

The Role of Envy in Anti-Semitism

by

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ABSTRACT

Anti-Semitism is a recurrent phenomenon in modern history, but has garnered relatively little focus among research psychologists compared to prejudice toward other groups. The present work frames anti-Semitism as a strategy for managing the implications of Jews' extraordinary achievements compared to other groups. Anti-Semitic beliefs are sorted into two types: stereotypes that *undercut* the merit of Jews' achievements by attributing them to unfair advantages such as power behind the scenes; and stereotypes that *offset* Jews' achievements by attaching unfavorable traits or defects to Jews, which are unrelated to the achievement domains, e.g. irritating personalities or genetically-specific health problems. The salience of Jews' disproportionate achievements was hypothesized as driving greater endorsement of anti-Semitic stereotypes, and envy was hypothesized as mediating this effect. Individual differences in narcissistic self-esteem and moral intuitions around in-group loyalty and equity-based fairness were hypothesized as moderating the effect of Jewish achievement on anti-Semitic beliefs. The results showed greater endorsement of undercutting – but not offsetting – stereotypes after reading about Jewish achievements, compared to Jewish culture or general American achievement conditions. Envy did not significantly mediate this effect. The moral foundation of in-group loyalty predicted greater endorsement of anti-Semitic stereotypes in the Jewish Achievement condition, and lesser endorsement in the Jewish Culture condition. Fairness intuitions did not significantly predict stereotype endorsement. Limitations of the sample and next steps are discussed.

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Introduction

Anti-Semitism is a recurrent phenomenon in human history (Rein, 2003), but has not sparked as much empirical attention as prejudices toward other minority groups (Cohen, Jussim, Harber, & Bhasin, 2009), at least in experimental psychology. In this paper, I lay out a compensatory model of anti-Semitism that focuses on ways in which anti-Semitism compensates for self-esteem threats presented by Jews' greater achievements. In particular, I predict that perceptions of Jews' extraordinary achievements drive unfavorable implications for both the self and for one's own group's status relative to Jews, especially where self-esteem is fragile. This compensatory process is characteristic of envy (van de Ven, Zeelenberg, & Pieters, 2009), and I argue that anti-Semitism – as exhibited in the contemporary West – is often a case of malicious envy. This model is potentially powerful in its ability to generate predictions as to the forms that anti-Semitism should take – that is, the forms of stereotypes about Jews. Such stereotypes should be useful at reducing the perceived disparity between Jews and one's own group, and include stereotypes that *undercut* Jewish achievements, and stereotypes that *offset* Jewish achievements. Finally, I predict that underlying moral intuitions about equity-fairness and group loyalty will drive more endorsement of anti-Semitic beliefs.

This paper extends current work in two ways: instead of prejudice derived from negative stereotypes, anti-Semitism is an example of prejudice stemming from perceptions of power and ability, in particular stereotypes around achievement, intelligence, and success; and instead of envy as an interpersonal phenomenon, anti-Semitism may represent envy at an *intergroup* level. The bulk of empirical research on stereotyping centers on downward social comparison – a belief about a group that places them beneath one's own group, inferior in some respect. For example, a white

stereotype about blacks might be that blacks are less intelligent or more prone to criminality (Cottrell & Neuberg, 2005). Many such stereotypes seem to serve a sociofunctional threat-avoidance rationale (Neuberg, Kenrick, & Schaller, 2011), where the threat is either aggression (in the case of African-Americans) or disease (in the case of gay men or obese people). Anti-Semitism, however, presents a different structure. Jewish stereotypes are often grounded in perceptions of Jewish achievements and success, including ratings of higher intelligence and wealth (Wilson, 1996), but ultimately take a negative, prejudicial form by attributing such success to nefarious causes, as I detail below.

This theoretical framework centers on envy because perceptions of disproportionate achievement and power are conspicuous in the litany of anti-Semitic stereotypes (Wilson, 1996; ADL, 2013; Morse & Allport, 1952). In a recent survey by the Anti-Defamation League, seven of the eleven items referred to Jewish power or business prowess (ADL, 2011). Three items focus on Jewish clannishness or loyalty to the United States, and one item on Jews' unspecified "irritating faults". Now, the questions crafted by pollsters might not reflect the principal dimensions of anti-Semitism in public opinion, but these items square with broader efforts by Wilson (1996) and Morse and Allport (1952). We do not find a recurring theme of physical threat, crime, or disease. Nor do we find dismissals of Jews for their stupidity, or even their irrelevance. Another factor highlighted in the literature is a stereotype of cold, unethical behavior (Fiske, Cuddy, Glick, & Xu, 2002). Notably, such perceptions are still tied to perceptions of Jewish achievement, and Fiske, et al found that Jews were perceived as coldly *competent*. Since the prevailing theme is one of Jewish competence, power, and achievement, and since anti-Semitic stereotypes express resentment and anger at Jews regarding their achievements, envy stands out as a logical, or at least plausible, factor.

