magnitude of the difference between liberals and conservatives on envy is greater on (1) state envy of specific wealthy people than it is on (2) dispositional envy, this might suggest that certain aspects of exceptionally financially successful people (or their histories) are exacerbating what might normally be a very slight difference in envy between conservatives and liberals (e.g., some wealthy people's having received large inheritances, giving them a major advantage in life). In sum, the current study allows for an investigation of not only envy as a disposition (by the inclusion of personality questionnaires on dispositional envy), but also state envy in reaction to specific kinds of wealthy people, who may be perceived differently by people on opposite sides of the conservative-liberal divide.

Differentiating envy and resentment. The current study examines more than the very broad question of whether envious reactions to wealthy people vary as a function of political ideology. Envy is only one of a number of different possible emotional reactions to great wealth, and contextual factors might impact liberals' and conservatives' reactions to wealthy people in many different ways. In addition to envy, such contextual factors could influence fairness or justice perceptions, as well as levels of morally-relevant emotions other than envy, such as resentment. If, for example, liberals do indeed tend to envy wealthy individuals more than conservatives, such envy and resulting opposition to their wealth might still be "legitimated" to the extent that the envy is accompanied or explained by justice concerns often cited by liberals as the "true" reasons for their



objections to concentrated wealth (Rawls, 1971). In sum, the current study obviates the possibility of over-attributing important political ideology-based differences in reactions to wealthy people to envy alone and oversimplifying a potentially much more nuanced, context-dependent and emotionally complex reality.

Distinguishing envy from related emotions can be challenging, but doing so may be especially important for understanding reactions to great wealth, in general, and how such reactions are related to political ideology, in particular. As an earlier example suggests, it is likely that liberals believe their concerns over great wealth are captured by feelings of resentment and legitimate judgments of unfairness. By contrast, it appears that conservatives are not only more likely to view great wealth as fair in the first place, but also to view liberal complaints as motivated by envy.

Disentangling the emotion of envy (especially hostile envy) from resentment/feelings of unfairness is far from straightforward, but the advantages of an approach in which envy and resentment are examined separately are at least four-fold. First, although envy and resentment often co-occur, unlike envy, resentment can be experienced in the absence of any sense that someone else is advantaged relative to oneself. Second, separating resentment from envy allows resentment to represent a sense of anger or hostility that is (at least ostensibly) free of envious feelings, and therefore more socially acceptable or "legitimate." Third, separating envy-based resentful feelings from resentment proper acknowledges the vital role of different kinds of fairness judgments to the experiences of envy and resentment. Specifically, the dividing line between resentment proper and invidious resentment (the hostile component of envy) is the perception of whether the great majority of other "reasonable" people would agree that



the other person's advantage is unjust—if so, the advantage is "objectively" unjust and the resulting feeling is more akin to "resentment proper" and thus more socially-acceptable; if not, the unfairness is more personal or "subjective," and the resulting feeling is more akin to "invidious resentment" (Hoogland et al., in press; Smith & Kim, 2007; Smith, Parrott, Ozer, & Moniz, 1994). By incorporating "invidious resentment" as a part of envy, envy so defined includes the subjective sense of injustice necessary for envy to take on its prototypical, hostile form (Smith & Kim, 2007; Smith et al., 1994) without precluding the possibility of "pure" resentment, or resentment unalloyed with feelings of envy. Finally, and more simply, finding conservative-liberal differences on not just envy but also resentment of different sorts of wealth would suggest a more central role for fairness judgments in driving ideology-based differences in reactions to wealth.

Examining the roles of anger and moral disgust. Likely because of its close linkage with unfairness appraisals, anger is often experienced in morally-relevant situations (Batson et al., 2007), and anger often co-occurs with other negative emotions, such as resentment, which is itself a form of anger. Considering liberals often react more negatively to inequality than conservatives, anger is an emotion particularly relevant to the study of differences between liberals and conservatives in reactions to wealth. Perceived unfair treatment is a prototypical appraisal in the experience of anger (Frijda, Kuipers, & ter Schure, 1989), although, strictly speaking, unfairness appraisals are not necessary to experience anger (Berkowitz, 1990; Berkowitz & Harmon-Jones, 2004; Izard, 1993). Anger varies in intensity on the basis of various appraisals, including judgments that the anger-eliciting actions were intentional, preventable, or unfair (Darley & Pittman, 2003; Fernandez & Turk, 1995; Frijda et al., 1989). Because anger can occur in the absence of a



perceived injustice or other moral violations, in this study, it was measured separately from related constructs, such as resentment.

Moral disgust is another possible response to wealthy people that could depend on both contextual factors and political ideology. This is because it is a reaction to perceived moral violations, such as unfair treatment (Chapman, Kim, Susskind, & Anderson, 2009; Chapman & Anderson, 2014; Clark & Fessler, 2015; Rozin, Lowery, Imada, & Haidt, 1999). Although frequently experienced simultaneously with anger, and sometimes even used as a synonym for anger, moral disgust is not identical to anger (Chapman & Anderson, 2013, 2014), and may have an even stronger relationship with perceived unfairness than anger (Chapman et al., 2009).

Although no research before the current study has examined moral disgust in response to particular wealthy people, mounting empirical evidence suggests that political affiliation may influence moral disgust across a variety of situations. For example, research has repeatedly linked conservatism with greater disgust sensitivity (e.g., Hodson, & Costello, 2007; Inbar, Pizarro, & Bloom, 2009; Inbar, Pizzaro, Iyer, & Haidt, 2012), and disgust sensitivity with harsher moral judgments and negative attitudes toward stigmatized groups, such as gay people and immigrants (Hodson & Costello, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009; Schnall, Haidt, Clore, & Jordan, 2008).

Given the complex pattern of findings on links among conservatism, moral judgments, and disgust, it is difficult to predict whether liberals or conservatives should be more prone to feeling moral disgust toward wealthy people, whether overall or only in response to specific kinds of wealthy people. On the one hand, conservatives are more disgust-prone, and disgust may amplify moral condemnation of perceived unfairness. On



the other, conservatives are less likely than liberals to perceive inequality as morally wrong or unfair in the first place.

Contextual Factors in Reactions to Wealth

A primary challenge to examining emotional reactions to great wealth is that there are undoubtedly any number of contextual factors crucial to predicting emotional reactions to particular cases of great wealth. This is bound to be true regardless of the political leanings of the beholder, although such leanings could well moderate the impact of those factors. Thus, the question is not whether liberals envy those with great wealth, but rather what types of great wealth engender envy and what types engender resentment—or both. Furthermore, it may be that some types of great wealth produce envy in both liberals and conservatives and other types produce similar amounts of resentment. One of the main goals of the present research was to systematically examine aspects of great wealth that should reveal both similarities and differences in how liberals and conservatives might react to such wealth. Doing so would not only recast the possibly simplistic question of whether liberals are more envious than conservatives, but also help in understanding when differences in their emotional reactions might be more envy-based or resentment-based.

Initial source of wealth: Inherited or earned through hard work. One especially important contextual factor may be how a wealthy person became wealthy in the first place. The wealth may have come in the form of an easily-obtained gift from family (e.g., an inheritance), or it instead might have been earned through years of hard work. That is, the person's initial wealth may signify either unearned privilege or something closer to an up-by-the-bootstraps, rags-to-riches story. The issue here is that the perception of great wealth is likely affected by whether it is perceived to be "deserved" or



not. This is not a trivial distinction. Basic social psychological research indicates that perceived personal responsibility for an outcome is a key determinant of the perceived deservedness (or fairness) of that outcome (Feather, 1999), as well as emotional reactions to that outcome (Feather, 2006; van Dijk, Goslinga, & Ouwerkerk, 2008). For example, according to Feather's (2006, 2012) deservingness theory, resentment is likely to result when another person experiences an undeserved positive outcome, and joy (or schadenfreude) may occur when that person loses the undeserved positive outcome either way, a sense of justice and "balance" between the other person's actions and outcomes is restored (Feather, 2006; 2012; Heider, 1958; van Dijk, Ouwerkerk, & Goslinga, 2009). Furthermore, the literature on fairness and justice perceptions suggests that the process by which the distribution of resources was determined, or procedural justice, generally impacts evaluations of wealth to an even greater extent than distributive justice, or the overall distribution of resources (Tyler, 2011). Thus, because a wealthy person who inherited his or her wealth would not be seen as responsible for and therefore deserving of it, that wealth would be perceived as less fair than wealth gained more slowly through great effort.

In the present study, participants reacted to examples of great wealth that was either inherited or "earned" through hard work. This manipulation had a number of possible benefits for the research questions at hand. First, one might predict that, regardless of political ideology, inherited wealth would produce more envy than earned wealth. However, this pattern might be especially pronounced for liberals compared to conservatives. Possibly, liberals would have equal and low amounts of envy in reaction to earned wealth; inherited wealth would be where liberals part company with conservatives.



But this pattern, even if it emerged, would be only half the story. Liberals might also perceive the inherited wealth to be "objectively" less fair than would conservatives, thereby increasing resentment.

The nature of liberal and conservative ideology also suggests a complex picture. For example, the literature on just-world beliefs and system-justifying ideologies suggests that conservatives generally perceive greater procedural justice in the *society-wide* process of wealth allocation than liberals (Jost, 2006; Jost & Hunyady, 2005; Lerner, 1980). Simply put, the economic "system" often seems less "rigged" to conservatives than liberals. Conservatives should therefore be more likely to assume that a specific wealthy person deserves his or her wealth (even if much of it were inherited), at least in the absence of clear evidence that it was ill-gotten. If so, envy (and resentment) should be low across the board for conservatives. Additional literature suggests that although liberals and conservatives alike are concerned about procedural economic justice (e.g., equal opportunity to succeed in America's relatively free-market economy), liberals place a substantially greater emphasis on distributive justice (e.g., equality of outcomes) than conservatives (Janoff-Bulman & Carnes, 2013). If so, envy (and resentment) should be relatively high across the board for liberals.

In any event, manipulating the source of the target's great wealth had the potential to aid in better understanding how this key contextual factor might affect reactions in general and also reveal the particular concerns of liberals and conservatives. Not only

⁶ The improbable rise of populist Republican presidential candidate Donald J. Trump, who frequently and publically has complained of US trade agreements that are stacked against average Americans by a self-enriching political and economic elite, suggests that large numbers of people across the political spectrum may view the current socioeconomic order in the US as fundamentally unjust. Even so, the extent to which ideologically "pure" conservatives, rather than dissatisfied current or former liberals, concur with Trump's statements on the economy (e.g., on free trade and outsourcing) is unclear.



could the separate reactions of envy and resentment be examined, but the way in which these two emotions relate to one another in each context could be addressed. For example, would the source of wealth source influence both envy and resentment among liberals and conservatives alike? Further, could wealth source influence the strength of the relationship between political ideology and one or both of these emotions?

It should also be emphasized that this distinction between inherited and earned wealth dovetails with many common examples in everyday life that appear to capture how people differentially react to great wealth in general and as a function of political leanings (e.g., popular perceptions of "privileged" heirs vs. equally-wealthy, self-made businesspeople). Furthermore, as suggested already, the social psychological variables underlying possible differences between liberals and conservatives in their reactions to inherited and earned wealth represent longstanding theoretical and empirical traditions.

Harmfulness of actions related to wealth: Not harmful or harmful. Emotional reactions to wealthy people should be influenced by the perceived source of their wealth, but another factor suggested by empirical literature (especially on moral judgments; Schein & Gray, 2015; Schein, Ritter, & Gray, in press) and the current political debates over concentrated wealth and inequality may play an even more influential role. Specifically, whether a rich person actively harmed less fortunate people in the pursuit of greater wealth may be a stronger determinant of reactions to her wealth than how she became wealthy in the first place. For example, a very well-heeled person might acquire a company and lay people off in order to reap large profits, or, alternatively, he might earn those same profits in ways that do not hurt workers. Per deservingness and balance theories, a harm-doer's wealth itself may be seen as unfair or unjust because "bad" people



deserve congruent, "bad" outcomes (Feather, 2006; 2012; Heider, 1958). The harmful actions are also very likely to be seen as at least somewhat procedurally unjust, and, as mentioned, perceived procedural injustice engenders anger and resentment in response to inequality. Moreover, psychological perspectives on moral judgment often emphasize the role of perceived harm when people make judgments of right and wrong (e.g., Haidt, 2012, 2015). For example, Haidt's popular book Righteous Minds (2012; Chapter 7) cites harming others while personally profiting as a straightforward example of violating the rules and principles of fairness, and empirical research on reactions to unfair treatment has sometimes involved gauging how people react to another's "unfairly" profiting at their expense by deviating from an equitable, 50/50 division of resources (e.g., Chapman et al., 2009). Although matters of procedural justice and deservingness perceptions are likely at play (as with the manipulation of wealth source), manipulating harmfulness may be a uniquely powerful way of increasing envy and resentment of wealthy people, as some researchers have posited that judgments of harmfulness comprise the cardinal factor in judgments of the morality and fairness of actions; in such a view, fairness judgments about actions are modulated by the perceived degree of harm caused by those actions (e.g., Gray, Waytz, & Young, 2012; Schein et al., in press; Schein & Gray, 2012). Given all this, a major advantage of manipulating the harmfulness of actions taken in the pursuit of wealth is that harmful actions can be expected to increase unfavorable reactions among people across the entire political spectrum.

Harming others to obtain more wealth violates many people's ideas of procedural justice, and the harm caused by those actions in and of itself should lead to unfairness judgments and moral condemnation. There would therefore seem to be an appreciable risk



that harmfulness may "engulf the field," in the sense that it might eliminate any possibility of envy and/or resentment varying as a function of political ideology. Previous empirical research, however, suggests that is not the case. Both liberals' and conservatives' judgments of morality may be made on the basis of perceived harm and fairness, but these "moral foundations" are even more important to liberals than conservatives (Graham, Haidt, & Nosek, 2009; Graham, Nosek, Haidt, Iyer, Koleva, & Ditto, 2011; Haidt, 2012). Moreover, research on system justification and rationalization of inequality suggests that conservatives should perceive self-enriching actions with negative economic consequences for others to be more fair, and perhaps less harmful, than liberals (Jost & Hunyady, 2003; 2005). This suggests that harmfulness should have even stronger effects on envy and resentment among liberals than conservatives. To summarize, when a wealthy person (at least seemingly) does no harm in the pursuit of wealth, both liberals and conservatives might be expected to have relatively low levels of envy and resentment of him or her, while clear harm-doing might enhance liberals' envy and resentment to an even stronger extent than for conservatives.

Clearly, personally-enriching, intentional acts that hurt other people are more likely to be seen as unfair, *ceteris paribus*. However, political ideology may influence reactions not only to wealthy people who have harmed others in the pursuit of wealth, but also to wealthy people whose equally-lucrative business decisions did no apparent harm. Due largely to distributive justice concerns and, possibly, less favorable views of wealthy people in general, liberals might well experience somewhat stronger envious and/or resentful feelings toward wealthy people who have done no apparent harm than conservatives.



Before considering examples of wealthy people whose source of wealth and actions varied widely (specifically, US presidents and presidential candidates), it should be emphasized that the similar predictions often made on envy and resentment in this study do not imply that they are considered synonymous or interchangeable. Envy of harm-doing wealthy people might be higher among liberals because they might see such actions as unfair in a relatively personal, subjective sense (e.g., "That may be how some people think the economy is 'supposed' to work, but I still do not agree with it''). Resentment might also be higher among liberals because they should be more likely to see harmful actions as "objectively" unfair (e.g., "Anyone would agree that hurting people for personal gain is morally wrong") than conservatives, who are more likely to endorse economic system-justifying ideologies. It should be noted that (un)fairness judgments themselves are not envy or resentment, although they can be important antecedents to (or even consequences of) those and other emotions, including anger and moral disgust. There is substantial overlap among concepts such as envy, resentment, and fairness, but, as suggested, these concepts are considered separately to the extent possible.

Crossing the manipulations. Examples from United States electoral history illustrate that the ways in which wealthy individuals came to be wealthy, and the consequences for others of their subsequent actions, can significantly influence how other people react to them. First, part of President Andrew Jackson's appeal to early 19th-century Americans was the perception that he rose to wealth and influence through merit despite beginning life in poverty, and Jackson's campaign platform and actions while president led him to be perceived as more of a populist than a plutocrat (UShistory.org).⁷

⁷ Ironically, Jackson had a reputation as a self-made man despite his immensely profitable use of slave labor, which was the primary source of his wealth (Escobedo, 2016).



However, even candidates from very privileged backgrounds are not necessarily viewed negatively for their wealth. The very wealthy, patrician Franklin D. Roosevelt won 4 presidential elections, in no small part due to his expressed—and often realized—intentions to use government to help people less fortunate than he and his fellow upper class Americans. Decades later, however, another politician born into wealth saw his presidential hopes dashed, in part, by portrayals of him as a self-interested harm-doer. During the 2012 election season, Mitt Romney's candidacy was damaged by allegations that he unfairly profited by acquiring companies and laying people off during his tenure at Bain Capital (e.g., Taibbi, 2012). Empirical research and these examples from US presidential politics suggest that, while still influential, whether or not wealthy people were born into privilege may play a lesser role in overall reactions to them than the harmful or beneficial consequences of their subsequent choices for others.⁸

As shown above, psychological literature and historical examples suggest that the source of wealthy people's initial fortune and the potentially-harmful consequences for others of their personally-enriching actions should influence others' fairness judgments and emotional reactions to them. Experimentally manipulating these factors may therefore be an especially suitable way to investigate the central questions of the current research, including the extent to which context impacts liberals' and conservatives' reactions to wealthy people. One of the most important reasons I opted for the current design is that it

⁸ Although not a focus of the current study, perceived similarity to and resulting "affirmative" identification with non-wealthy people (e.g., "I am an 'average person'") might be yet another factor at play in reactions to wealthy people (Hogg & Turner, 1985). Negational identification, or defining one's group in terms of what it is *not*, could also have a role (e.g., "As a fellow 'average person,' I am *not* one of *them* [i.e., a member of the American upper class]) (Zhong, Galinsky, & Unzueta, 2008). The negational identification process might be especially likely when other "average people" have been harmed by a wealthy person's actions. In such circumstances, increased identification with the victims, through affirmative and/or negational processes, should increase empathy for them and anger toward the wealthy person responsible for their plight (Allport, 1954; Brewer, 1999).

allowed for a test of both conservative and liberal lay theories regarding the origins of opposition to wealth. For example, if liberals respond with more envy across contexts *and* justice/fairness concerns do not mediate that relationship, then there would be a degree of support for conservative critics' accusations that liberal opposition to concentrated wealth is based in envy, rather than differences in legitimate, unselfish justice concerns that may accompany and help explain such envy.

A final advantage of the current design is that it focuses on reactions to individuated wealthy people, rather than as a stereotyped group. The people at the top of America's income spectrum range from widely-disliked "vulture capitalists" to vaunted Silicon Valley "angel investors" (Loewenstein, 2013). With this design, one can begin to investigate the extent to which key contextual factors impact ideology-based differences in reactions to the diverse group of people sometimes collectively known as "the rich."

Overview

The current study aims to address the following primary questions: (1) Are liberals generally more envious than conservatives?, (2) To what extent are liberals' and conservatives' reactions to wealthy people and their behaviors influenced by (a) the source of their initial wealth, and (b) the consequences for others of their personally-enriching actions? Or, more broadly, to what extent does context matter to reactions to wealth among liberals and conservatives?, and (3) Are any differences between liberals and conservatives on envy in response to wealthy people explained by fairness/justice concerns?



Design Overview

Amazon Mechanical Turk (MTurk) and University of Kentucky (UKY) undergraduate participants read and reacted to two articles from a fictitious investment news website detailing interviews with ostensibly-real, wealthy businessmen. In counterbalanced order, participants responded to both Gary Taylor, who acquired a ball bearing plant in Ohio, and Andy Simmons, who acquired a hubcap factory in Kansas. Each entrepreneur either received a large monetary gift from family to start his business or worked hard for the money to start it. In the pursuit of further wealth, each entrepreneur either harmed workers at the company he acquired (via layoffs and benefits cuts, e.g.), or did not. Thus, the study had a 2 (Company/Entrepreneur: ball bearings company/Taylor or hubcap company/Simmons) X 2 (Initial Wealth Source: Inherited or Hard Work) X 2 (Harmfulness of Actions: Not Harmful or Harmful) mixed factorial experimental design (Appendix A). The within-participants "Company/Entrepreneur" factor was included for purposes of internal replication (Smith & Harris, 2006) and was expected and found to be unimportant to key outcomes, as described in *Results*. After indicating their reactions to the articles, participants responded to a series of individual differences questionnaires, including one on their political ideology. Political Ideology (or, alternatively, "Liberalism") represented another independent variable, albeit an observed, continuous, quasi-experimental one. As appropriate, Political Ideology's effects were examined jointly with the experimental manipulations. Thus, averaging participants' responses across the Company/Entrepreneur factor yielded a final, 2 (Source) X 2 (Harmful Actions) X continuous (Political Ideology) between-participants design.



Hypotheses⁹

Hypotheses were derived and tested. Simplified, brief rationales are provided for each hypothesis.

Political Ideology and envy. When another has self-relevant advantages¹⁰ (Tesser, 1988; Tesser, Millar, & Moore, 1988) that are judged to be unfair, envy often results (van de Ven et al., 2015). In general, liberals tend to view the unequal distribution of wealth as both objectively and subjectively less fair than do conservatives. On this basis, I predicted there would be a positive correlation between political liberalism and state envy of the wealthy entrepreneurs. I also expected a perhaps weaker positive correlation between political liberalism and dispositional envy, as conservatives have a greater tendency toward seeing the state of the world, including their own deserts, as fair (e.g., Schlenker, Chambers, & Le, 2012).

Predicted effects of context and Political Ideology on envy and resentment.

Because of the close conceptual links between envy and resentment, I made the same predictions about context and Political Ideology effects on resentment as envy, with the exception of the Hard Work X Not Harmful condition, as explained below. For purposes of brevity and clarity, hypotheses on "envy/resentment" are written together where possible.

Both liberals and conservatives value the proportionality of economic inputs and outputs as a basis for judging economic fairness. On this basis, I predicted a main effect of

¹⁰ In the US and elsewhere, these attributes generally will include financial and professional success.



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⁹ For purposes of clarity, hypotheses are stated as though the liberal-conservative spectrum were dichotomized, but in reality, political ideology was measured and analyzed as a continuous variable (Cohen, Cohen, West, and Aiken, 2003).

Source on envy/resentment whereby more envy/resentment would be reported in the Inherited condition than in the Hard Work condition.

Harming others in the pursuit of wealth should seem unfair to most people across the political spectrum. On this basis, I predicted a main effect of Harmful Actions on envy/resentment whereby more envy/resentment would be reported in the Harmful condition than in the Not Harmful condition.

Liberals view the unequal distribution of wealth to be more unfair than do conservatives, whereas conservatives tend to view concentrated wealth as relatively fair unless the possessor's outcomes seem disproportionate to his or her inputs. Given this and empirical research suggesting that a subjective sense of unfairness is necessary for envy, and that liberals may be more prone to perceiving concentrated wealth as inherently and "objectively" unfair, I predicted a main effect of Political Ideology on envy/resentment whereby liberals would report greater envy/resentment than would conservatives in response to wealthy entrepreneurs.

Liberals tend to be more concerned about equality of opportunity than conservatives when making judgments about the procedural justice or fairness of another's outcome. On this basis, I predicted a two-way Source X Political Ideology interaction, whereby the enhancing effect of Inherited wealth on envy/resentment would be more pronounced among liberals than conservatives.

To an even greater extent than conservatives, liberals tend to morally evaluate actions on the basis of how harmful and/or unfair they perceive them to be. Conservatives often make harsher moral judgments than liberals, but given their tendency to rationalize "collateral damage" in the current entrepreneurial capitalist system of the United States



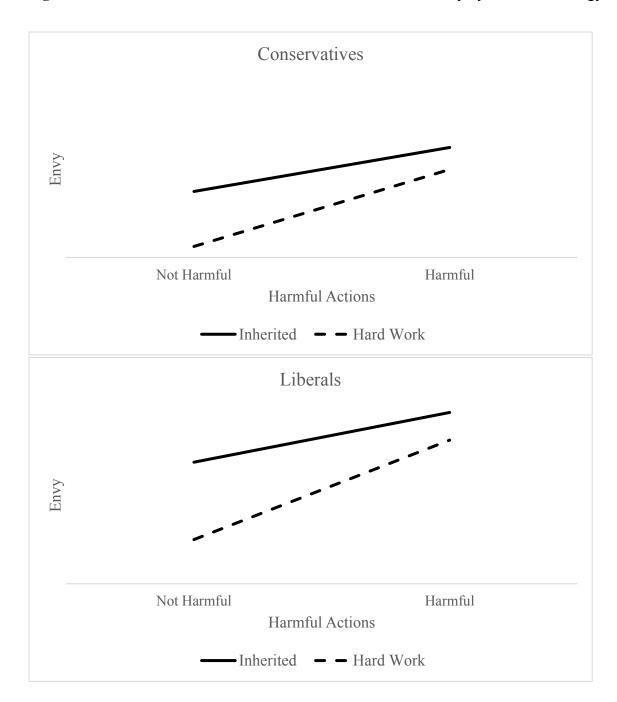
(e.g., Jost & Hunyady, 2005), that tendency to judge perceived transgressions more harshly may be somewhat muted when judging wealthy businesspeople. That is, due to economic system-justifying ideologies, conservatives may see business decisions that boost personal wealth at the expense of workers as less unfair than liberals, and therefore less worthy of their typically-harsher moral condemnation. Despite these complexities, I tentatively predicted a two-way Harmful Actions X Political Ideology interaction whereby the enhancing effect of Harmful actions on envy/resentment would be more pronounced among liberals than conservatives.

Because of differences in distributive justice concerns, I particularly expected liberals to experience more envy than conservatives in the Hard Work X Not Harmful condition, as that condition gave no readily apparent, "objective" reason that the entrepreneur's wealth was unfair. In contrast, I had no specific prediction for whether liberals and conservatives would differ in resentment within the Hard Work X Not Harmful condition. As shown in Figure 1, my predictions on envy in the Hard Work X Not Harmful condition implied a simple effect of Political Ideology, such that liberals (+1 SD on political liberalism) would express greater envy in the Hard Work X Not Harmful condition than would conservatives (-1 SD on political liberalism).

Other contextual effects on emotional reactions to wealth. Perceived harm as a result of intentional actions should increase anger toward the actor. On this basis, I



Figure 1: Predicted Effects of Source and Harmful Actions on Envy by Political Ideology



predicted greater anger in the Harmful condition than in the Not Harmful condition. Moral disgust is perhaps even more strongly linked to perceived unfairness than anger, and should therefore be enhanced when others (a) unfairly profit at the cost of others and (b) have unfair advantages in life. On this basis, I predicted greater moral disgust in the Harmful condition than in the Not Harmful condition, and greater moral disgust in the Inherited condition than in the Hard Work condition.

Predicted process effects. I conducted mediation and moderated mediation tests in order to examine why and when liberals and conservatives might respond differently when presented with wealthy people. These analyses focused on three key topics in the current study, including political ideology, fairness perceptions, and envy.

Conservatives more strongly endorse economic system-justifying ideologies than liberals, and justifying a wealthy entrepreneur's actions (whether harmful to others or not) should make them seem fairer. On this basis, I predicted mediation of the effect of Political Ideology on the perceived fairness of the entrepreneur's actions via a composite measure of justifying statements (e.g., "Simmons' actions were good for the overall economy").

The predicted moderation by Political Ideology of the effect of Source on envy was predicated on the assumption that Liberalism would (1) enhance the effect of Inherited wealth on envy, and (2) moderate the degree to which Inherited wealth would lead the entrepreneur's initial wealth source to be perceived as less fair than wealth earned through Hard Work. On this basis, I predicted a first stage and direct effect moderation model, in which Political Ideology moderates both the direct effect of Source on envy and



the indirect effect of Source on envy via the perceived fairness of the initial wealth source (Figure 2).¹¹

The predicted moderation by Political Ideology of the effect of harm on envy was predicated on the assumptions that Liberalism would (1) enhance the effect of Harmful actions on envy, and (2) moderate the degree to which Harmful actions would lead the entrepreneur's actions to be perceived as less fair. On this basis, I predicted a first stage and direct effect moderation model (Edwards & Lambert, 2007; Hayes, 2015; Preacher, Rucker, & Hayes, 2007), in which Political Ideology would moderate both the direct effect of Harmful Actions on envy via the perceived fairness of the entrepreneur's actions (Figure 3).¹²

Exploratory analyses. I tested whether the effect of Political Ideology on the perceived fairness of a wealthy entrepreneur's actions would be mediated via the perceived harmfulness of those actions, as suggested by proponents of dyadic morality theory (DMT) (Gray & Schein, 2012; Schein & Gray, 2015). I collapsed across experimental condition for that analysis, as the goal was to investigate in a preliminary way whether left-right differences in moral judgments of wealthy people can be traced to their different perceptions of how harmful a wealthy person's behavior is likely to be.

¹² Paralleling the previously-described process model on Source and envy, I did not predict that the pathway between the mediator (fairness of the entrepreneur's actions) and the outcome (envy) would be moderated by Political Ideology—although Liberalism should impact the extent to which Harmful actions decrease the perceived fairness of those actions, there was little reason to believe that the effect of such fairness judgments on envy, once made, would be moderated by Political Ideology. In short, I predicted moderation of the "a" path, but not the "b" path, in Figure 3.



¹¹ I did not predict that the pathway between the mediator (fairness of the entrepreneur's initial wealth source) and the outcome (envy) would be moderated by Political Ideology. Although Liberalism should impact the extent to which Inherited wealth (as opposed to Hard Work) decreases the perceived fairness of that source of wealth, there was little reason to believe that the effect of such fairness judgments on envy, once made, would be moderated by Political Ideology. In path-analytic terms, I predicted moderation of the "a" path, but not the "b" path, in Figure 2 (see Baron & Kenny, 1986, p. 1176).

Figure 2: Hypothesized First Stage and Direct Effect Moderation Model: Moderation by Political Ideology of Direct Effect of Source on Envy and Indirect Effect of Source on Envy via Perceived Fairness of Entrepreneur's Initial Source of Wealth

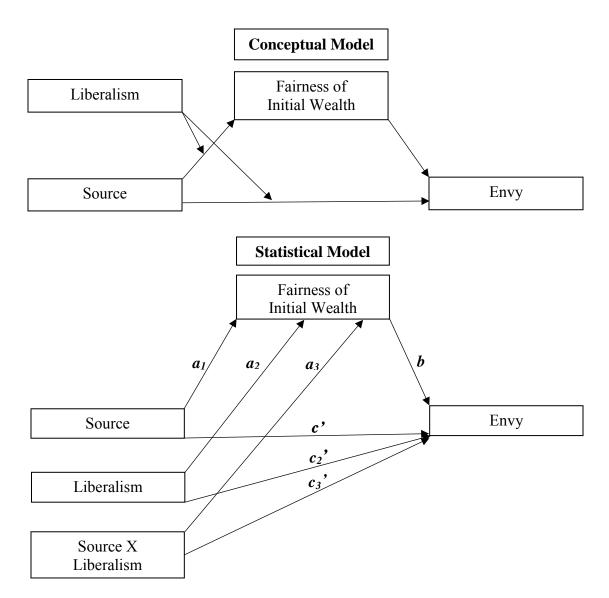
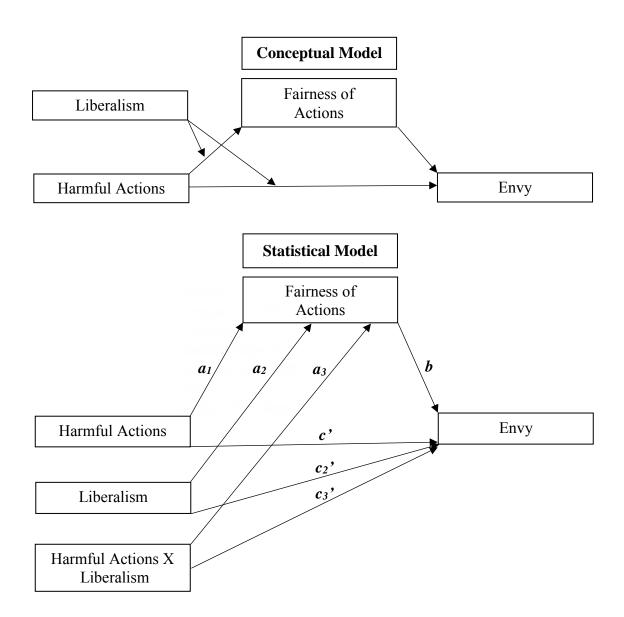


Figure 3: Hypothesized First Stage and Direct Effect Moderation Model: Moderation by Political Ideology of Direct Effect of Harmful Actions on Envy and Indirect Effect of Harmful Actions on Envy via Perceived Fairness of Entrepreneur's Actions



I also investigated whether envy varies as a function of subjective socioeconomic status (SES) among liberals but not conservatives. Napier and Jost (2008) found that socioeconomically disadvantaged and advantaged people do not differ in the palliative effect of system-justifying beliefs on (un)happiness. Accordingly, because conservatives also endorse system-justifying beliefs more strongly than liberals (Jost et al., 2003a; Napier & Jost, 2008), they could feel less envy across the board than liberals. However, if the envy-based, conservative account of liberal opposition to concentrated wealth is correct, subjective SES and ideology might have interactive effects on envy in response to a wealthy person—low SES liberals should feel more envy than high SES liberals, whereas conservatives should feel similarly low levels of envy whether low or high in SES. I therefore ran a multiple regression model in which envy was regressed on Political Ideology, subjective SES, and their interaction.

Chapter Two: Method

Power Analysis

The typical effect size in published social psychology research is approximately r=.21, or small to medium in magnitude (Richard, Bond, & Stokes-Zoota, 2003); given this, and the small to medium effect sizes frequently observed in the pilot research, a priori power analyses were conducted assuming small to medium effect sizes (d=.35; r=.20; $f^2=.085$; Murphy & Myors, 2004). To detect an association of r=.20 (e.g., between political liberalism and envy), 95% power required N=319, assuming $\alpha=.05$ (twotailed); with these same parameters, 80% power would require N=193 (https://www.statstodo.com/SSizCorr_Pgm.php). For tests of the effect of a two-level independent variable, N=201 for 95% power and N=121 for 80% power



(http://powerandsamplesize.com/Calculators/Compare-2-Means/2-Sample-Equality). The required sample size to detect mediation with 80% power using the bias-corrected bootstrap mediation method is N = 400, assuming an "a" path medium in magnitude (e.g., the anticipated effect of Political Ideology on fairness judgments), and a "b" path small in magnitude (Fritz & MacKinnon, 2007, Table 3).

To calculate the sample sizes necessary for 80% power and 95% power for the predicted three-way interaction on envy, I used G*Power version 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009). I estimated the increment in R^2 as a result of adding the three-way interaction to the envy model to be .01 ($f^2 = .0101$). For 80% power to detect the predicted 3-way interaction with an increment in R^2 of .01, 779 participants would be necessary; 1,289 would be necessary for 95% power.

In past online research using mild deception similar to the deception employed in this study (i.e., misleading people to believe that fabricated articles were genuine), approximately 25% of participants either failed one or more attention checks or expressed suspicion regarding the researcher-constructed articles. Given the statistical and methodological characteristics of the proposed study (as described above), target *N* was

 $^{^{13}}$ Perhaps counterintuitively, an obtained increment in R^2 of .01 arguably should not be considered negligible when one or more continuous, observed independent variables is involved. In a review article explaining the greater difficulty of detecting interactions involving at least 1 continuous, observed independent variable, compared to detecting interactions only involving experimentally-manipulated independent variables, McClelland and Judd (1993) concluded that "It is not appropriate to dismiss a 1% interaction found in the field because, as this example [of a continuous X continuous interaction discussed in the article] shows, it is equivalent to an interaction reducing error 21.7% in an optimal design [i.e., a design involving only experimentally-manipulated independent variables]" (p. 384). To be clear, such a large "equivalent" reduction in error for the current study was not expected.



1,000 (~800 for 80% power, plus 200 [25%] more participants to make up for anticipated attrition).¹⁴

Participant Recruitment

Six hundred sixty-seven participants of varying socioeconomic and ethnic backgrounds were recruited via Amazon's Mechanical Turk (or MTurk) service.

Mechanical Turk is a popular resource for recruiting participants for social science research, as it allows researchers to quickly and inexpensively obtain data of similar quality to data collected from convenience samples of undergraduate psychology students, who tend to be less sociodemographically diverse (Buhrmester, Kwang, & Gosling, 2011; Huff & Tingley, 2015; Paolacci & Chandler, 2014). In this approximately 25 minute-long study, MTurk participants were paid 50 cents each for their participation; research indicates that even substantially lower per-minute compensation rates have little impact on the quality of the data MTurk participants provide (Buhrmester et al., 2011).

In addition to the MTurk sample, 321 participants were recruited from the UKY Psychology participant pool. Data from an online mass-testing (MT) questionnaire administered approximately 8 to 10 weeks prior to the study were available on (1) political ideology, (2) dispositional envy, and (3) dispositional benign envy for 137 UKY participants. Another 11 UKY participants had MT data available on only the dispositional envy and dispositional benign envy scales. Both MTurk and UKY participants completed the study online. Unless otherwise noted, all results are based on combined MTurk and UKY data.

 $^{^{14}}$ Given budgetary and time constraints that made it unlikely to obtain a sample with 95% power to detect the three-way interaction (1,289 X 1.25 = 1,611), the target was set at 80% power, which traditionally has been considered an acceptable level of power in social psychological research (Cohen et al., 2003).



Stimulus Articles

A total of eight stimulus articles were constructed to appear as though they were from a business website (Appendix B^{15}).

Company/Entrepreneur manipulation. Participants read about a male businessperson, "Gary Taylor," who either harmed or did not harm workers in pursuit of wealth, and either received his initial wealth as a gift from family or through hard work. For purposes of internal replication, another businessperson, "Andy Simmons," was also described. Within each of the four conditions, storylines for both businesspeople were similar, aside from superficial details which were changed to prevent the articles from being too similar to be believable. For example, the company that each entrepreneur acquired was in a different US state and manufactured a different product. Only a handful of participants noted that the articles they read seemed similar to them; thus, efforts to make the articles seem sufficiently different from one another appear to have been successful.

(Initial Wealth) Source manipulation. The entrepreneur was presented as either having been gifted his wealth or having earned it through long-term, sustained effort. For example, in the Inherited condition, Gary Taylor's backstory was described as follows:

"After Taylor graduated college at the age of twenty-one with a degree in economics, he started working at his father's investment management firm. The key to the sudden take off of Taylor's career, however, was his determination to acquire struggling businesses, and to make sizeable profits by selling them. With

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¹⁵ Care was taken to make the articles appear as authentic as possible. No copyediting marks (e.g., wavy underlining) were present in the articles posted online, and few expressed the suspicion that the articles were constructed by the researcher, or "fake."

the help of a multimillion dollar gift from his 'well-to-do' family, he quit his job and started looking for a company to acquire at the ripe old age of 25."

In the Hard Work condition, however, Taylor's rise was described as a function of hard work and wise investment:

"When Taylor graduated college at the age of twenty-one, he set off for the corporate world with little more than a degree in economics and the shirt on his back. He worked very hard at his post-college investment management job, saving his money and making strategic stock purchases when he could. The key to the sudden take off of Taylor's career, however, was his determination to acquire struggling businesses, and to make sizeable profits by selling them. By combining his savings and selling his investments, he had just enough money to quit his job and start looking for a company to acquire at the ripe old age of 25."