It may be worth pausing here to log some qualifiers and frame the broader context. There are presumably several factors that drive anti-Semitism. Reaching back through the centuries and across the diaspora, we might find a number of causes behind the pogroms and the stigmatization of Jews. Envy is not presumed to explain all anti-Semitism throughout history and across cultures (although it may indeed have been a major factor in many episodes). The model presented here presumes a modern Western context, especially an American context. As noted above, perceptions of disproportionate achievement stand out as a common thread in modern anti-Semitic attitudes, so envy looks to be a promising avenue of research. However, even if we find evidence that much anti-Semitism in the West is driven by envy, we would not necessarily expect this to hold in Middle Eastern countries, for example, where profound historical and geopolitical factors might be expected to be powerful. The goal of this research program is to help explain the anti-Semitism we see in the contemporary West.

Anti-Semitism

For present purposes, anti-Semitism is defined broadly as prejudice toward Jews. (*Prejudice* is used in the broadest sense, including explicit stereotypes and implicit processes.) Notably, and unlike well-researched racial prejudices, anti-Semitism often takes the form of ascribing (excessive or unfair) achievement, power, and greater status to Jews. For example, 14% of Americans think Jews “have too much power in the USA today”, 16% believe that Jewish businesspeople are “so shrewd, others don’t have a chance”, and 19% believe that Jews “control Wall Street” (ADL, 2011).

These sorts of achievement- or power-based stereotypes are robust extending through the past century. Katz and Braly (1932) report stereotypes of Jews as shrewd, ambitious, industrious, intelligent, sly, and “grasping”. Bettelheim and Janowitz (1950) report the most frequent stereotypes as “money is their god”, “they control everything”, “they use underhanded business methods”, and “they are clannish”. Both of these studies centered on American views. Allport (1954) reports a broader spectrum of stereotypes in Europe, where Jews are also associated with lechery, filth, and violence. Allport suggests that Europe did not have an equivalent to the American black population, and that Jews in a sense occupied the role that blacks did in America. This presumes a sociological or psychodynamic framework where people “need” to have an out-group to place in a particular category. Notably, anti-Semitism has been framed around a psychodynamic model where negative stereotypes are a projection of unacceptable inner strivings onto the stigmatized group (Bettelheim & Janowitz, 1950).

The core perception that Jews are high achievers is empirically true. Jews have won 115 times the number of Nobel prizes in the sciences that their proportion of the population would predict, and 55 times as many Nobel prizes in literature (Pease, 2009). 25% of American Jews earn an income greater than \$150,000, compared to 8% of the general US population (Pew, 2013). Mere endorsement of these descriptive facts does not qualify as anti-Semitism for present purposes, since there is nothing inherently *anti* or hostile in noting a group’s achievements. Rather, anti-Semitism is defined here by the *negative attributions* mentioned above, many of them focused on uncharitable *explanations* for Jewish achievements.

As Cohen et al. have noted (2009), there has been relatively sparse research in scientific psychology probing anti-Semitism or its causes. Their series of experiments serves as the most notable contemporary attempt to investigate anti-Semitism in

social psychology. Framing their hypotheses around Terror Management Theory, they found that mortality salience predicts anti-Semitism and anti-Israeli attitudes, especially in bogus pipeline conditions where participants were told that their true attitudes would be difficult to conceal. In this framework, mortality salience sparks anti-Semitism because it drives people to protect their worldviews (and Jews have a competing worldview.) The authors also found that mortality salience caused participants to endorse greater punishments for Israel than for other countries reported to have committed the same human rights violations. Mortality salience is known to drive a greater motivation to punish transgressors, and the differentially greater increase in endorsing punishments for Israel presumably stems from specific anti-Semitic prejudices.