Harmful Actions manipulation. In the Harmful condition, the entrepreneur was portrayed as having increased the profitability of his investment in a company in ways that decreased the economic well-being of workers. For example, participants read about entrepreneur Andy Simmons taking the following actions in the Harmful condition:

"...he cut over 25% of the workers at the factory, and replaced them with cheaper hires when necessary," and "He eliminated the health insurance plans and the 401K program for all new hires, and reduced 401K matching for current employees by 67%."

In contrast, the entrepreneur in the Not Harmful condition increased the value of his investment to an equal extent without harming workers in the process. To illustrate, in the Not Harmful condition, Andy Simmons "increased the factory workers' output with



the help of productivity experts that he personally interviewed and hired, and designed a new financial plan for the company."

Questionnaires following Stimulus Articles

Following each article, participants responded to a 37-item questionnaire (Appendix C). Responses were on a Likert-type scale ranging from 0 (*disagree completely*) to 6 (*agree completely*). Five items included as fillers to reduce suspicion (e.g., "[Entrepreneur] is a great role model") were not analyzed.

Envy. Five items were adapted from van de Ven et al. (2015) and averaged to create a composite measure of envy (α = .83), including "I am a little jealous¹⁶ of [Entrepreneur's] wealth;" "It is frustrating that [Entrepreneur] is better off than I am;" "I hope [Entrepreneur] suffers a serious financial setback;" "I wish [Entrepreneur] weren't so successful;" and "I can't help but resent [Entrepreneur] for his success." Although not of central interest to the current research, "benign envy" was measured with a different set of five items adapted from van de Ven (2015), including "I am a little envious of [Entrepreneur]'s wealth;" "I want to have [Entrepreneur's] wealth as well;" "I feel inspired to get wealth myself;" "I think about what it would be like to have [Entrepreneur's] wealth," and "I want to put in effort to obtain wealth myself." The items were averaged to create a composite measure of benign envy (α = .89).

Resentment, anger, and moral disgust. Two items were included as measures of resentment ("I resent [Entrepreneur's] actions/wealth") ($\alpha = .80$). Two items apiece were

¹⁶ In English, the terms "envy" and "jealousy" are often used interchangeably. In the psychological literature, however, envy and jealousy are treated as distinct constructs. Specifically, jealousy is a varying set of threatening thoughts, feelings, and action tendencies following a realization that one might lose a valued other (e.g., a romantic partner) to another person (e.g., a rival suitor)—an inherently three-person situation (Parrott, 1991; Parrott & Smith, 1993).



also included to measure anger ("[Entrepreneur's] actions/wealth make[s] me angry.") (α = .84) and moral disgust ([Entrepreneur's] actions/wealth were/is disgusting.) (α = .88).

Manipulation checks and perceived fairness. Two items served as a manipulation check for Source ("[Entrepreneur's] initial wealth was earned through hard work;" and "[Entrepreneur's] initial wealth was given to him by family") (α = .92) and two items served as a manipulation check for Harmful Actions ("[Entrepreneur] harmed the workers in the [Kansas/Ohio] company;" "[Entrepreneur] harmed the company in [Kansas/Ohio]) (α = .84). Two items measured the perceived fairness of the entrepreneur's source capital ("The way [Entrepreneur] got his initial wealth was fair;" "[Entrepreneur]'s source of startup money was fair") (α = .94), and two items measured the perceived fairness of the entrepreneur's actions ("[Entrepreneur's] actions were fair;" "[Entrepreneur's] actions with the company were unfair" (R)) (α = .93).

Economic justifications for actions. Four items measured the extent to which participants viewed the entrepreneur's actions as economically justified or beneficial, including "[Entrepreneur's] actions were good for the overall economy;" "I believe [Entrepreneur] helped save the [Kansas/Ohio] company;" "[Entrepreneur] did his duty for his investors by taking the actions he did with the Ohio company;" and "[Entrepreneur's] way of turning around companies is good for the country" ($\alpha = .91$).

Personal qualities. Two items enabled an exploration of whether political ideology might influence perceptions of the entrepreneur's personal characteristics (e.g., lesser endorsement of positive attributes, and greater endorsement of negative attributes), and, therefore emotional reactions to them. The first, "[Entrepreneur] is a very skilled



businessperson," gauged the entrepreneur's perceived competence, while the second, "[Entrepreneur] is greedy," measured perceived greed.

Individual Differences Measures¹⁷ (Appendix D)

Political Ideology. In recent years, "Republican" has become increasingly synonymous with conservative political ideology, just as "Democrat" has with liberal political ideology (Barber & McCarty, 2015; Levendusky, 2009). In keeping with this trend, and other research that has successfully used brief composite measures of political ideology (Jost, 2006; Napier & Jost, 2008), I used a composite measure of political ideology which combined measures of both ideology proper (i.e., endorsement of conservative and liberal political views) and agreement with the conservative (Republican) and liberal (Democratic) parties' positions. This measure was an adaptation of Morgan, Mullen, and Skitka's (2010) measures of political orientation, which included self-reported liberalism and conservatism, as well as feelings toward Democrats and Republicans; the items were subsequently combined to form reliable composite measures of political orientation.

For the current research, political ideology was assessed with four items (endpoints: $1 = completely \ disagree$, $7 = completely \ agree$): "I agree with Republicans (Democrats) on political issues" and "I am conservative (liberal) in my political views." The "Republican" and "conservative" questions were reverse-scored and averaged with the "Democrat" and "liberal" questions to obtain a composite "Liberalism" score ($\alpha = 0.92$). As mentioned, some participants completed the political ideology measure both as

¹⁷ For purposes of an unrelated scale validation project, a 7-item dispositional schadenfreude scale (Krizan & Hoogland, manuscript in preparation) was included after all other individual differences questionnaires. This likely prevented it from having an appreciable impact on the measures of interest in the current study and it will not be discussed further.



part of the main study session and 8-10 weeks earlier during MT, at which point the measure was embedded among various unrelated questionnaires. Similar to when it was administered as part of the main study session, the political ideology scale was also reliable when administered during MT (α = .88). Moreover, test-retest reliability was high, r(135) = .88, p < .001, indicating considerable stability of political views over the 8-10 week period between MT and participation in the main study session. Pilot data also suggested the validity and reliability of the scale. Specifically, when a 20-item measure of right-wing authoritarianism (Altemeyer, 1996) was included in the UKY Psychology participant pool MT questionnaire, it strongly negatively correlated with this study's measure of Liberalism, r(1,245) = -.58, p < .001.

Dispositional hostile and benign envy. Dispositional envy was measured using both the 8-item DES (Smith et al., 1999; example item: "It is so frustrating to see some people succeed so easily") (α = .91), and the 4-item dispositional malicious envy subscale of the BeMaS (Lange & Crusius, 2015; example item: "I feel ill will towards people I envy") (α = .90); as expected, the scale composites were highly correlated, r(797) = .66, p < .001. Dispositional benign envy was measured with the 4-item dispositional benign envy subscale of the BeMaS (Lange & Crusius, 2015; example item: "If I notice that another person is better than me, I try to improve myself") (α = .90); there is no other validated scale for dispositional benign envy at present. Responses to each of the above measures were on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*) in order to aid comparability of results, and in keeping with the endpoints for the BeMaS used in previous research (i.e., Lange & Crusius, 2015). When measured during MT, both the dispositional envy (α = .87) and dispositional benign envy (α = .87) scales were high in



internal consistency. Test-retest reliabilities were r(146) = .58, p < .001, and r(146) = .55, p < .001, respectively.

Social desirability. Especially because envy is a socially undesirable emotion (Powell, Smith, & Schurtz, 2008), I included a 13-item version of the Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960; Fischer & Fick, 1993; Loo & Thorpe, 2000; Reynolds, 1982) (α = .75). Responses were on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*). The SDS correlated with key outcomes, including envy r(798) = -.23, p < .001, and liberal political ideology, r(798) = -.09, p = .011. It therefore was included as a covariate in regression analyses to control for any influence it might have on conservative-liberal differences on the outcomes of interest.

Subjective SES. Regardless of their actual resource level, people who perceive themselves to be relatively low in status tend to be more supportive of redistribution (or equality of outcomes) than those who perceive themselves to be high in status, and, similarly, subjective socioeconomic status (SES) likely plays a greater role in reactions to inequality than objective SES (Brown-Iannuzzi, Lundberg, Kay, & Payne, 2015). In light of the link between perceived status and reactions to inequality, subjective SES was measured using the ten-rung McArthur Ladder, in which participants placed themselves at higher rungs as their perceived standing relative to others in the United States increased (Ditto et al., 2013).

Procedure

After signing up online and consenting to participate, participants read 2 target articles (randomly presented), each of which was followed by questionnaires with response options on a Likert-type scale. Participants then completed the individual



differences measures and gave open-ended responses to the suspicion check questions.

Before exiting the study, participants read a debriefing form, which was followed by an opportunity to withhold their data from analysis, in light of the deception employed in the experiment.

Data Preparation

Data cleaning. Of the 321 undergraduates who consented to participate, 39 did not indicate whether or not they consented for their data to be used; however, all but 3 of them provided no answers for questions late in survey, indicating the vast majority of them dropped out of the study before completion. Another 7 participants opted to have their data excluded from analysis. Thus, 275 undergraduates' data passed the initial data screen. Of the 667 MTurk participants consenting to participate, 49 did not indicate whether or not they consented for their data to be used; however, all but 1 of them did not provide answers to questions late in survey. One other participant opted to have his or her data excluded from analysis. Thus, 617 MTurk participants' data passed the initial data screen.

For further data cleaning (and subsequent data analyses), the combined sample was examined. A (2 [Sample: MTurk or UKY Undergraduate] X 4 [Experimental Condition]) chi-square test of independence confirmed that, within the combined sample, roughly equal proportions of participants from each sample were in each experimental condition, $\chi^2(3) = .664$, p = .88 (Table 1). This indicated that any effects of sample were not systematically related to experimental condition and allowed the data from the MTurk and UKY samples to be combined.



Table 1: Participant Count by Experimental Condition and Sample (Mechanical Turk or Undergraduate)

			Cond			
		Hard	Hard	Inherited		
Sample		Work X	Work X	X No	Inherited	Total
		No Harm	Harm	Harm	X Harm	
	Count	47	50	58	52	20′
	Expected count	50.72	49.42	54.6	52.27	20
UKY Undergraduates	% within row	22.7 %	24.2 %	28.0 %	25.1 %	100.0 %
	% within column	24.0 %	26.2 %	27.5 %	25.7 %	25.9 %
	% of Total	5.9 %	6.3 %	7.2 %	6.5 %	25.9 %
	Count	149	141	153	150	59:
	Expected count	145.28	141.58	156.4	149.73	59:
Mechanical Turk Workers	% within row	25.1 %	23.8 %	25.8 %	25.3 %	100.0 %
Turk Workers	% within column	76.0 %	73.8 %	72.5 %	74.3 %	74.1 %
	% of Total	18.6 %	17.6 %	19.1 %	18.8 %	74.1 %
	Count	196	191	211	202	800
Total	Expected count	196	191	211	202	80
	% within row	24.5 %	23.9 %	26.4 %	25.3 %	100.0 %
	% within column	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	% of Total	24.5 %	23.9 %	26.4 %	25.3 %	100.0 %



Six participants' data were excluded from the combined sample because they indicated in the open-ended suspicion check questions that they accidentally skipped ahead past an article or had technical difficulties (e.g., not seeing one of the stimulus articles). Two participants' data were excluded for providing rather strange answers to those questions ("salty people who are jelly;" "us good"), thereby indicating possible intoxication and/or not having taken the study seriously. Fifteen participants answered no questions about either article; their data was excluded as a result. Twenty-one random responders (e.g., participants who answered every Likert-type item in the study with a "3") were also excluded. A final 48 participants' data were excluded for failing one or both attention checks in the study ("This is an attention check. Please choose answer "3" for this question"); one attention check was embedded in the questionnaire following each of the two target entrepreneurs. In sum, 988 participants consented to participate, and, after the data cleaning and exclusion procedures were completed, N = 800 (81%) remained.

Suspicion check and sensitivity analysis. Two questions served as suspicion checks in the study ("Do you have any comments about this study?" and "What do you think the study was about?"). Responses were open-ended, and based on answers to both questions, the overall suspicion of each participant was coded on an ordinal scale as follows: 0 = None; 1 = Mild (mentioned envy, resentment, or politics); 2 = Moderate (thought articles might have been fake); and 3 = Strong (guessed hypothesis or guessed combination of independent variables).

Approximately 94% of participants expressed no (40%) or only mild (54%) suspicion about the study (Table 2). Three percent expressed suspicion over the articles'



Table 2: Suspicion by Experimental Condition

			Suspicion (Category		
Condition	_	0	1	2	3	Total
	Count	91	95	6	10	202
Inherited X	Expected count	80.55	108.3	5.55	7.58	202
	% within row	45.0 %	47.0 %	3.0 %	5.0 %	100.0 %
Harm	% within	28.5 %	22.1 %	27.3 %	33.3 %	25.3 %
	% of Total	11.4 %	11.9 %	0.8 %	1.3 %	25.3 %
	Count	74	120	4	13	211
Inherited X	Expected count	84.14	113.1	5.8	7.91	211
	% within row	35.1 %	56.9 %	1.9 %	6.2 %	100.0 %
No Harm	% within	23.2 %	28.0 %	18.2 %	43.3 %	26.4 %
	% of Total	9.3 %	15.0 %	0.5 %	1.6 %	26.4 %
	Count	77	103	7	4	191
Hard Work X	Expected count	76.16	102.4	5.25	7.16	191
Harm	% within row	40.3 %	53.9 %	3.7 %	2.1 %	100.0 %
Hallii	% within	24.1 %	24.0 %	31.8 %	13.3 %	23.9 %
	% of Total	9.6 %	12.9 %	0.9 %	0.5 %	23.9 %
	Count	77	111	5	3	196
Hard Work X	Expected count	78.16	105.1	5.39	7.35	196
No Harm	% within row	39.3 %	56.6 %	2.6 %	1.5 %	100.0 %
NO Haiiii	% within	24.1 %	25.9 %	22.7 %	10.0 %	24.5 %
	% of Total	9.6 %	13.9 %	0.6 %	0.4 %	24.5 %
	Count	319	429	22	30	800
	Expected count	319	429	22	30	800
Total	% within row	39.9 %	53.6 %	2.8 %	3.8 %	100.0 %
	% within	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	% of Total	39.9 %	53.6 %	2.8 %	3.8 %	100.0 %

Suspicion Categories: 0 = none; 1 = Mentioned envy, resentment, or politics;



^{2 =} Suspicious of article authenticity; 3 = Guessed hypotheses/multiple independent variables

authenticity, and 4% either guessed hypotheses and/or combinations of the independent variables in the study. Spearman's rho rank-order correlations indicated that participant level of suspiciousness was not significantly associated with envy in response to the entrepreneurs, r_s (798) = -.001, p = .97, dispositional envy (measured with the dispositional malicious envy subscale of the BeMaS), r_s (798) = -.01, p = .88, either manipulation check, $|r_s s| < .04$, ps > .30, or political orientation, r_s (798) = .02, p = .63. However, there was a weak negative correlation between social desirability and suspiciousness, r_s (798) = -.09, p = .008. Given these results indicating few differences between the responses of suspicious and non-suspicious participants, no participant's data were excluded on the basis of suspicion.

Collapsing across Order and Company/Entrepreneur factors. All participants responded to articles on entrepreneurs "Gary Taylor" and "Andy Simmons" in counterbalanced order (Order: Taylor First, n = 391, 48.8%; Simmons First, n = 409, 52.2%). To ensure that order of presentation did not have carryover effects on responses to the individual differences measures, a series of independent samples t-tests were conducted with individual differences measures as the outcome and Order as the predictor. Order did not predict responses to the political ideology, dispositional envy, and social desirability scales, $t \le 0.70$, $t \le 0.50$, although a small difference was observed on dispositional benign envy whereby participants in the Taylor First condition ($t \le 0.50$, $t \ge 0.50$, $t \ge 0.50$, $t \ge 0.50$,



Results were also collapsed across Company/Entrepreneur (ball bearing company buyer Gary Taylor vs. hubcap manufacturing company buyer Andy Simmons), as participants responded to two fundamentally similar articles for purposes of internal replication. For example, participants in the Inherited X Harmful condition read about and responded to

two separate articles describing an entrepreneur who was gifted millions of dollars by his family and laid off workers in the pursuit of further personal wealth.

To ensure that Company/Entrepreneur did not affect outcomes, I conducted a series of mixed factorial ANOVAs on seven items, ¹⁸ with Company/Entrepreneur as a within-participants factor and Hard Work and Harmful as between-participants factors. Across all the ANOVAs, there were no substantial main effects or interaction effects involving Company/Entrepreneur, as all η_p^2 values were < .01.

To further ensure that the articles about "Gary Taylor" and "Andy Simmons" were perceived roughly equivalently, I correlated several reactions to the two entrepreneurs, and then submitted those reactions to paired t-test analyses, with Company/Entrepreneur as the predictor. Responses to the question "I am a little envious of [Entrepreneur]" were highly correlated, r(791) = .68, p < .001, and responses did not differ significantly across Company/Entrepreneur, $M_{Taylor} = 2.78$, $M_{Simmons} = 2.84$, t(792) = -1.07, p = .29. Perceptions that each entrepreneur's "source of startup money was fair" were also highly correlated, r(786) = .72, p < .001, and nearly identical on average, $M_{Taylor} = 3.83$, $M_{Simmons} = 3.82$, t(787) = 0.28, p = .78. Finally, perceptions that each entrepreneur "harmed the

¹⁸ The items tested were as follows: "I am a little envious of Taylor/Simmons;" "The way Taylor/Simmons got his initial wealth was fair;" "Taylor's/Simmons' actions were fair;" "I resent Taylor's/Simmons' wealth;" "I resent Taylor's/Simmons' actions;" "I feel inspired to get wealth myself;" and "Taylor/Simmons is a very skilled businessperson."

workers in the [Kansas/Ohio] company" were also highly related, r(795) = .80, p < .001, and item means were virtually identical, $M_{\text{Taylor}} = 2.61$, $M_{\text{Simmons}} = 2.60$, t(796) = -0.20, p = .84.

Given the demonstrated near-equivalence of the articles in terms of the responses they elicited, Company/Entrepreneur was collapsed by averaging each participant's responses to the two entrepreneurs about whom they read. Collapsing across Order and Company/Entrepreneur factors yielded the expected (and final) 2 (Source) X 2 (Harmful Actions) between-participants experimental design.

Statistical Analysis

All data analyses were conducted in R version 3.2.3 (R Core Team, 2013) and/or SPSS version 22.0 (IBM Inc., 2013). Correlation, regression, and moderated regression analyses were conducted per Cohen et al.'s (2003) guidelines using SPSS. Moderated mediation and simple mediation analyses were conducted in SPSS with Hayes' (2012) PROCESS macro using 10,000 bias-corrected bootstrapped resamples (cf. Preacher et al., 2007). Simple slopes tests were conducted in R.

Modeling envy and resentment. I separately modeled envy and resentment with contrast-coded Source (-.5 = Inherited, .5 = Hard Work) and Harmful Actions (-.5 = Not Harmful, .5 = Harmful) as binary predictors, and mean-centered Liberalism and social desirability (a covariate) as continuous predictors. I initially included all possible interaction terms (e.g., the 4-way interaction), per Yzerbyt, Muller, & Judd (2004), who argued that, in order to prevent biased estimation of regression coefficients for interaction effects of theoretical interest, all possible IV X covariate interactions should be included in multiple regression models. Yzerbyt et al. (2004) further noted that under some



circumstances failure to include a non-significant IV x covariate interaction could lead to false-positive results on the interaction effect(s) of theoretical interest. However, Hayes (2012) reasoned that while IV X covariate interactions should indeed be tested, such terms can be dropped when they are (1) not statistically significant, and (2) when they were not predicted *a priori*. Accordingly, I dropped the IV X covariate interactions from the models for both envy and resentment, as (1) all *p*-values for those tests were \geq .15 and (2) I had not predicted any IV X covariate interactions. Thus, reported results include main effects tests of the 3 IVs and the covariate (i.e., Source, Harmful Actions, Liberalism, and social desirability), and all possible interactions among the 3 IVs.

I also checked regression model assumptions and found "fanning" heteroskedasticity of residuals (Cohen et al., 2003). ¹⁹ Thus, I also ran the envy and resentment models using heteroskedasticity-consistent HC3 and HC4m standard errors estimators, which keep Type-I error rates very near nominal levels in the presence of heteroskedasticity; the latter estimator also adjusts for high leverage points (Cribari-Neto & da Silva, 2011; Hayes & Cai, 2007). Using these estimators yielded significance test results very similar to those using regular OLS standard errors. Regression results reported in-text are based on HC4m standard error estimators. For comparison purposes, results using standard OLS and HC3 standard error estimators are also summarized in the regression tables for envy and resentment.

¹⁹ There was also non-normality of residuals in both models, but given the large sample size, this was considered a negligible issue (Cohen et al., 2003). Bivariate scatterplots did not reveal any non-linear patterns of association.



Chapter Three: Results

Descriptive Statistics

Participants (N = 800) were primarily female (n = 509, 63.6%) and predominantly Caucasian (n = 688, 86.0%). Sixty-seven (8.4%) participants indicated they were African American and 33 (4.1%) indicated they were Asian American; 46 people of any race (5.8%) indicated Hispanic ethnicity (Table 3). The sample was somewhat less homogeneous in terms of age, subjective SES, and political ideology (Table 4). Participants ranged in age from 18 to 87 years old (M = 33.70, SD = 14.46), and most participants placed themselves near the middle of the subjective SES scale (M = 4.68, SD = 1.73). Overall, the sample tended to lean slightly liberal (M = 3.21, SD = 1.22).

Across conditions, participants tended to report only modest amounts of envy, resentment, anger, and moral disgust (Table 5), but this was expected, in part because of the emotions' social undesirability. Such results were also in keeping with previous research on envy and related emotions (Smith & Kim, 2007). However, participants did report higher levels of all four of these negative emotions in the Harmful conditions. Conversely, actions were considered to be fairer in the Not Harmful than the Harmful conditions. Finally, the entrepreneur's source of initial wealth was considered to be fairer in the Hard Work than the Inherited conditions.

Negative emotional reactions to the wealthy entrepreneurs tended to be strongly correlated, although the correlations between those emotions and the fairness measures tended to be somewhat lower (Table 6^{20}). Descriptively, the emotion most strongly

 $^{^{20}}$ In Tables 6 and 7, both Pearson's r and Kendall's Tau-b non-parametric correlations are provided, as some variables were heavily skewed. Results were similar whether using Pearson's r or Kendall's Tau-b, although the non-parametric correlations tended to be slightly smaller in magnitude.



Table 3: Gender, Race, and Ethnicity

Gender	n	%
Female	509	63.6%
Male	286	35.8%
Prefer Not to Answer	5	0.6%
Total	800	100.0%
Race	n	%
Caucasian	688	86.0%
African American	67	8.4%
Asian American	33	4.1%
Native American	10	1.3%
Two or More Races	16	2.0%
Other/Prefer Not to Answer	19	2.4%
Total [†]	833	104.1%
Ethnicity	n	%
Hispanic (of Any Race)	46	5.8%
Not Hispanic	733	91.6%
Prefer Not to Answer	21	2.6%
Total	800	100.0%

[†]Percentage sums to over 100% because some participants indicated multiple races



Table 4: Demographic Statistics

					P	ercenti	le		
Demographic Variable	M	SD	5%	10%	25%	50%	75%	90%	95%
Age	33.7	14.46	18	19	20	31	43	57	62
Subjective SES (1-9									
scale)	4.68	1.73	2	2	3	5	6	7	7
Liberalism (1-5 scale)	3.21	1.22	1.00	1.25	2.25	3.25	4.25	5.00	5.00



Table 5: Descriptives Statistics by Experimental Condition

Outcome			Harmful				
(0-6 scale)	Source		Actions	n	M	Mdn	SD
	Inherited	X	Not Harmful	211	1.38	1.10	1.11
Envy	Hard Work	X	Not Harmful	196	1.30	1.10	1.10
Liivy	Inherited	X	Harmful	202	2.03	2.00	1.41
	Hard Work	X	Harmful	191	1.93	1.80	1.31
	Inherited	X	Not Harmful	211	1.18	1.00	1.23
Resentment	Hard Work	X	Not Harmful	196	0.97	0.50	1.22
Reschinent	Inherited	X	Harmful	202	2.52	2.50	1.60
	Hard Work	X	Harmful	191	2.40	2.50	1.56
	Inherited	X	Not Harmful	211	0.84	0.25	1.12
Angor	Hard Work	X	Not Harmful	196	0.81	0.25	1.12
Anger	Inherited	X	Harmful	202	2.52	2.50	1.69
	Hard Work	X	Harmful	191	2.53	2.50	1.70
	Inherited	X	Not Harmful	211	0.86	0.50	1.06
Moral	Hard Work	X	Not Harmful	196	0.81	0.25	1.14
Disgust	Inherited	X	Harmful	202	2.62	2.62	1.76
	Hard Work	X	Harmful	191	2.65	2.50	1.77
T : 0	Inherited	X	Not Harmful	211	4.70	4.75	1.05
Fairness of Harmful	Hard Work	X	Not Harmful	196	4.95	5.00	1.06
Actions	Inherited	X	Harmful	202	2.51	2.50	1.66
Actions	Hard Work	X	Harmful	191	2.60	2.75	1.56
Fairness of	Inherited	X	Not Harmful	211	3.61	3.50	1.47
Initial	Hard Work	X	Not Harmful	196	4.64	5.00	1.23
Wealth	Inherited	X	Harmful	202	3.01	3.00	1.58
Source	Hard Work	X	Harmful	191	3.99	4.00	1.38



Table 6: Correlations among Predictors and Reactions to Wealthy Entrepreneurs

					F	Pearson's r					
	1 2		3	4	S	9	7	8	6	10	11
1 Source	0.0	0.004	0.023	0.014	-0.034	0.035	-0.049	-0.002	-0.002	0.045	0.326 ***
2 Harmful Actions			900.0	-0.001	0.249 ***	-0.213 ***	0.441 ***	0.511 ***	0.524 ***	-0.641 ***	-0.2 ***
3 Liberalism				* 680.0-	0.216 ***	-0.124 ***	0.246 ***	0.238 ***	0.238 ***	-0.176 ***	-0.165 ***
4 Social Desirability					-0.229 ***	-0.129 ***	-0.139 ***	-0.11 **	-0.082 *	0.044	990.0
5 Envy					1	* 880.0	0.783 ***	0.718 ***	0.635 ***	-0.415 ***	-0.296 ***
6 Benign Envy							-0.225 ***	-0.309 ***	-0.388 ***	0.469 ***	0.361 ***
7 Resentment							I	0.872 ***	0.831 ***	-0.687 ***	-0.416 ***
8 Anger								1	0.925 ***	-0.791 ***	-0.449 ***
9 Moral Disgust										-0.817 ***	-0.468 ***
10 Fairness of Actions											0.512 ***
11 Fairness of Initial Wealth Source	Vealth Sourc	ě									
* p < .05, ** p < .01, *** p < .001	*** p < .001										
					Ke	Kendall's Tau-b					
	1 2		3	4	5	9	7	8	6	10	11
1 Source	0.0	0.004 0.0	0.023	0.018	-0.022	0.035	-0.047	-0.005	-0.01	0.042	0.288 ***
2 Harmful Actions			900.0	-0.007	0.198 ***	-0.167 ***	0.381 ***	0.449 ***	0.455 ***	-0.542 ***	-0.165 ***
3 Liberalism			-	-0.07 **	0.146 ***	*** 680.0-	0.175 ***	0.163 ***	0.163 ***	-0.118 ***	-0.105 ***
4 Social Desirability				I	-0.164 ***	*** 660.0-	*** 660.0-	*** 880.0-	** 790.0-	0.039	0.049
5 Envy						0.054 *	0.588 ***	0.54 ***	0.485 ***	-0.308 ***	-0.221 ***
6 Benign Envy							-0.187 ***	-0.236 ***	-0.29 ***	0.338 ***	0.263 ***
7 Resentment								0.745 ***	0.722 ***	-0.562 ***	-0.342 ***
8 Anger									0.816 ***	-0.654 ***	-0.359 ***
9 Moral Disgust										-0.674 ***	-0.369 ***
10 Fairness of Actions											0.398 ***
11 Fairness of Initial Wealth Source	Vealth Sourc	e.									
* p < .05, ** p < .01, *** p < .001	*** p < .001										



correlated with judgments of (un)fairness was moral disgust, which was not surprising, given mounting research indicating that moral disgust may be particularly closely linked to perceived unfairness (e.g., Chapman et al., 2009).

Manipulation Checks and Perceived Fairness

Results indicated that the Source and Harmful Actions manipulations were successful. Hard Work condition entrepreneurs were much more strongly perceived as having earned their initial capital through hard work (M = 4.66, SD = 1.21) than entrepreneurs in the Inherited condition (M = 1.56, SD = 1.47), t(798) = 32.58, p < .001, d = 2.31. Participants also perceived that Harmful condition entrepreneurs harmed others (M = 3.44, SD = 1.44) much more than did entrepreneurs in the Not Harmful condition (M = 1.15, SD = 1.16), t(798) = 24.73, p < .001, d = 1.75.

As expected, the way in which Inherited condition entrepreneurs obtained their initial wealth (i.e., as a gift from family) was considered less fair (M = 3.32, SD = 1.55) than the way in which Hard Work condition entrepreneurs obtained their initial wealth (i.e., through sustained hard work) (M = 4.32, SD = 1.34), t(798) = -9.74, p < .001, d = -0.69. In a similar vein, Harmful condition entrepreneurs' actions were considered much less fair (M = 2.56, SD = 1.61) than those of the Not Harmful condition entrepreneurs (M = 4.82, SD = 1.06), t(798) = -23.59, p < .001, d = -1.69.

Envy and Liberalism

Correlation analyses were performed on measures of Political Ideology and both state and dispositional envy to address whether liberals might be more envy-prone than conservatives. As predicted, state envy of the wealthy entrepreneurs was positively



associated with Liberalism, whether Liberalism was measured concurrently, r(798) = .22, p < .001, or weeks earlier during MT, r(135) = .17, p = .050.

When measured concurrently, Liberalism was significantly positively associated with dispositional envy, whether measured with the DES (Smith et al., 1999), r(797) = .11, p = .002, or the Dispositional Malicious Envy subscale of the BeMaS (Lange & Crusius, 2015), r(798) = .17, p < .001. However, when Liberalism was measured during MT, there was not a significant association between Liberalism and dispositional envy, $r_{\text{DES}}(135) = .02$, p = .79; $r_{\text{BeMaS}}(135) = .11$, p = .20. When measured concurrently, Liberalism was significantly negatively correlated with dispositional benign envy, r(798) = -.07, p = .040. However, when Liberalism was measured during MT, there was not a significant association between Liberalism and dispositional benign envy, r(135) = -.11, p = .22.

In summary, associations between Liberalism and state envy of the entrepreneurs were both more consistent and stronger in magnitude than associations between Liberalism and dispositional envy. This was also the case with state and dispositional benign envy (Table 7).

Envy

Regression results for envy (Table 8) indicated no significant main effect of Source (i.e., Inherited or earned through Hard Work), b = -0.09, $SE_{HC4m} = 0.08$, t = -1.11, p = .27. There were, however, significant main effects of Harmful Actions (i.e., Not

²¹ When measured concurrently, Liberalism was significantly positively associated with dispositional envy, r(798) = .25, p < .001. In contrast, when Liberalism was measured during MT, there was not a significant association between Liberalism and state resentment, r(135) = .11, p = .22. State benign envy was negatively associated with Liberalism, whether Liberalism was measured concurrently, r(798) = -.12, p < .001, or weeks earlier during MT, r(135) = -.19, p = .025.



Table 7: Correlations among Liberalism, Envy, and Fairness Judgments

					Pear	Pearson's r						
	1	2	3	4	5	9	7	8	6	10	11	12
1 Liberal		0.22 ***	-0.12 ***	0.17 ***	0.11 **	* 20.0-	* 60.0-	-0.18 ***	-0.17 ***	0.88 ***	0.028	0.081
2 Envy			0.088 *	0.65 ***	0.55 ***	0.153 ***	-0.23 ***	-0.42 ***	-0.3 ***	0.168 *	0.1	0.307 ***
3 Benign Envy				0.13 ***	0.23 ***	0.579 ***	-0.13 ***	0.469 ***	0.361 ***	-0.19 *	0.168 *	0.159
4 Disp. Malicious Envy					0.66 ***	0.202 ***	-0.35 ***	-0.18 ***	-0.18 ***	0.11	0.077	0.578 ***
5 Disp. Envy						0.235 ***	-0.35 ***	-0.1 **	* 60.0-	0.023	0.062	0.442 ***
6 Disp. Benign Envy							-0.11 **	0.144 ***	0.14 ***	-0.11	0.551 ***	0.148
7 Social Desirability								0.044	990.0	0.041	-0.16	-0.37 ***
8 Fairness of Actions									0.512 ***	-0.24 **	0.016	0.095
9 Fairness of Initial Wealth Source	onrce								I	-0.21 *	0.059	0.075
10 MT Liberal										I	-0.01	9/0.0
11 MT Disp. Benign Envy												0.245 **
12 MT Disp. Malicious Envy												I
					Kenda	Kendall's Tau-b						
	1	2	3	4	5	9	7	8	6	10	11	12
1 Liberal		0.15 ***	-0.09 ***	0.11 ***	0.05 *	-0.05	-0.07 **	-0.12 ***	-0.11 ***	0.772 ***	0.038	0.038
2 Envy			0.054 *	0.5 ***	0.43 ***	0.102 ***	-0.16 ***	-0.31 ***	-0.22 ***	0.126 *	0.037	0.225 ***
3 Benign Envy				0.07 **	0.16 ***	0.409 ***	-0.1 ***	0.338 ***	0.263 ***	-0.1	0.099	0.108
4 Disp. Malicious Envy				1	0.51 ***	0.138 ***	-0.27 ***	-0.17 ***	-0.15 ***	0.07	0.078	0.424 ***
5 Disp. Envy						0.175 ***	-0.26 ***	-0.1 ***	*** 60.0-	-0.02	0.047	0.308 ***
6 Disp. Benign Envy							-0.07 **	0.101 ***	0.097 ***	-0.1	0.348 ***	0.115
7 Social Desirability								0.039	0.049	0.019	-0.12 *	-0.23 ***
8 Fairness of Actions									0.398 ***	-0.17 **	0.044	9/0.0
9 Fairness of Initial Wealth Source	onrce								I	-0.14 *	0.037	290.0
10 MT Liberal											0.005	0.041
11 MT Disp. Benign Envy												0.204 ***

Table 8: Regular OLS and Heteroskedasticity-Robust Regression Models on Envy

		Envy	
	Regular OLS SE	Robust HC3 SE	Robust HC4m SE
Intercept	1.66 [1.58, 1.74]***	1.66 [1.58, 1.74]***	1.66 [1.58, 1.74]***
Source (Inherited =5, Hard Work = .5)	-0.09 [-0.26, 0.07]	-0.09 [-0.26, 0.07]	-0.09 [-0.26, 0.07]
Harmful (Not Harmful =5, Harmful = .5)	0.64 [0.47, 0.80]***	0.64 [0.47, 0.80]***	0.64 [0.47, 0.80]***
Liberal	0.20 [0.14, 0.27]***	0.20 [0.14, 0.27]***	0.20 [0.14, 0.27]***
Social Desirability	-0.09 [-0.11, - 0.06]***	-0.09 [-0.11, - 0.06]***	-0.09 [-0.11, - 0.06]***
Source X Harmful	0.06 [-0.27, 0.39]	0.06 [-0.27, 0.39]	0.06 [-0.27, 0.39]
Source X Liberal	$0.12 [-0.01, 0.26]^{\dagger}$	$0.12 [-0.01, 0.25]^{\dagger}$	$0.12 [-0.01, 0.25]^{\dagger}$
Harmful X Liberal	0.03 [-0.10, 0.16]	0.03 [-0.10, 0.16]	0.03 [-0.10, 0.16]
Source X Harmful X Liberal	-0.07 [-0.34, 0.20]	-0.07 [-0.33, 0.19]	-0.07 [-0.33, 0.19]
N	800		
R^2	0.157		
Adjusted R^2	0.149		
Residual SE	1.178		
$F(8, 791) = 18.464^{***}$			

NOTE: Bracketed values are lower and upper bounds of the 95% confidence intervals of the regression estimates $^{\dagger}p < .10, ^{*}p < .05, ^{**}p < 0.01, ^{***}p < .001$



Harmful or Harmful), b = 0.64, $SE_{HC4m} = 0.08$, t = 7.58, p < .001; Liberalism, b = 0.20, $SE_{HC4m} = 0.03$, t = 5.96, p < .001; and social desirability, b = -0.09, $SE_{HC4m} = 0.01$, t = -6.08, p < .001. The only interaction term that approached significance was Source X Liberalism, b = 0.12, $SE_{HC4m} = 0.07$, t = 1.81, p = .071; all other ps > .42.

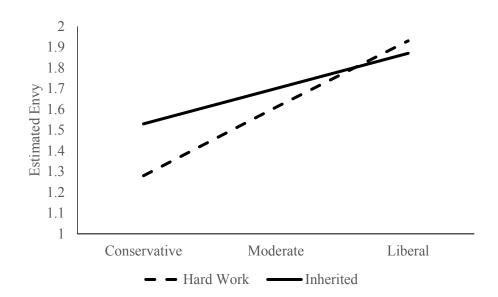
I probed the Source X Liberalism interaction on envy to determine whether the enhancing effect of Inherited wealth on envy would be greater among liberals than conservatives, thereby confirming my hypothesis. However, the opposite was the case. Specifically, a Johnson-Neyman regions of significance analysis²² indicated that there was no significant effect (at p < .05) of Source on envy among people *greater* than 2.57 (i.e., slightly below the midpoint) on the Liberalism scale. That is, Inherited wealth only strengthened envy compared to wealth earned through Hard Work among those who were at least slightly conservative (Figure 4). It should be noted, however, that simple slopes tests indicated liberals (+1 SD Liberalism) experienced significantly more envy than conservatives (-1 SD Liberalism) in both the Hard Work (p < .001) and Inherited (p = .004) conditions. Even so, per the significant interaction effect, the effect of Liberalism on envy was stronger in the *Hard Work* condition than in the Inherited condition.

A planned comparison confirmed the prediction that there would be a significant difference between conservatives (-1 SD on Liberalism) and liberals (+1 SD on Liberalism) on envy within the Hard Work X Not Harmful condition. Liberals (estimated mean = 1.60, SE = .12) reported more envy than conservatives (estimated mean = 0.95, SE = .12) in the Hard Work X Not Harmful condition, t(791) = 3.96, p < .001, d = .28.

²² This and all other probes of moderation, mediation, or moderated mediation effects were performed in PROCESS using HC3 heteroskedasticity-consistent standard error estimators.



Figure 4: Effect of Source on Envy Moderated by Political Ideology (Estimated Means at -1 SD, M, and +1 SD Liberalism)



Resentment

Regression results for resentment (Table 9) indicated a marginally significant main effect of Source, b = -0.17, $SE_{\text{HC4m}} = 0.10$, t = -1.75, p = .081. Significant main effects of resentment were obtained on Harmful Actions, b = 1.39, $SE_{\text{HC4m}} = 0.10$, t = 1.4.46, p < .001; Liberalism, b = 0.30, $SE_{\text{HC4m}} = 0.04$, t = 7.55, p < .001; and social desirability, b = -0.059, $SE_{\text{HC4m}} = 0.02$, t = -3.67, p < .001. Contrary to predictions, no interaction effects approached significance, $ps \ge .154$.

Although I had no *a priori* hypothesis about whether liberals would report more resentment in the Hard Work X Not Harmful condition than conservatives, I conducted a contrast analysis to determine whether results on resentment would mirror those on envy. Closely paralleling results on envy, liberals indicated more resentment (estimated mean = 1.30, SE = .13) of Hard Work X Not Harmful condition entrepreneurs than conservatives in the same experimental condition (estimated mean = 0.60, SE = .14), t(791) = 3.74, p < .001, d = .27.

Context Effects on other Emotions

Context was also predicted to exert effects on emotions other than envy and resentment, including anger and moral disgust. As expected, participants experienced greater anger in the Harmful condition (M = 2.53, SD = 1.69) than in the Not Harmful condition (M = 0.83, SD = 1.12), t(798) = 16.80, p < .001, d = 1.19, and greater moral disgust was also indicated in the Harmful condition (M = 2.64, SD = 1.76) than in the Not Harmful condition (M = 1.10, SD = 0.05), t(798) = 17.37, p < .001, d = 1.29. On the other hand, there was virtually no difference in moral disgust between the Inherited (M = 1.73, SD = 1.69) and Hard Work (M = 1.72, SD = 1.75) conditions, t(798) = 0.07, p = .95, d = 1.69



Table 9: Regular OLS and Heteroskedasticity-Robust Regression Models on Resentment

	Resentment		
	Regular OLS SE	Robust HC3 SE	Robust HC4m SE
Intercept	1.77 [1.67, 1.86]***	1.77 [1.67, 1.86]***	1.77 [1.67, 1.86]***
Source (Inherited =5, Hard Work = .5)	-0.17 [-0.35, 0.02] [†]	-0.17 [-0.36, 0.02] [†]	-0.17 [-0.36, 0.02] [†]
Harmful (Not Harmful =5, Harmful = .5)	1.39 [1.20, 1.57]***	1.39 [1.20, 1.57]***	1.39 [1.20, 1.57]***
Liberal	0.30 [0.22, 0.38]***	0.30 [0.22, 0.38]***	0.30 [0.22, 0.38]***
Social Desirability	-0.06 [-0.09, - 0.03]***	-0.06 [-0.09, - 0.03]***	-0.06 [-0.09, - 0.03]***
Source X Harmful	0.15 [-0.22, 0.53]	0.15 [-0.22, 0.53]	0.15 [-0.22, 0.53]
Source X Liberal	0.05 [-0.10, 0.20]	0.05 [-0.10, 0.20]	0.05 [-0.10, 0.20]
Harmful X Liberal	0.11 [-0.04, 0.26]	0.11 [-0.04, 0.26]	0.11 [-0.04, 0.26]
Source X Harmful X Liberal	-0.09 [-0.39, 0.22]	-0.09 [-0.39, 0.22]	-0.09 [-0.39, 0.22]
\overline{N}	800		
R^2	0.27		
Adjusted R^2	0.27		
Residual SE	1.35		
$F(8,791) = 37.26^{***}$			

NOTE: Bracketed values are lower and upper bounds of the 95% confidence intervals of the regression estimates $^{\dagger}p < .10, ^{*}p < .05, ^{**}p < 0.01, ^{***}p < .001$

.01, disconfirming my hypothesis. Perhaps moral disgust is more likely in response to more clear-cut examples of unfairness than having received a large sum of money from family, such as blatantly harming others in the pursuit of personal gain.

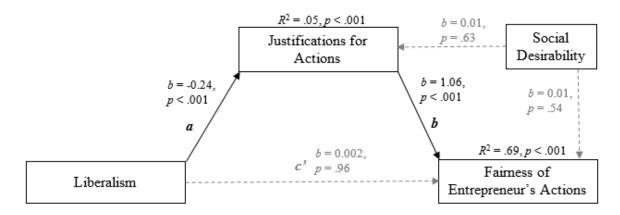
Process Models

Justifications for actions and fairness. As predicted, the effect of liberal political ideology on the perceived fairness of the entrepreneur's actions was mediated via decreased endorsement of justifications for the entrepreneur's actions, b = -0.25, 95%CI [-0.33, -0.17]; no significant direct effect remained after taking into account the indirect effect, p = .96 (Figure 5). The model accounted for a very large proportion of variance in fairness judgments, $R^2 = .69$, p < .001. Because of the strong link between justifications and fairness, b = 1.06, p < .001, a follow-up exploratory serial mediation analysis including mediation pathways from (1) Liberalism \rightarrow Justifications \rightarrow Envy, (2) Liberalism→Fairness of Actions→Envy, and (3) Liberalism→Justifications→Fairness of Actions \rightarrow Envy was conducted to explore how those variables might be related to ideology-based differences in envy (Figure 6). Significant effects via pathways (1), b =0.05, 95% CI [0.02, 0.08], and (3), b = 0.04, 95% CI [0.01, 0.07] were obtained, and themodel explained approximately one quarter of the variance in envy, $R^2 = .25$, p < .001. Accounting for all indirect pathways, a significant direct effect of Liberalism on envy remained, b = 0.12, 95% CI [0.05, 0.19]. The ratio of the indirect effect to the total effect of Liberalism on envy was .41, 95% CI [.26, .64].

This pattern suggests that conservatives may have perceived the actions wealthy entrepreneurs took in pursuit of more wealth as more justifiable and fair than liberals did, helping to explain why they reacted to the wealthy entrepreneurs with somewhat less



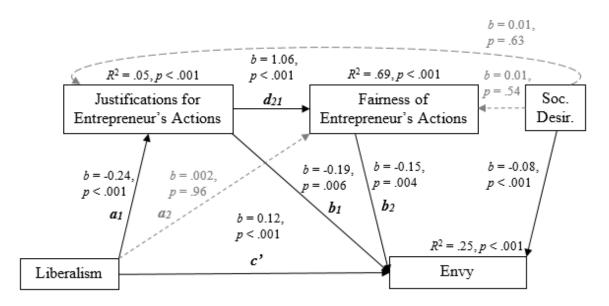
Figure 5: Mediation of Effect of Political Ideology on Fairness of Actions via Endorsement of Justifications for Actions



NOTE: Indirect effect of Liberalism on perceived fairness of actions via endorsement of justifications for actions: ab = -0.25, 95% CI [-0.33, -0.17]



Figure 6: Effect on Political Ideology on Envy Serial Multiple Mediation Model



Indirect effect of Liberalism on Envy through Justifications for Actions = a_1b_1 = 0.05, 95% CI [.02, .08]

Indirect effect of Liberalism on Envy through Perceived Fairness of Actions = a_2b_2 = -0.0002, 95% CI [-.01, .01], *ns*

Indirect effect of Liberalism on Envy through Justifications for Actions and Perceived Fairness of Actions in serial = $a_1d_{21}b_2$ = 0.04, 95% CI [.01, .07] Direct effect of Liberalism on Envy = c' = 0.12, 95% CI [.05, .19]



envy than liberals. However, there are plausible alternative explanations for the obtained pattern, especially because the lack of a time lag between the mediators in the serial mediation model makes causal precedence unclear.

Source, fairness of initial wealth, and envy. I predicted that (1) Liberalism would moderate the direct effect of Source on the perceived fairness of the entrepreneur's initial wealth source, and (2) Liberalism would moderate the mediated effect of Source on Envy via the perceived fairness of the entrepreneur's initial wealth source. This predicted model received partial support (Figure 7). Although Liberalism did not moderate the mediated effect of Source on envy via fairness of initial wealth, b = -.01, 95% CI [-0.05, 0.03], Liberalism marginally-significantly moderated the direct effect of Source on envy, b = 0.12, p = .076. The marginally significant direct effect of Source on envy was also positive, b = 0.14, p = .099. Probing the interaction revealed that *after accounting for the envy-reducing indirect effect of Source via fairness of initial wealth* (b = -.23, p < .001), there was no significant effect of Source on envy among relatively conservative participants. Surprisingly, however, Hard Work entrepreneurs engendered somewhat *more* envy than Inherited wealth entrepreneurs among people politically left of center (Figure 8).

In seeking to better understand the current model, it might first be noted that the envy-reducing indirect effect of Source on envy via increased perceived fairness of initial wealth was essentially identical across all levels of Liberalism. This was evidenced by the lack of moderated mediation and the very similar magnitude of the indirect effect among participants across the political spectrum (e.g., b = -.22 and b = -.24 for those at the 10^{th} and 90^{th} percentiles of Liberalism, respectively). Thus, results suggested knowing that a



Figure 7: Direct Effect of Source on Envy Moderated by Political Ideology

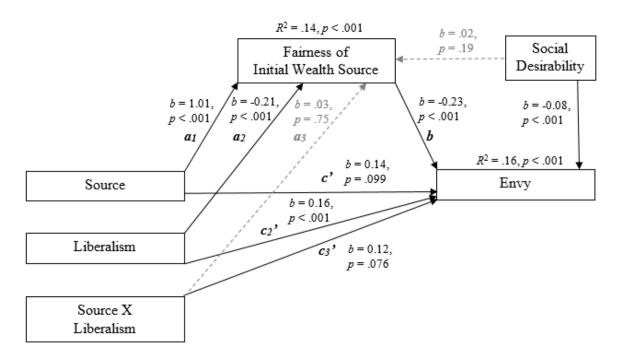
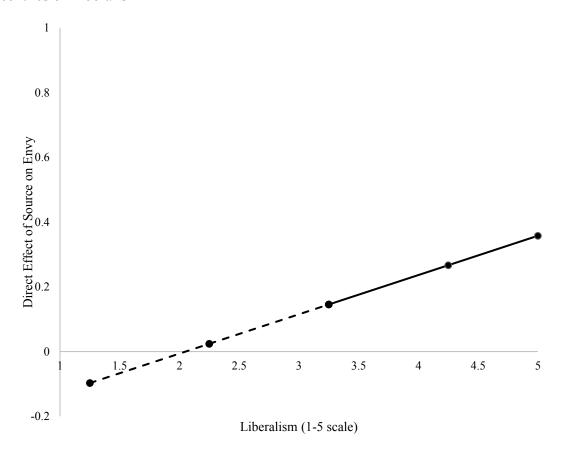


Figure 8: Conditional Direct Effect of Source on Envy at 10th, 25th, 50th, 75th, and 90th Percentiles of Liberalism



NOTE: Dashed line indicates non-significant (p > .10) direct effect of Source on envy.

wealthy person's initial wealth was earned through Hard Work (as opposed to having been Inherited) may have had similar palliative effects on liberals' and conservatives' envy. Even so, certain perceived personal qualities of the Hard Work entrepreneur may have stoked liberals' envy beyond any envy-reducing effect his Algeresque story had via increased perceived fairness of his initial wealth. To begin to address this possibility, I explored whether Source would moderate the effects of Liberalism on perceived competence and greed, as perceived competence and greed were both associated with envy in the current study, $r_{\text{competence}} = -.34$, $r_{\text{greed}} = .49$, $p_{\text{s}} < .001$. Results of moderated regression analyses indicated that Source did not moderate the significant effects of Liberalism on perceived competence and greed. That is, across Source conditions, Liberalism was associated with viewing wealthy entrepreneurs as less competent (b = -0.15, p < .001) and more greedy (b = 0.35, p < .001), and there was no significant Source X Liberalism interaction on competence and greed, ps > .54. Given these results, a relatively simple explanation for the model represented in Figures 7 and 8 seems possible, if not likely: because liberals tended to experience more envy in general, they had more envy left over to explain after taking into account the mediated effect of the Source manipulation via the perceived fairness of the initial wealth.

Harmful Actions, fairness of actions, and envy. Political Ideology was predicted to moderate (1) the direct effect of Harmful Actions on envy, and (2) the

²³ Finding a negative correlation between perceived competence and envy may seem counterintuitive, as competence makes another person more "enviable," at least in a colloquial sense. However, given the close link between perceived unfairness and envy, a negative association between competence and envy actually makes sense—a more competent wealthy person is likely to be perceived as more deserving of his or her professional and financial success than a relatively less competent wealthy person. Still, in keeping with the intuitive idea that perceiving another to be more competent is likely to make him or her more "enviable," non-hostile, benign envy was *positively* associated with perceived competence, r(798) = .40, p < .001. These findings once again underscore the crucial role of the perceived justice and fairness of outcomes in the experience of envy (Smith & Kim, 2007; Floyd, Hoogland, & Smith, 2015; Hoogland et al., in press).



indirect of Harmful Actions on envy via the perceived fairness of the entrepreneur's actions. Results provided partial support for the predicted model (Figure 9). Although Liberalism did not moderate the direct effect of Harmful Actions on envy, b = -0.05, p = .43, it did moderate the mediated effect of Harmful Actions on envy via the perceived fairness of the entrepreneur's actions, per the significant index of moderated mediation, 24 b = .08, SE = .02, 95% CI [.04, .13]. As illustrated in Figure 10, the more liberal a participant was, the more strongly harming workers (i.e., the Harmful condition) increased their envy by way of decreasing the perceived fairness of the entrepreneur's actions.

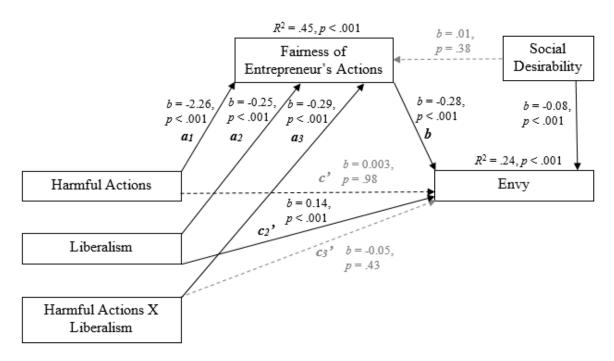
Exploratory Analyses

Perceived harm's link to fairness judgments. I explored whether increases in the perceived harmfulness of actions might determine the perceived unfairness of those actions, as posited by proponents of dyadic morality theory (DMT) (e.g., Schein & Gray, 2015), and how such a process might help explain differences in envy between conservatives and liberals. I conducted a simple mediation analysis (Figure 11) with Liberalism as the predictor, the perceived harmfulness of the entrepreneur's actions as the mediator, and the perceived fairness of the entrepreneur's actions as the outcome. In keeping with DMT, results indicated that no significant direct effect of Liberalism on the perceived fairness of the entrepreneur's actions remained after taking into account the indirect effect of Liberalism via harm perceptions, $b_{\text{direct effect}} = -0.02$, p = .54; $b_{\text{indirect effect}} = -0.23$, 95% CI [-0.32, -0.15]. Taken together with Liberalism's strengthening of the mediated effect of Harmful Actions on envy via the perceived fairness of the

²⁴ A significant index of moderated mediation indicates that the moderator moderates the mediated effect throughout the moderator's range of values (for a review, see Hayes, 2015).

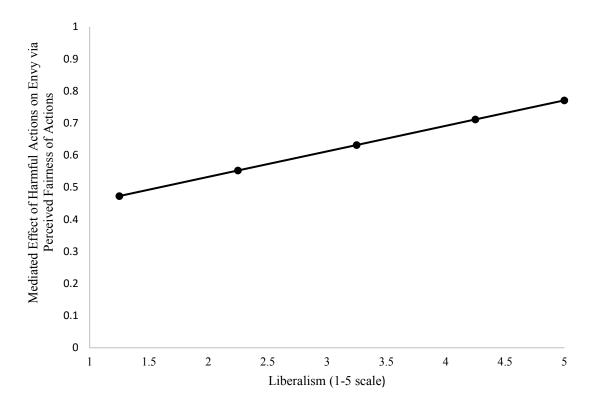


Figure 9: Moderation by Political Ideology of Indirect Effect of Harmful Actions on Envy via Perceived Fairness of Entrepreneur's Actions



NOTES: Index of moderated mediation: b = .08, SE = .02, 95% CI [.04, .13], Conditional indirect effect of Harmful Actions on envy via perceived fairness of entrepreneur's actions: $\omega = a_1b_1 + a_3b_1W = .6328 + .0795$ (mean-centered Liberalism)

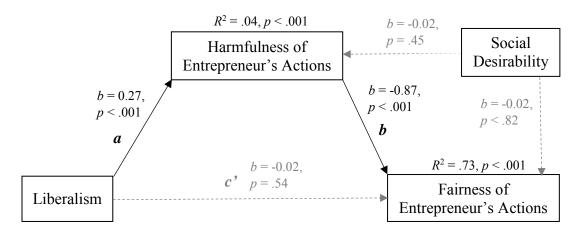
Figure 10: Conditional Indirect Effect of Harmful Actions on Envy via Perceived Fairness of Actions at 10th, 25th, 50th, 75th, and 90th Percentiles of Liberalism



NOTE: Index of moderated mediation: b = .08, SE = .02, 95% CI [.04, .13], Conditional indirect effect: $\omega = a_1b_1 + a_3b_1W = .6328 + .0795$ (mean-centered Liberalism*)

*Liberalism scores on x-axis were transformed to original scale for ease of interpretation.

Figure 11: Test of Mediation of Effect of Political Ideology on Perceived Fairness of Actions via Perceived Harmfulness of Actions



NOTE: Indirect effect of Liberalism on perceived fairness of actions via perceived harmfulness: ab = -0.23, 95% CI [-0.32, -0.15]



entrepreneur's actions (per the previous subsection), these results suggest that liberals may perceive entrepreneurs' actions as more harmful, and therefore unfair, than conservatives, ultimately leading to enhanced envy of them. This raises the question of whether such liberal-conservative differences in harm and fairness perceptions were present only in the Harmful condition, especially since there was no clear indication that the entrepreneurs in the Not Harmful condition had harmed anyone.

Subsetting and analyzing the data by Harmful condition (i.e., Harmful or Not Harmful) indicated that Liberalism was associated with the perceived harm done by and fairness of the entrepreneur's actions within both the Harmful condition, $r_{\text{harmfulness}}(391) =$ $.36, p < .001, r_{\text{fairness}}(391) = -.30, p < .001$, and the Not Harmful condition (albeit more weakly), $r_{\text{harmfulness}}(405) = .12$, p = .017, $r_{\text{fairness}}(405) = -.12$, p = .021. The difference between the correlations observed in the two conditions was significant for both perceived harm, Z = 3.61, p < .001, and perceived fairness, Z = -2.66, p = .004. Thus, ideology-based differences in perceived harmfulness and associated (un)fairness judgments are especially pronounced when harm clearly has been done, but such differences are also present to a lesser extent when no direct indication of harm-doing exists. While Liberalism most strongly enhances perceived harm when harm clearly has been done (per liberals' greater endorsement of Harm and Fairness as foundations for moral judgments), relative to conservatives, liberals also appear less likely to give wealthy people who have not necessarily harmed anyone the benefit of the doubt. In keeping with this line of reasoning, although Liberalism was more strongly associated with perceived greed within the Harmful condition, r(391) = .32, p < .001, it was also



associated with greed perceptions in the Not Harmful condition, r(405) = .18, p < .001, Z = 2.11, p = .035.

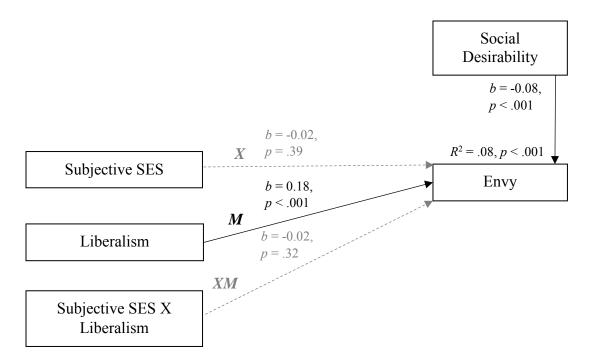
Do downscale liberals envy wealthy people significantly more than upscale liberals? Envy-based, conservative explanations of liberal opposition to concentrated wealth suggest that liberals should feel more envy when they are low rather than high in SES, while conservatives across the socioeconomic spectrum should feel similar, low levels of envy. However, I did not find evidence that the conservative-liberal gap in envy varied as a function of subjective SES, although subjective SES had weak zero-order correlations with both liberal political ideology, r(749) = -.11, p = .002, and envy, r(749) = -.07, p = .046. As illustrated in Figure 12, in a model including subjective SES, Liberalism, and their interaction as predictors of envy (and social desirability as a covariate), only Liberalism, b = 0.18, p < .001, and social desirability, b = -0.08, p < .001, were significantly associated with envy. In short, Liberalism's link to envy was not significantly stronger or weaker among participants at the high vs. low ends of the socioeconomic spectrum.

Chapter Four: Discussion

This study set out to begin answering a number of questions on "the politics of envy," including whether, other things being equal, liberals are more prone to envy than conservatives. The tentative answer to that question would appear to be a qualified "Yes," but the observed links were weak, and it was telling that political liberalism was more strongly associated with reactions to specific, wealthy entrepreneurs than with a general disposition toward envying *anyone*, be they coworkers from the office or wealthy CEOs. That is, liberals appear to be only slightly more prone to envy than conservatives,



Figure 12: Test of Moderation by Political Ideology of Effect of Subjective SES on Envy



but such differences become somewhat more pronounced when faced with people whose wealth and backstories evoke fairness and justice concerns.

Competing conservative and liberal narratives about opposition to concentrated wealth and income inequality largely hinge on the question of whether envy or fairness concerns underlie that opposition. Conservative critics contend that opposition to great wealth is based in envy of wealthy people's successes, rather than the more socially-legitimate fairness or justice concerns frequently cited by liberals. Psychological theory and previous empirical work suggest that differences between conservatives and liberals in envy and other negative emotional reactions to wealthy people might be explained, at least in part, by differences in their perceptions and judgments of relevant contextual factors. Thus, I examined the extent to which contextual factors theorized to influence differences in moral judgments and emotional reactions between conservatives and liberals modulated conservatives' and liberals' reactions to wealthy people.

Political Ideology and Reactions to Wealth

Across conditions, liberals had less favorable reactions to wealthy entrepreneurs. They reported more envy, resentment, anger, and moral disgust toward them than did conservatives. Moreover, liberals considered the source of the wealthy entrepreneurs' wealth and their actions in the pursuit of wealth to be less fair than conservatives, and reported less benign envy as well. Finally, relative to conservatives, liberals considered the entrepreneurs to be greedier and less competent. These associations tended to be stronger when the entrepreneurs harmed others in the pursuit of wealth, but they obtained even when the entrepreneur had done no apparent harm. Thus, liberals would appear to like and trust wealthy people (or at least wealthy capitalists) less than conservatives



(perhaps in part because of negative stereotyping), but these ideology-based differences might be more pronounced when there is clear evidence that a wealthy person has harmed others in the pursuit of wealth. Liberals' lesser endorsement of economic justifications for entrepreneurs' actions (whether overtly harmful or not) heightened envy via both their effects on fairness perceptions and directly (see Figure 6). An exploratory analysis, moreover, suggested that differences between liberals and conservatives in the perceived fairness of the entrepreneurs' actions may be explained by liberals' perceiving the actions to be more harmful. These are important findings in terms of the persistent debate over the origins of opposition to concentrated wealth, as they suggest that liberals' (un)fairness judgments are not necessarily based in envy, but rather legitimate concern for the economic welfare of others and, perhaps, broader procedural and distributive justice concerns. Ironically, those legitimate fairness and justice concerns promote sociallyundesirable envy and resentment. Moreover, a substantial proportion of the effect of Liberalism on envy was *not* explained by fairness and justice concerns. Taken together, these results suggest that there likely is some truth to both conservatives' envy-based and liberals' justice-based explanations for the liberal tendency to oppose concentrated wealth.

Context, Political Ideology, and Reactions to Wealth

To examine the extent to which ideology-based reactions to wealth might vary as a function of key contextual factors, I selected and experimentally manipulated two factors which were expected to elicit somewhat different reactions from liberals and conservatives, based on relevant theory and research (e.g., Haidt, 2012). Specifically, I experimentally manipulated whether the wealthy entrepreneurs to which participants



reacted (1) came to be wealthy through a large family gift or earned their money through hard work (Source), and whether they (2) harmed others while pursuing more wealth (Harmful Actions). Results demonstrated that conservative-liberal differences in envious reactions to wealth were, to a degree, context-dependent, as those differences varied as a function of experimental condition. As noted, however, across conditions, liberals had a general tendency toward greater envy and resentment of the wealthy entrepreneurs. As further noted, ideology-based differences were mediated, at least in part, by fairness and justice concerns.

Source. Effects of Source on envy and resentment were weaker, less consistent, and somewhat less in keeping with hypotheses than those of Harmful Actions. Contrary to predictions, there was no main effect of Source (i.e., Inherited wealth or wealth earned through Hard Work) on envy, although there was a marginally significant Source X Liberalism interaction. Despite obtaining an interaction as predicted, the form that interaction took was the opposite of what was expected—rather than the Source manipulation impacting liberals' envy more strongly than that of conservatives, there was only a significant effect of Source (whereby Hard Work decreased envy) among relatively conservative participants. Further, the effect of Liberalism on envy was significant and positive in both the Inherited and Hard Work conditions, but, contrary to expectations, was stronger in magnitude within the Hard Work condition.

A subsequent process model examined whether Liberalism would moderate the direct effect of Source and/or the indirect effect of Source via the perceived fairness of the source of the entrepreneur's initial wealth. Intuitively, and as expected, Source had a significant indirect effect on envy whereby Hard Work lessened envy because the hard



work was considered a fairer source of initial wealth than Inherited wealth. Liberalism did not moderate that mediated effect, but it marginally-significantly moderated the (marginal) direct effect of Source on envy. Interestingly, after taking into account the stronger, negative indirect effect of Source on envy via fairness, no significant direct effect of Source on envy remained among political conservatives, but a weak, *positive* direct effect was observed among liberals. After a series of follow-up analyses described in *Results*, I ultimately came to the tentative conclusion that liberals' greater envy of wealthy entrepreneurs in general meant that only they had an appreciable amount of envy left over to explain after taking into account the indirect effect.

Resentment was modestly increased by Inherited wealth, but Source's effect on envy was not moderated by Liberalism. The lack of an interaction effect may have been a consequence of the relatively weak effect of the manipulation itself, or it simply may have had a similar impact on liberals' and conservatives' resentment of the entrepreneurs.

Although complex in a number of ways, some straightforward points can be made about the observed pattern of effects for Source. Regardless of political affiliation,
Inherited wealth tends to be perceived as less fair than wealth earned through Hard Work, and the effects on envy of Source are explained by such fairness judgments. Furthermore, in line with historical example and contemporary moral psychological theories, (such as DMT and MFT), "unfair" Inherited wealth appears to engender substantially less envy than self-enrichment at the expense of others. For example, Inherited wealth condition had virtually no impact on moral disgust, an emotion strongly associated with perceived unfair treatment (e.g., Chapman et al., 2009), whereas Harmful actions greatly increased moral disgust.



Harmful Actions. As expected, the manipulation with stronger effects on the emotional reactions and moral judgments of both conservatives and liberals was Harmful Actions. Self-enriching actions that clearly harmed others' economic well-being increased envy, resentment, anger, and moral disgust among people across the political spectrum. Likewise, conservatives and liberals considered Harmful actions to be much less fair than actions that did no apparent harm. It would appear, then, that while there might be a degree of truth to conservative claims that liberal opposition to wealth is driven by envy, the same might be said about conservatives who oppose it—as with liberals, conservatives' envy/opposition to wealth increases as a function of certain contextual factors, such as harm, and fairness and justice concerns played prominent explanatory roles in both conservative and liberal envy.

Although Harmful Actions had effects that were similar in kind regardless of Political Ideology, as predicted, the mediated effect of Harmful Actions on envy via the perceived fairness of the entrepreneur's actions was more pronounced among liberals than conservatives, as liberals' fairness judgments were more strongly affected by Harmful Actions than those of conservatives. Such was the case despite the failure to obtain the predicted Harmful Actions X Liberalism interaction in the multiple regression model. This is not entirely surprising, as it is possible to obtain significant indirect effects of a predictor which has no significant total effect (e.g., Hayes, 2009), and fairness was predicted to be a major explanatory factor for any Harmful Actions X Liberalism interaction. Despite the predicted moderation by Liberalism of the direct effect of Harmful Actions on envy, in light of the results just described, the failure to obtain a moderated direct effect was not surprising, given the non-significance of the direct effect



of Harmful Actions on envy (i.e., the effect of Harmful Actions on envy remaining after taking into account its indirect effect via the perceived fairness of the entrepreneur's actions). In short, harmful actions increased envy, but the increase among liberals was more pronounced because the harmful actions were considered especially unfair by them (and/or especially harmful; Schein & Gray, 2015).

Main effects of both Liberalism and Harmful Actions were observed on resentment, but the predicted Harmful Actions X Liberalism interaction on resentment was not. Two possible reasons for the latter finding come to mind. First, blatantly harmful actions may have seemed relatively "objectively" unfair to liberals and conservatives, increasing their resentment of the entrepreneur roughly equivalently. On the other hand, mirroring findings on envy, there may have been no total effect of the interaction on resentment, despite an (unexamined) indirect effect of that interaction via enhanced unfairness perceptions.

Subjective SES

Taken together with the finding that subjective SES was only modestly zero-order correlated with envy, results of the exploratory analysis on possible interactive effects between Liberalism and subjective SES failed to support the notion that envious reactions to wealthy people are primarily driven by perceived differences in SES or relative deprivation. Instead, they buttressed the general conclusion that justice concerns are probably more important determinants of negative emotional reactions to wealthy people, as well as ideology-based differences in such reactions, than subjective SES. These findings challenge the ideas that (1) links between liberal political ideology and envy might be substantially stronger among people low in SES, and (2) coming from a low



SES background increases only liberals' envy—subjective SES was weakly associated with envy, regardless of Political Ideology.

Limitations

The current study entailed measuring the self-reported judgments and emotional reactions of online participants. The emotional reactions participants experienced were in response to ostensibly-real, wealthy entrepreneurs. That is, participants reacted to "real" emotional events, rather than indicating their imagined reactions to simulated events, a potentially problematic methodology which can exacerbate underreporting of envy and other undesirable emotions (e.g., Smith & Kim, 2007). Further, attention checks and open-ended suspicion check questions allowed a substantial degree of data quality control despite the remote location of the participants. Finally, because the final sample included 800 participants, statistical power was relatively high for most, if not all analyses.

Despite the considerable methodological strengths of this study, a number of limitations must be acknowledged. First, self-reports are vulnerable to social desirability biases and limitations in participants' ability to accurately report the bases of their thoughts and feelings (Nisbett & Wilson, 1977). Nonetheless, complex, "blended" social emotions such as envy have proved difficult to study without using self-reports (van de Ven et al., 2015; Hoogland et al., in press). For example, to my knowledge, there is currently no well-validated implicit measure of envy (whether hostile or otherwise), and, unlike anger or moral disgust, envy lacks a signature facial expression that could be measured with EEG or other technologies. Given the relatively small effect sizes observed in this study, it might be prohibitively costly or time-intensive to conduct well-



powered, physiology-based research examining political ideology's effects on emotional reactions to wealthy people.

Arguably the greatest limitation of this study was that no manipulation of political ideology was included (e.g., cognitive load; Eidelman, Crandall, Goodman, & Blanchar, 2012), precluding causal conclusions from being made about the effects of political ideology on envy. Still, the factors that were manipulated in this study had a number of effects which were modulated by political ideology, which, at the very least, strongly suggested that political ideology's role in reactions to wealthy people can vary based on pertinent contextual factors.

Future Directions

Because effects of political ideology on envy were influenced by contextual factors, it appears possible, or even likely, that under some circumstances, conservatives might experience more envy of wealthy people than liberals. To name one such possibility, conservatives might begrudge the wealth of "undeserving" alternative energy entrepreneurs who have benefitted financially from government grants to a greater extent than liberals, who might instead feel benign envy or admiration toward them. Further, longitudinal research might reveal if dispositional envy leads to increased liberalism,²⁵ liberalism leads to greater dispositional envy, both, or neither.

As noted, in this and other psychological studies, unidimensional measures of political ideology have been used successfully, but researchers such as Everett (2013) have argued that although economic and social conservatism/liberalism are related, they may be usefully distinguished (e.g., libertarians might be considered high in economic

²⁵ Previous research has suggested that basic dispositions may drive ideological choices (Iyer, Koleva, Graham, Ditto, & Haidt, 2012).



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conservatism but low in social conservatism; Everett, 2013). Economic liberalism is probably much more relevant to reactions to wealthy people²⁶ than social liberalism, and thus it seems possible that social liberalism might have little impact above and beyond economic liberalism on such reactions. An even finer-grained approach might involve measuring whether some economic attitudes are especially predictive of reactions to wealthy people (e.g., attitudes toward business as opposed to welfare benefits; Everett, 2013), as the consistency between attitudes and behavior increases as the attitude becomes more specific and relevant to the behavior of interest (Kraus, 1995). Still other measurement approaches might focus on self-identification as a liberal or conservative rather than underlying political ideologies (Conover & Feldman, 1981), especially if a wealthy target's political leanings are made clear, allowing stronger intergroup dynamics to emerge.

Another relevant empirical challenge might be to attempt to tease out when socially- and personally-unacceptable feelings of envy might transmute into more "righteous" resentment or indignation, anger, or even moral disgust. Might conservatives be more adept at such a coping process than liberals? This possibility is not as far-fetched as it might seem at first blush, as conservatives tend to claim greater happiness than liberals, ²⁷ a difference based not only on system-justifying ideologies (e.g., Jost, 2006;

²⁶ This seems especially likely when such wealthy people happen to be living relatively conventional lifestyles.

²⁷ See Wojcik et al. (2015) for evidence that conservatives' greater self-reported happiness might be mediated by their tendency toward self-deceptive enhancement (e.g., reporting unrealistic levels of happiness), and behavioral evidence indicating liberals may experience and display (yet not report) slightly more happiness on average than conservatives. Wojcik et al.'s (2015) work also underscored the value of controlling for socially-desirable response tendencies in psychological research comparing liberals and conservatives (as was the case for focal analyses in the current research).



Jost & Hunyady, 2005), but also on certain personality characteristics, such as greater personal agency (Schlenker et al., 2012).²⁸

A final avenue for future research might be to explore *why* liberals may be less trusting of wealthy people who ostensibly have earned their wealth and have not hurt anybody in the pursuit of further wealth. Making reference to perceived justice concerns would not appear to tell the whole story, as liberal ideology was associated with less positive perceptions of the wealthy person within the Not Harmful condition (e.g., lesser perceived competence and greater perceived greed). It also seems possible that those perceptions were driven by an offended sense of distributive justice (Janoff-Bulman & Carnes, 2013).

Conclusion

Liberals might be slightly more prone to envy. Larger ideology-related differences in envy of specific, wealthy people, however, may be explained by legitimate justice concerns to a substantial extent. Future research in which both political ideology and contextual factors are experimentally manipulated will be necessary to conclusively establish that political ideology plays a causal role in envy across a variety of situations, rather than extraneous factors associated with political ideology or particular situations. Nonetheless, the various complexities revealed in the current research suggest that neither

²⁸ Schlenker and colleagues (2012) offered a "positive adjustment" explanation for differences in happiness between conservatives and liberals, as conservatives tend to be higher in several characteristics positively associated with mental health, including optimism, personal agency, religiosity, and a domain-general belief that life is fair. They also attributed a decline in liberals' happiness as income inequality has risen to a concomitant increase in secularism (see General Discussion, Schlenker et al., 2012). Although Schlenker et al.'s (2012) findings are enlightening, judgments of the fairness of wealthy people's economic activities were a focus of this study, and thus conservatives' greater endorsement of economic system-justifying beliefs were of much greater relevance to the topic at hand. Nonetheless, the extent to which either system-justifying ideologies or overall positive adjustment provide better explanations for conservatives' greater self-reported life satisfaction is itself an important topic for future research.



conservative nor liberal explanations for opposition to wealth fully capture a more nuanced reality. Much more remains to be learned about the whys and wherefores of ideology-based differences in reactions to wealthy people of varied stripes.



Appendix A

Summary of Initial and Final Experimental Conditions

Initial Experimental Conditions

- 1 (Andy first) Andy X Hard Work X Not Harmful; Gary X Hard Work X Not Harmful
- 2 (Andy first) Andy X Hard Work X Harmful; Gary X Hard Work X Harmful
- 3 (Andy first) Andy X Inherited X Not Harmful; Gary X Inherited X Not Harmful
- 4 (Andy first) Andy X Inherited X Harmful; Gary X Inherited X Harmful
- 5 (Gary first) Gary X Inherited X Not Harmful; Andy X Inherited X Not Harmful
- 6 (Gary first) Gary X Inherited X Harmful; Andy X Inherited X Harmful
- 7 (Gary first) Gary X Hard Work X Not Harmful; Andy X Hard Work X Not Harmful
- 8 (Gary first) Gary X Hard Work X Harmful; Andy X Hard Work X Harmful

Final Experimental Conditions*

- 1 Hard Work X Not Harmful
- 2 Hard Work X Harmful
- 3 Inherited X Not Harmful
- 4 Inherited X Harmful

*NOTE: Both the order and specific company/entrepreneur (i.e., ball bearing company buyer Gary Taylor vs. hubcap manufacturing company buyer Andy Simmons) conditions were collapsed, yielding the final, 2 X 2 between-subjects design.



Appendix B

Andy X Hard Work X Not Harmful Article





Andy Simmons

This Week in Business: Entrepreneur Spotlight

Andy Simmons, owner of Simmons and Moore Investments, has gained international recognition among capital investors for his ever-growing

success. Simmons earned a BA in Finance at the age of twenty-two, and, shortly thereafter, landed a job at a mid-sized mutual fund. Though at the time Simmons didn't have much, he did

have an abiding desire to purchase companies barely making ends meet and turn them around for a profit. In order to pursue his passion, he consistently saved his earnings, along with dividends from a number of shrewd personal investments.



At right: Andy Simmons

By age 27, Simmons had saved a considerable sum of money, "in the low

millions," which allowed him to start an LLC and search for a struggling company to invest in.

When asked about his thoughts on the first business he purchased, which was on the brink of failure, Simmons said "I just had a feeling, you know? I just knew that that hubcap factory in Kansas could be improved." Simmons was accurate in his prediction; he drastically changed the company's situation within seven months' time. He bargained with his buyers and re-wrote all contracts, increased the factory workers' output with the help of productivity experts that he personally interviewed and hired, and designed a new financial plan for the company. Through these actions, the company swiftly returned to profitability.

Eleven months after he bought the business in Kansas, Simmons put it back on the market. It was soon purchased, and the sale left Simmons and his closest associates with an astonishing 17.3 million dollar profit. Today, Simmons is working on his twelfth company turnaround. Simmons and Moore Investments is flourishing, and these days Simmons himself is soaking up the rays of financial success from his office in Key West.

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Andy X Hard Work X Harmful Article





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At right: Andy Simmons

Simmons' family agreed to give him a substantial sum, "in the low millions," which allowed him to start an LLC and search for a struggling company to invest in.



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Gary X Hard Work X Not Harmful Article



Gary Taylor

This Week in Business: Entrepreneur Spotlight

Not many people know the name Gary Taylor, but in the world of capital investment, his name has become synonymous with success. Taylor is founder and CEO of Taylor Capital

International, which has garnered the spotlight recently due to its consistently impressive





Gary Taylor on vacation with wife, Elizabeth, and children, Michael (4), Anna (3)

quarterly results. When Taylor graduated college at the age of twenty-one, he set off for the corporate world with little more than a degree in economics and the shirt on his back. He worked very hard at his post-college investment management job, saving his money and making strategic stock purchases when he could. The key to the sudden take off of Taylor's career, however, was his determination to acquire struggling businesses, and to make sizeable profits by selling them. By combining his savings and selling his investments, he had just enough

money to quit his job and start looking for a company to acquire at the ripe old age of 25.

Taylor recalls the first company he acquired, which was in bad shape due to international competition: "When I bought an unprofitable ball bearing plant in Akron, Ohio, I knew dramatic changes were needed to turn things around." Taylor did just that after just three months in Akron. To increase productivity, he worked with a team of materials and process engineers who helped modernize the aging plant. After he switched to lower-cost suppliers and singlehandedly restructured the company accounting system, the Ohio company regained profitability despite years of losses.

Six months later, Taylor sold the company for a multimillion dollar profit. He has since worked his turnaround magic on many other businesses, and Taylor Capital International just announced its fifth straight year of record profits.

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Gary X Hard Work X Harmful Article



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Not many people know the name Gary Taylor, but in the world of capital investment, his name has become synonymous with success. Taylor is founder and CEO of Taylor Capital

International, which has garnered the spotlight recently due to its consistently impressive





Gary Taylor on vacation with wife, Elizabeth, and children, Michael (4), Anna (3)

quarterly results. After Taylor graduated college at the age of twenty-one with a degree in economics, he started working at his father's investment management firm. The key to the sudden take off of Taylor's career, however, was his determination to acquire struggling businesses, and to make sizeable profits by selling them. With the help of a multimillion dollar gift from his "well-to-do" family, he quit his job and started looking for a company to acquire at the ripe old age of

Taylor recalls the first company he acquired, which was in bad shape due to international competition: "When I bought an unprofitable ball bearing plant in Akron, Ohio, I knew dramatic changes were needed to turn things around." Taylor did just that after just three months in Akron. Taylor first eliminated a third of the workforce and ended the healthcare and pension plans for new hires, in addition to reducing pensions by 43% for current employees. After he switched to lower-cost suppliers and singlehandedly restructured the company accounting system, the Ohio company regained profitability despite years of losses.

Six months later, Taylor sold the company for a multimillion dollar profit. He has since worked his turnaround magic on many other businesses, and Taylor Capital International just announced its fifth straight year of record profits.

http://www.shelton.com/magazine/TWB/8122014/index1.html



Appendix C

Reactions to Stimulus Articles

Please indicate how reading the article made you think <u>about or regarding [Entrepreneur]</u> <u>and/or his profession</u> by selecting a number on the scale below that best fits your view and then entering it into the space next to each item.

0 1 2 3 4 5 6
Strongly
Disagree
Completely

- 1. [Entrepreneur's] actions were fair.
- 2. [Entrepreneur's] actions were good for the overall economy.
- 3. I believe [Entrepreneur] helped save the [Kansas/Ohio] company.
- 4. [Entrepreneur] is a very skilled businessperson.
- 5. I am a little envious of [Entrepreneur].
- 6. [Entrepreneur] did his duty for his investors by taking the actions he did with the [Kansas/Ohio] company.
- 7. [Entrepreneur] harmed the company in [Kansas/Ohio].
- 8. [Entrepreneur] is greedy.
- 9. [Entrepreneur's] initial wealth was earned through hard work.
- 10. [Entrepreneur's] initial wealth was given to him by family.
- 11. The way [Entrepreneur] got his initial wealth was fair.
- 12. [Entrepreneur's] source of startup money was fair.
- 13. I resent [Entrepreneur's] actions.
- 14. I resent [Entrepreneur's] wealth.
- 15. It is frustrating that [Entrepreneur] is better off than I am.
- 16. This is an attention check. Please choose answer "3" for this question.
- 17. [Entrepreneur] seems to be intelligent.
- 18. I feel inspired to get wealth myself.
- 19. [Entrepreneur's] actions were disgusting.
- 20. [Entrepreneur's] wealth is disgusting.
- 21. I want to put in effort to obtain wealth myself.
- 22. I hope [Entrepreneur] suffers a serious financial setback.
- 23. I like [Entrepreneur].
- 24. I am a little jealous of [Entrepreneur's] wealth.
- 25. [Entrepreneur's] way of turning around companies is good for the country.
- 26. I think about what it would be like to have [Entrepreneur's] wealth.
- 27. [Entrepreneur] harmed the workers in the [Kansas/Ohio] company.
- 28. [Entrepreneur's] actions with the company were unfair.
- 29. [Entrepreneur's] actions make me angry.
- 30. [Entrepreneur's] wealth makes me angry.
- 31. Reading about [Entrepreneur] makes me want to work harder.
- 32. I wish [Entrepreneur] weren't so successful.



- 33. I can't help but resent [Entrepreneur] for his success.
- 34. [Entrepreneur] is a great role model.
- 35. I want to have [Entrepreneur's] wealth as well.
- 36. [Entrepreneur] lacks compassion for company employees.
- 37. I am happy for [Entrepreneur].



Appendix D

Individual Differences Measures

Political Ideology Scale (endpoints: 1 = completely disagree, 7 = completely agree) (Adapted from Morgan et al., 2010)

- 1. I agree with Democrats on political issues.
- 2. I agree with Republicans on political issues.
- 3. I am liberal in my political views.
- 4. I am conservative in my political views.

Dispositional Envy Scale (endpoints: 1 = *strongly disagree*, **6** = *strongly agree*) (Smith et al., 1999)

- 1. I feel envy every day.
- 2. The bitter truth is that I generally feel inferior to others.
- 3. Feelings of envy constantly torment me.
- 4. It is so frustrating to see some people succeed so easily.
- 5. No matter what I do, envy always plagues me.
- 6. I am troubled by feelings of inadequacy.
- 7. It somehow doesn't seem fair that some people seem to have all the talent.
- 8. Frankly, the success of my neighbors makes me resent them.

Dispositional Benign and Malicious Envy Scales (endpoints: 1 = strongly disagree, 6 = strongly agree) (Lange & Crusius, 2014)

- 1. When I envy others, I focus on how I can become equally successful in the future.
- 2. I wish that superior people would lose their advantage.
- 3. If I notice that another person is better than me, I try to improve myself.
- 4. Envying others motivates me to accomplish my goals.
- 5. If other people have something that I want for myself, I wish to take it away from them.
- 6. I feel ill will toward people I envy.
- 7. I strive to reach other people's superior achievements.
- 8. Envious feelings cause me to dislike the other person.
- 9. If someone has superior qualities, achievements, or possessions, I try to attain them for myself.
- 10. Seeing other people's achievements makes me resent them.

Short Social Desirability Scale (endpoints: 1 = *strongly disagree*, **6** = *strongly agree*) (Reynolds, 1982)

- 1. It is sometimes hard for me to go on with my work if I am not encouraged.
- 2. I sometimes feel resentful when I don't get my way.
- 3. On a few occasions, I have given up doing something because I thought too little of my ability.



- 4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- 5. No matter who I'm talking to, I'm always a good listener.
- 6. There have been occasions when I took advantage of someone.
- 7. I'm always willing to admit it when I make a mistake.
- 8. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
- 9. I am always courteous, even to people who are disagreeable.
- 10. I have never been irked when people expressed ideas very different from my own.
- 11. There have been times when I was quite jealous of the good fortune of others.
- 12. I am sometimes irritated by people who ask favors of me.
- 13. I have never deliberately said something that hurt someone's feelings

Subjective SES "Ladder" Scale (Ditto et al., 2013)

Think of this ladder, to the right, as representing where people stand in <u>your country</u>.

At the top of the ladder are the people who are the best off - those who have the most money, the most education, and the most respected jobs. At the bottom are the people who are the worst off - who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom.

Where would you place yourself on this ladder?

Please choose the radio button corresponding to the position on the ladder where you think you stand at this time in your life, compared to people in your country.





References

- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper & Row.
- Allport, G. W. (1954). The nature of prejudice. Cambridge, MA: Addison-Wesley.
- Altemeyer, B. (1981). *Right-wing authoritarianism*. Winnipeg, Canada: University of Manitoba Press.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University

 Press
- Aristotle (350 B.C.E./1924). Rhetoric. In W. Rhys Roberts (Trans.), *The Works of Aristotle* (Vol. 9). London: Oxford University Press.
- Barber, M., & McCarty, N. (2015). Causes and consequences of polarization. In N. Persily (Ed.), *Solutions to political polarization in America* (pp. 15-58). New York: Cambridge University Press.
- Batson, C. D., Kennedy, C. L., Nord, L. A., Stocks, E. L., Fleming, D. Y. A., Marzette,C. M., ... & Zerger, T. (2007). Anger at unfairness: Is it moral outrage?. *European Journal of Social Psychology*, 37(6), 1272-1285.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106(1), 59-73.
- Berkowitz, L. (1990). On the formation and regulation of anger and aggression: A cognitive-neoassociationistic analysis. *American Psychologist*, *45*(4), 494-503.
- Berkowitz, L., & Harmon-Jones, E. (2004). Toward an understanding of the determinants of anger. *Emotion*, *4*(2), 107–130.



- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love and outgroup hate?. *Journal of Social Issues*, *55*(3), 429-444.
- Brown-Iannuzzi, J. L., Lundberg, K. B., Kay, A. C., & Payne, B. K. (2015). Subjective status shapes political preferences. *Psychological Science*, *26*(1), 15-26.
- Carney, D. R., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, *29*(6), 807-840.
- Chapman, H. A., & Anderson, A. K. (2013). Things rank and gross in nature: a review and synthesis of moral disgust. *Psychological Bulletin*, *139*(2), 300-327.
- Chapman, H. A., & Anderson, A. K. (2014). Trait physical disgust is related to moral judgments outside of the purity domain. *Emotion*, *14*(2), 341-348.
- Chapman, H. A., Kim, D. A., Susskind, J. M., & Anderson, A. K. (2009). In bad taste: Evidence for the oral origins of moral disgust. *Science*, *323*(5918), 1222-1226.
- Clark, J. A., & Fessler, D. M. T. (2015). The role of disgust in norms, and of norms in disgust research: Why liberals shouldn't be morally disgusted by moral disgust. *Topoi*, *34*(2), 483-498.
- Clinton, H. (2016, May) Hillary Clinton Statement on New Department of Labor

 Overtime Rules. Retrieved from

 https://www.hillaryclinton.com/briefing/statements/2016/05/18/hillary-clinton-statement-on-new-department-of-labor-overtime-rules/
- Cohen, J. (1977). Statistical power analysis for behavioral sciences (Revised Ed.). New York: Academic Press.



- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple*regression/correlation analysis for the behavioral sciences. Mahwah, NJ:

 Lawrence Erlbaum Associates, Inc.
- Cohen-Charash, Y. (2009). Episodic envy. *Journal of Applied Social Psychology*, *39*(9), 2128-2170.
- Conover, P. J., & Feldman, S. (1981). The origins and meaning of liberal/conservative self-identifications. *American Journal of Political Science*, 25(4), 617-645.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*(4), 349-354.
- Darley, J. M., & Pittman, T. S. (2003). The psychology of compensatory and retributive justice. *Personality and Social Psychology Review*, 7(4), 324-336.
- Davis, S. (2012, April 16). Senate fails to advance Buffett Rule. *USA Today*. Retrieved from http://www.usatoday.com
- Ditto, P., Graham, J. Haidt, J., Iyer, R., Koleva, S., Motyl, M., Sherman, G., & Wojcik, S. (2013). [Graphic ladder and text] *Your Morals Project*. Retrieved from https://www.yourmorals.org/register.php?grp=&goto=
- Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. (2012). A social context model of envy and social undermining. *Academy of Management Journal*, 55(3), 643-666.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. *Psychological Methods*, *12*(1), 1-22.



- Eidelman, S., Crandall, C. S., Goodman, J. A., & Blanchar, J. C. (2012). Low-effort thought promotes political conservatism. *Personality and Social Psychology Bulletin*, *38*(6), 808-820.
- Engel, S., & Martin, B. (2015). Challenging economic inequality. *Economic & Political Weekly*, 50(49), 42-48.
- Escobedo, T. (2016, April 14). How did Andrew Jackson go from revered to reviled?.

 CNN. Retrieved from http://www.cnn.com/2016/03/31/politics/andrew-jackson-from-revered-to-reviled/
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149-1160.
- Feather, N. T. (2006). Deservingness and emotions: Applying the structural model of deservingness to the analysis of affective reactions to outcomes. *European Review of Social Psychology*, 17(1), 38-73.
- Feather, N. T. (2012). Tall poppies, deservingness and schadenfreude. *The Psychologist*, 25(6), 434-437.
- Feather, N. T., & Sherman, R. (2002). Envy, resentment, schadenfreude, and sympathy:

 Reactions to deserved and undeserved achievement and subsequent failure.

 Personality and Social Psychology Bulletin, 28(7), 953-961.
- Fernandez, E., & Turk, D. C. (1995). The scope and significance of anger in the experience of chronic pain. *Pain*, 61(2), 165-175.



- Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne social desirability scale, *Educational and Psychological Measurement*, *53*(2), 417-424.
- Floyd, T. M., Hoogland, C. E., & Smith, R. H. (2016). The role of leaders in managing envy and its consequences for competition in organizations. In S. Braun, C. Peus, & B. Schyns (Eds.), *Leadership lessons from compelling contexts* (pp. 129-156).
 Bradford, UK: Emerald Group Publishing.
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57(2), 212-228.
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, *18*(3), 233-239.
- Gollwitzer, M., & van Prooijen, J. W. (2016). Psychology of justice. In C. Sabbagh & M. Schmitt, (Eds.), *Handbook of social justice theory and research* (pp. 61-82). New York: Springer.
- Graham, J., Haidt, J., & Nosek, B. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029-1046.
- Graham, J., Nosek, B., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366-385.
- Gray, K., & Schein, C. (2012). Two minds vs. two philosophies: Mind perception defines morality and dissolves the debate between deontology and utilitarianism. *Review of Philosophy and Psychology*, *3*(3), 1–19.



- Gray, K., Waytz, A., & Young, L. (2012). The moral dyad: A fundamental template unifying moral judgment. *Psychological Inquiry*, *23*(2), 206-215.
- Haidt, J. (2012). The righteous mind. New York: Random House, Inc.
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20(1), 98-116.
- Harris, C. R., & Henniger, N. E. (2013). Envy, politics, and age. *Frontiers in Psychology*, 4(67), 1-5.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420.
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper].Retrieved from http://www.afhayes.com/public/process2012.pdf
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1-22.
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, 39(4), 709-722.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley & Sons.
- Hirsh, J. B., DeYoung, C. G., Xu, X., & Peterson, J. B. (2010). Compassionate liberals and polite conservatives: Associations of agreeableness with political ideology and moral values. *Personality and Social Psychology Bulletin*, *36*(5), 655-664.



- Hodson, G., & Costello, K. (2007). Interpersonal disgust, ideological orientations, and dehumanization as predictors of intergroup attitudes. *Psychological Science*, *18*(8), 691-698.
- Hogg, M. A., & Turner, J. C. (1985). Interpersonal attraction, social identification and psychological group formation. *European Journal of Social Psychology*, 15(1), 51-66.
- Hoogland, C. E., Thielke, S., & Smith, R. H. (in press). Envy as an evolving episode. In R. Smith, U. Merlone, & M. Duffy (Eds.), *Envy at work and in organizations:**Research, theory, and applications. New York: Oxford University Press.
- Huff, C. & Tingley, D. (2015). "Who are these people?": Evaluating the demographic characteristics and political preferences of MTurk survey respondents. *Research and Politics*, *July-September 2015*, 1-12.
- IBM Corp. (2013). IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.
- Inbar, Y., Pizarro, D. A., & Bloom, P. (2009). Conservatives are more easily disgusted than liberals. *Cognition and Emotion*, *23*, 714-725
- Inbar, Y., Pizarro, D., Iyer, R., & Haidt, J. (2012). Disgust sensitivity, political conservatism, and voting. *Social Psychological and Personality Science*, *3*(5), 537-544.
- Inbar, Y., Pizarro, D. A., Knobe, J., & Bloom, P. (2009). Disgust sensitivity predicts intuitive disapproval of gays. *Emotion*, *9*(3), 435-439.



- Iyer, R., Koleva, S., Graham, J., Ditto, P., & Haidt, J. (2012). Understanding libertarian morality: The psychological dispositions of self-identified libertarians. *PloS One*, 7(8), 1-23.
- Izard, C. E. (1993). Four systems for emotion activation: cognitive and noncognitive processes. *Psychological Review*, *100*(1), 68-90.
- Janoff-Bulman, R. (2009). To provide or protect: Motivational bases of political liberalism and conservatism. *Psychological Inquiry*, *20*(2-3), 120-128.
- Janoff-Bulman, R., & Carnes, N. C. (2013). Surveying the moral landscape moral motives and group-based moralities. *Personality and Social Psychology Review*, 17(3) 219-236.
- Jost, J. T. (2006). The end of the end of ideology. *American Psychologist*, 61(7), 651-670.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003a). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*(3), 339-375.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003b). Exceptions that prove the rule—using a theory of motivated social cognition to account for ideological incongruities and political anomalies: Reply to Greenberg & Jonas (2003). *Psychological Bulletin*, *129*(3), 383-393.
- Jost, J., & Hunyady, O. (2003). The psychology of system justification and the palliative function of ideology. *European Review of Social Psychology*, *13*(1), 111-153.
- Jost, J. T., & Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Current Directions in Psychological Science*, *14*(5), 260-265.



- Jost, J. T., Napier, J. L., Thorisdottir, H., Gosling, S. D., Palfai, T. P., & Ostafin, B. (2007). Are needs to manage uncertainty and threat associated with political conservatism or ideological extremity?. *Personality and Social Psychology Bulletin*, 33(7), 989-1007.
- Kraus, S. J. (1995). Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, 21(1), 58-75.
- Krizan, Z., & Hoogland, C. E. (manuscript in preparation). Dispositional schadenfreude.
- Lange, J., & Crusius, J. (2015). Dispositional envy revisited: Unraveling the motivational dynamics of benign and malicious envy. *Personality and Social Psychology Bulletin*, 41(2), 284-294.
- Leach, C. W., & Spears, R. (2008). "A vengefulness of the impotent": The pain of ingroup inferiority and schadenfreude toward successful out-groups. *Journal of Personality and Social Psychology*, 95(6), 1383-1396.
- Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: schadenfreude at the suffering of another group. *Journal of Personality and Social Psychology*, 84(5), 932-943.
- Lerner, M. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Levendusky, M. (2009). *The partisan sort: How liberals became Democrats and conservatives became Republicans*. Chicago: University of Chicago Press.
- Loewenstein, A. (2013). *Profits of doom: How vulture capitalism is swallowing the world*. Melbourne, Australia: Melbourne University Publishing.



- Loo, R., & Thorpe, K., (2000). Confirmatory factor analyses of the full and short versions of the Marlowe-Crowne social desirability scale. *Journal of Social Psychology*, 140(5), 628-635.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, *114*(2), 376-390.
- Morgan, G. S., Mullen, E., & Skitka, L. J. (2010). When values and attributions collide: Liberals' and conservatives' values motivate attributions for alleged misdeeds. Personality and Social Psychology Bulletin, 36(9), 1241-1254.
- Murphy, K. R., & Myors, B. (2004). *Statistical power analysis*. Mahwah: Lawrence Erlbaum Associates, Inc.
- Napier, J. L., & Jost, J. T. (2008). Why are conservatives happier than liberals?. *Psychological Science*, *19*(6), 565-572.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, *84*(3), 231-259.
- Norton, M. I., & Ariely, D. (2011). Building a better America—One wealth quintile at a time. *Perspectives on Psychological Science*, *6*(1), 9-12.
- Norton, M. I., Neal, D. T., Govan, C. L., Ariely, D., & Holland, E. (2014). The not-so-common-wealth of Australia: Evidence for a cross-cultural desire for a more equal distribution of wealth. *Analyses of Social Issues and Public Policy*, *14*(1), 339-351.
- Obama, B. (2013, December). *Remarks by the President on Economic Mobility*. Speech presented at THEARC, Washington, D.C.



- Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science*, 23(3), 184-188.
- Parker, K. (2013, December 31). Dream the American Dream in 2014. *The Washington Post*. Retrieved from https://www.washingtonpost.com
- Parrott, W. G. (1991). Experiences of envy and jealousy. In P. Salovey (Ed.), *The psychology of jealousy and envy*, (pp. 3-30). New York: Guilford Press.
- Parrott, W. G., & Smith, R. H. (1993). Distinguishing the experiences of envy and jealousy. *Journal of Personality and Social Psychology*, 64(6), 906-920.
- Powell, C. A. J., Smith, R. H., & Schurtz, D. R. (2008). Schadenfreude caused by an envied person's pain. In R. H. Smith (Ed.), *Envy* (pp. 148-164). New York:

 Oxford University Press.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral**Research*, 42(1), 185-227.
- R Core Team (2013). R: A language and environment for statistical computing. R

 Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0,

 http://www.R-project.org/
- Rasinski, K. (1987). What's fair is fair-or is it? Value differences underlying public views about social justice. *Journal of Personality and Social Psychology*, *53*(1), 201-211.
- Rawls, J. (1971). A theory of justice. Cambridge, MA: Harvard University Press.
- Reynolds, W. M. (1982) Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology*, *38*(1), 119-125.



- Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, 7(4), 331-363.
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, 76(4), 574-586.
- Schein, C., & Gray, K. (2015). The unifying moral dyad: Liberals and conservatives share the same harm-based moral template. *Personality and Social Psychology Bulletin*, 41(8), 1147-1163.
- Schein, C., Ritter, R. S., & Gray, K. (in press). Harm mediates the disgust-immorality link. *Emotion*.
- Schlenker, B. R., Chambers, J. R., & Le, B. M. (2012). Conservatives are happier than liberals, but why? Political ideology, personality, and life satisfaction. *Journal of Research in Personality*, 46(2), 127-146.
- Schnall, S., Haidt, J., Clore, G. L., & Jordan, A. H. (2008). Disgust as embodied moral judgment. *Personality and Social Psychology Bulletin*, *34*(8), 1096-1109.
- Smith, R. H. (1991) Envy and the sense of injustice. In P. Salovey (Ed.), *The psychology of jealousy and envy* (pp. 79-97). New York, NY: Guilford Press.
- Smith, R. H. (2013). *The joy of pain: Schadenfreude and the dark side of human nature*. New York: Oxford University Press.
- Smith, R. H., & Harris, M. J. (2006). Multimethod approaches in social psychology:

 Between-and within-method replication and multimethod assessment. In M. Eid



- & E. Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 385-400). Washington, DC: American Psychological Association.
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin*, *133*(1), 46-64.
- Smith, R.H., Parrott, W.G., Diener, E., Hoyle, R.H., & Kim, S.H. (1999). Dispositional envy. *Personality and Social Psychology Bulletin*, *25*(8), 1007-1020.
- Smith, R. H., Parrott, W. G., Ozer, D., & Moniz, A. (1994). Subjective injustice and inferiority as predictors of hostile and depressive feelings in envy. *Personality and Social Psychology Bulletin*, 20(6), 705–711.
- Smith, R. H., Thielke, S. M., & Powell, C. A. (2014). Empirical challenges to understanding the role of envy in schadenfreude. In W. W. van Dijk & J. W. Ouwerkerk (Eds.), *Schadenfreude: Understanding pleasure at the misfortune of others* (pp. 91-109). Cambridge, UK: Cambridge University Press.
- Taibbi, M. (29 August 2012). Greed and debt: The true story of Mitt Romney and Bain Capital. *Rolling Stone*, 1165(September 13, 2012). Retrieved from http://www.rollingstone.com/politics/news/greed-and-debt-the-true-story-of-mitt-romney-and-bain-capital-20120829
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. *Advances in Experimental Social Psychology*, 21, 181-227.
- Tesser, A., Millar, M., & Moore, J. (1988). Some affective consequences of social comparison and reflection processes: The pain and pleasure of being close. *Journal of Personality and Social Psychology*, *54*(1), 49-61.



- Tetlock, P. E., & Mitchell, G. (1993). Liberal and conservative approaches to justice:

 Conflicting psychological portraits. In B. A. Mellers & J. Baron (Eds.),

 Psychological perspectives on justice: Theory and applications (pp. 234-255).

 New York: Cambridge University Press.
- Tyler, T. (2011). Procedural justice shapes evaluations of income inequality:

 Commentary on Norton and Ariely (2011). *Perspectives on Psychological Science*, *6*(1), 15-16.
- UShistory.org (n.d.). The rise of the common man. Accessed online at http://www.ushistory.org/us/24a.asp
- van de Ven, N. (2015). Envy and admiration: Emotion and motivation following upward social comparison. *Cognition and Emotion*. doi: 10.1080/02699931.2015.1087972
- van de Ven, N., Hoogland, C. E., Smith, R. H., van Dijk, W. W., Breugelmans, S. M., & Zeelenberg, M. (2015). When envy leads to schadenfreude. *Cognition and Emotion*, 29(6), 1007-1025.
- van de Ven, N., Zeelenberg, M., & Pieters, R. (2009). Leveling up and down: the experiences of benign and malicious envy. *Emotion*, *9*(3), 419-429.
- van Dijk, W. W., Goslinga, S., & Ouwerkerk, J. W. (2008). Impact of responsibility for a misfortune on schadenfreude and sympathy: Further evidence. *The Journal of Social Psychology*, *148*(5), 631-636.
- van Dijk, W. W., Ouwerkerk, J. W., & Goslinga, S. (2009). The impact of deservingness on schadenfreude and sympathy: Further evidence. *Cognition and Emotion*, *149*(3), 290-292.



- Wojcik, S. P., Hovasapian, A., Graham, J., Motyl, M., & Ditto, P. H. (2015).

 Conservatives report, but liberals display, greater happiness. *Science*, *347*(6227), 1243-1246.
- Yzerbyt, V. Y., Muller, D., & Judd, C. M. (2004). Adjusting researchers' approach to adjustment: On the use of covariates when testing interactions. *Journal of Experimental Social Psychology*, 40(3), 424-431.
- Zeelenberg, M., Nelissen, R. M., Breugelmans, S. M., & Pieters, R. (2008). On emotion specificity in decision making: Why feeling is for doing. *Judgment and Decision Making*, *3*(1), 18-27.



VITA

Charles E. Hoogland

EDUCATION

2009-2011

Wake Forest University

Winston-Salem, NC

M.A. in General Experimental Psychology

 Thesis title: The effects of upward social comparisons on affect and subsequent task persistence and performance in cooperative and competitive contexts

2003-2007

Wabash College

Crawfordsville, IN

B.A. in Psychology

- Summa cum laude
- Minor: History

2005

University of Aberdeen

Aberdeen, Scotland

Studied psychology, history, and art history abroad

PUBLICATIONS

- **Hoogland, C. E.**, Thielke, S., & Smith, R. H. (in press). Envy as an evolving episode. In U. Merlone, M. Duffy, & R. Smith (Eds.), *Envy at work and in organizations: Research, theory, and applications*. New York: Oxford University Press.
- Floyd, T. M., **Hoogland, C. E.**, & Smith, R. H. (in press). The role of leaders in managing envy and its consequences for competition in organizations. In S. Braun, C. Peus, & B. Schyns (Eds.), *Leadership lessons from compelling contexts*. Bradford, UK: Emerald Group Publishing.
- Hoogland, A. I., & **Hoogland**, C. E. (in press). Learning by listing: A content analysis of students' perceptions of older adults and grandparents. *Journal of Gerontology and Geriatrics Education*.
- **Hoogland, C. E.**, Schurtz, D. R., Cooper, C. M., Combs, D. J. Y., Brown, E. G., & Smith, R. H. (2015). The joy of pain and the pain of joy: In-group identification predicts schadenfreude and gluckschmerz following rival groups' fortunes. *Motivation and Emotion*, 39(2), 260-281.
- van de Ven, N., **Hoogland, C. E.**, Smith, R. H., van Dijk, W. W., Breugelmans, S. M., & Zeelenberg, M. (2015). When envy leads to schadenfreude. *Cognition and Emotion*, 29(6), 1007-1025.



- Inoue, Y., **Hoogland, C. E.**, Takehashi, H., & Murata, K. (2015). Effects of resource divisibility and expectations of sharing on envy. *Motivation and Emotion*, *39*(6), 961-972.
- Schurtz, D. R., Combs, D., **Hoogland, C.**, & Smith, R. H. (2014). Schadenfreude in sports and politics: A social identity perspective. In W. van Dijk & J. Ouwerkerk (Eds.) *Schadenfreude: Understanding pleasure at the misfortune of others*. London: Cambridge University Press.
- Webster, J. M., **Hoogland, C. E.**, Schurtz, D. R., & Smith, R. H. (2014). Excessive image concern and willingness to incur personal cost in the experience and perception of vanity. *Self and Identity*, *13*(5), 613-637.

TEACHING EXPERIENCE

- 2016, Spring *Primary Instructor* University of Kentucky Social Psychology and Cultural Processes (PSY 314)
- 2015, Summer *Primary Instructor* University of Kentucky Application of Statistics in Psychology (PSY 216)
 - Designed and delivered interactive lessons via Adobe Connect virtual classroom.
- 2014, Fall *Primary Instructor* Eastern Kentucky University Introduction to Psychology (PSY 200)
- 2015, Fall Lab Instructor University of Kentucky Application of Statistics in Psychology (PSY 216)
- 2015, Spring *Lab Instructor* University of Kentucky Research Methods in Social Psychology (PSY 440)
- 2014 *Lab Instructor* University of Kentucky Research in Personality (PSY 430)
- 2013, Fall Lab Instructor University of Kentucky Psychological Research Methods (PSY 215)
- 2013, Summer Online Lab Instructor University of Kentucky Application of Statistics in Psychology (PSY 216)
 - Created and led interactive lab lectures in Adobe Connect virtual classroom.
- 2012-2013 Lab Instructor University of Kentucky Introduction to Psychology (PSY 100)
- 2012, Summer Online Lab Instructor University of Kentucky Introduction to Social Psychology (PSY 314)



2009-2011 *Lab Instructor* Wake Forest University Psychological Research Methods and Statistics (PSY 312)

Four consecutive semesters

Mentoring Experience

2011-present Lab Manager University of Kentucky

- Mentored total of 15 undergraduate research assistants.
- Helped supervise and mentor up to 5 undergraduate research assistants simultaneously.
- Eight mentees coauthored or presented posters at research conferences.
- Mentees on one published manuscript and one under review.

ORAL PRESENTATIONS

- **Hoogland, C. E.** (2015). *Invited Talk at Georgetown College*. Delivered presentation on graduate school application process and life as a graduate student for a Psychology careers class.
- **Hoogland, C. E.** (2014). *Social Psychology Brown Bag Presentation*. Excessive image concern and willingness to incur personal cost in the experience and perception of vanity.
- **Hoogland, C. E.** (2013). *Social Psychology Brown Bag Presentation*. Why do some hate puns?: Effects of context and personality on reactions to puns.
- **Hoogland, C. E.** (2013). *Social Psychology Brown Bag Presentation*. Schadenfreude and gluckschmerz: In-group identification inverts normative responses to rival groups' fortunes.
- **Hoogland, C. E.** (2013). *Research Talk*. Structural equation model of envy's effects on schadenfreude. Presented to dozens of research assistants during N. DeWall lab meeting.
- **Hoogland, C. E.** (2012). *Social Psychology Brown Bag Presentation*. Effects of envy, deservingness, and inferiority on schadenfreude, or joy over another's misfortune.
- **Hoogland, C.**, & Ritter, M. (2005). *Research Talk*. The male and female fraternity stereotypes and their favorability to independent and fraternity males. Presented at the 24th Annual Mid-America Undergraduate Psychology Research Conference, Franklin College, IN.
 - Based on data collected at 3 universities.
 - Audience included dozens of students and professors from institutions throughout the Midwest and Kentucky.
 - Published individual paper on project in Horizon* (2006).



POSTER PRESENTATIONS

- **Hoogland, C. E.**, Smith, R. H., Martin, A. R., & Brown, E. G. (2016). Political affiliation moderates envy in reaction to inherited vs. earned wealth. Poster presented at the 17th annual meeting of the Society for Personality and Social Psychology, San Diego, CA.
- Kim, S. H., **Hoogland, C. E.**, & West, T. J. (2016). Dispositional envy and gratitude predict opposite reactions to awe-producing nonsocial stimuli. Poster presented at the 17th annual meeting of the Society for Personality and Social Psychology, San Diego, CA.
- Hoogland, A. I., **Hoogland, C. E.**, Schoenberg, N. E., & Bardach, S. H. (2015). Health behavior change in older adults in rural Appalachia. Poster presented at the 68th annual meeting of the Gerontological Society of America, Orlando, FL.
- **Hoogland, C. E.**, Payne, B. M., Brown, E. G., & Smith, R. H. (2015). Punster and personality factors associated with perceptions of humorous punning. Poster presented at the 37th annual meeting of the Society of Southeastern Social Psychologists, Winston-Salem, NC.
- Kim, S. H., **Hoogland, C. E.**, & West, T. J. (2015). The effect of awe on caring for future self. Poster presented at the 16th annual meeting of the Society for Personality and Social Psychology, Long Beach, CA.
- **Hoogland, C. E.**, Payne, B. M., Brown, E. G., & Smith, R. H. (2015). Once a pun a time: Reactions to puns and punsters in narrative contexts. Poster presented at the 16th annual meeting of the Society for Personality and Social Psychology, Long Beach, CA.
- Payne, B. M., Yeager, A. M., **Hoogland, C.**, Brown, E. G., & Smith, R. H. (2014). Once a pun a time: Effects of context and individual differences on reactions to puns and punsters. Poster presented at the 2014 National Conference for Undergraduate Research, Lexington, KY.
- West, T., Payne, B., Kim, S. H., **Hoogland, C. E.**, & Smith, R. H. (2014). The effect of awe on future self. Poster presented at the 2014 National Conference for Undergraduate Research, Lexington, KY.
- Leathem, L. D., Villanueva, M., **Hoogland, C. E.**, & Smith, R. H. (2014). Shades of envy: The effects of sustained envy and target likeability on envy through time. Poster presented at the 2014 National Conference for Undergraduate Research, Lexington, KY.



- **Hoogland, C. E.**, Martin, A. R., Smith, R. H., Cooper, C. M., & Brown, E. G. (2014). Political affiliation and reactions to great wealth: Fairness or envy? Poster presented at the 15th annual meeting of the Society for Personality and Social Psychology, Austin, TX.
- Smith, R. H., Cooper, C. M., **Hoogland, C. E.**, & Brown, E. G. (2014). Coping with malicious envy: Declines in envy coincide with increases in resentment. Poster presented at the 15th annual meeting of the Society for Personality and Social Psychology, Austin, TX.
- Kim, S. H., & **Hoogland, C. E.** (2014). A contest between two selves: Exploring self-negotiation. Poster presented at the 15th annual meeting of the Society for Personality and Social Psychology, Austin, TX.
- Martin, A., **Hoogland, C.**, & Smith, R. H. (2013). Envy vs. justice: Emotional reactions to wealth as a function of political ideology. Poster presented at the 2013 National Conference for Undergraduate Research, La Crosse, WI.
- **Hoogland, C. E.**, Pond, R., Martin, A., Smith, R. H., Krizan, Z., & Kim, S. H. (2013). The political ideology of envy and greed: Venture or vulture capitalism? Poster presented at the 14th annual meeting of the Society for Personality and Social Psychology, New Orleans, LA.
- Smith, R. H., Sawada, M., Hitokoto, H., Hoogland, C. E., Brown, E. G., & Cooper, C. M. (2013). Cross-cultural support for the emotion construct of glückschmerz, displeasure over another's good fortune. Poster presented at the 14th annual meeting of the Society for Personality and Social Psychology, New Orleans, LA.
- Cooper, C. M., **Hoogland, C. E.**, Schurtz, D. R., Combs, D. J. Y., & Smith, R. H. (2013). Perceived ingroup gain and loss mediate schadenfreude in response to outgroup minor or severe misfortune and glückschmerz following recovery. Poster presented at the 14th annual meeting of the Society for Personality and Social Psychology, New Orleans, LA.
- **Hoogland, C.**, Schurtz, D. R., Combs, D. J. Y., Powell, C. A., & Smith, R. H. (2012). Enjoying bad news and suffering good news: In-group identification and the joys of schadenfreude and the sorrows of glückschmerz. Poster presented at the 13th annual meeting of the Society for Personality and Social Psychology, San Diego, CA.
- Smith, R. H., Webster, J. M., Schurtz, D. R., Robichaud, S., & **Hoogland, C.** (2012). Excessive image concern and willingness to incur personal costs in the perceptions of vanity. Poster presented at the 13th annual meeting of the Society for Personality and Social Psychology, San Diego, CA.



- **Hoogland, C.**, Smith, R. K., Thielke, S. M., Kim, S. H., & Smith, R. H. (2012). Exploring how varieties of envy, inferiority, and resentment are linked with schadenfreude. Poster presented at the Kentucky Psychological Association's annual spring conference, Lexington, KY.
- Brown, E. G., Smith, R. H., **Hoogland, C. E.**, Cooper, C. M., & Golev, A. B. (2012). When good news strikes: Self-evaluation threat, counterfactual comparisons, and glueckschmerz. Poster presented at the Kentucky Psychological Association's annual spring conference, Lexington, KY.
- **Hoogland, C.**, & Seta, C. (2010). Social comparison effects on frustration and performance. Poster presented at the 2010 Wake Forest University Psychology Department's Graduate Student Colloquium, Winston-Salem, NC.
- **Hoogland, C.** (2007). Psychological aspects of stereotypes of Asian Americans. Paper presented at Wabash College Celebration of Student Research, Wabash College, IN.
 - Published in Horizon* (2007).

*Note: *Horizon* is the Wabash College student social sciences journal.

ACADEMIC HONORS AND AWARDS

University of Kentucky Psychology Department Travel Award (\$1000)
Phi Alpha Theta (National History Honor Society)
 For outstanding achievement in the social sciences. Givens Award for the Study of Art in Europe at Wabash College
Tau Kappa Epsilon Freshman Scholarship at Wabash College



Social Psychology Area Brown Bag Co-Coordinator	-2016
Assist with outside speaker travel arrangements.	2016
Psychology Graduate Student Executive Committee 2015	-2016
 Liaison to department chair for social area graduate students. 	
Session Moderator, National Conference for Undergraduate Research	2014
 Managed two undergraduate oral presentation sessions. 	
Graduate Recruitment Event (Durham, NC)	2010
 Discussed graduate school application process and 	
expectations with aspiring graduate students from the	
HBCU Spelman College.	
Academic and Morale Officer.	2004
 Tau Kappa Epsilon fraternity, Wabash College chapter. 	
 Designed and implemented academic policy. 	
 Served on fraternity disciplinary board. 	

Manuscript Reviews

- Psychological Science
- Emotion Review
- Cognition and Emotion
- British Journal of Social Psychology
- *Motivation and Emotion*
- Journal of Applied Social Psychology
- New Media and Society
- Psychological Reports
- *Group Processes & Intergroup Relations*
- Journal of Social and Personal Relationships

Project: Edited and fact-checked manuscript for book assisting trial lawyers in applying psychological principles to interactions with jurors.

- Chosen by John Petrocelli, Ph.D., on behalf of the author, Carol Anderson, J.D.
- Reviewed chapters and met with author to discuss potential revisions.
- Resulting book published by the National Institute for Trial Advocacy in 2012.

Spring 2007 Wabash College Crawfordsville, IN

Psychology Research Methods and Statistics Tutor

Crawfordsville, IN