This paper develops a different framework for understanding anti-Semitism – the compensatory processes of envy. As Jews are stereotyped as being powerful and outpacing other groups, this presents the upward social comparison that can threaten self-esteem, and the standing of one’s own group. This process resembles interpersonal envy, particularly the profile of malicious envy (van de Ven, Zeelenberg, & Pieters, 2009). Cohen et al. (2009) did not probe individual differences in their package of studies, a dimension that is central for the purposes of this program, in that certain traits should predict a propensity to the kind of social comparison-based self-esteem threat that would arise when confronted with an out-group’s disproportionate achievements. Moreover, the approach laid out here seeks to differentiate anti-Semitic beliefs into specific types and mechanisms, whereas the prior research has indexed anti-Semitic scales with no reference to specific subsets or types.

Envy

Envy has been defined as an unpleasant emotional reaction to another's superior achievement, resources, or qualities (Smith & Kim, 2007). At its core, envy rests on an unfavorable, upward social comparison (van de Ven, Zeelenberg, & Pieters, 2009). It appears to be a culturally universal capacity (Schoeck, 1969), and seems to occupy a familiar role in everyday discourse. While some research has explored the characteristics of envy, little is known about the factors that drive it. We can expand the interpersonal structure of envy to a group level, where the disparities are not between individuals but between one's in-group and an out-group. Given that anti-Semitism often centers on beliefs about Jewish high achievements, it presents the upward social comparison structure that drives envy.

Before addressing the intergroup dynamics of anti-Semitism, we must review the interpersonal framework for envy. The present theoretical account of envy rests on three core features. First, the social comparison between Person A (envious person) and Person B (envied target) must be *unfavorable* to Person A. That is, Person A must have less than Person B in the relevant domain. Second, the domain or object must be *relevant* to Person A. That is, they must desire or value it, or otherwise care about the gap between themselves and Person B. A man who has no wish to become a musician is unlikely to envy a piano grand master's skill. Consistent with this feature, Parrott & Smith (1993) found that longing, or desiring what the target has, is characteristic of envy. Finally, envy is an *unpleasant* or painful emotional state. More specifically, envy often includes feelings of inferiority, resentment, and hostility (Smith & Kim, 2007), and is thus not to be confused for admiration.

Drawing on the presence in the Dutch vocabulary of two distinct words for envy, van de Ven, Zeelenberg, and Pieters (2009) distinguished the features of *malicious* and *benign* envy. Based on cluster analyses of participants' open-ended recalled experiences of envy as such, their findings suggest that both subtypes of envy

rest on an explicit social comparison (unlike admiration or resentment). Where they differ, however, is that malicious envy is uniquely characterized by an assessment of injustice/unfairness and by low perceived control, whereas benign envy is characterized by assessments of fairness and higher perceived control (Smith et al., 1994; van de Ven et al., 2009). This is consistent with Heider's (1958) account of improving the self or "failing" the other.

Perceptions of fairness in the context of resource allocation are well anchored in our species, and in fact predate us. Notably, Brosnan and de Waal (2003) find that capuchin monkeys and chimpanzees (Brosnan, 2006) reject unequal rewards in laboratory experiments. If a monkey witnesses another monkey receiving a better payment (grapes vs. cucumber) for the same effort, it is more likely to refuse to cooperate in subsequent trials than a monkey who received an equal payment. Moreover, such participants are more likely to *refuse* the unequal rewards – that is, they are willing to forfeit the food payment altogether, even though they readily consume this food in all other circumstances. Consistent with this analysis, other researchers have also found that perceived unfairness predicts feelings of envy accompanied by hostility (Cohen-Charash & Mueller, 2007; van de Ven, Zeelenberg, & Pieters, 2009).

When presented with the fact of another's greater resources, the fairness of the arrangement has logical implications for an adaptive response. If the inequity is perceived as unfair, one's own strategies, qualities, and identity are not at issue. Redoubling one's efforts would not change the unfairness of the inequity, which might be entirely out of one's control. In this case, hostile or aggressive actions toward the target may be more effective than self-improvement at balancing resources. In studies across three Western countries, van de Ven et al (2009) found that benign envy was associated with a "moving up" motivation, aimed at self-

improvement, and malicious envy with a “pulling down” motivation, aimed at lowering the target’s position. Those who experienced benign envy were more likely to want to be near the other and to try harder to achieve their own goals, whereas those experiencing malicious envy were more likely to want to harm or degrade the other.

Although benign envy is clearly a more prosocial response to resource inequity than malicious envy, van de Ven et al (2009) find that benign envy is still a *negative* emotion, as participants reported feeling unpleasant and frustrated whether they experienced benign or malicious envy. Thus, benign envy is not to be confused with admiration, a positive emotion.

Self-Esteem

Individuals with fragile self-esteem are preoccupied with their achievements and how those achievements stack up to the expectations of others and oneself (Deci & Ryan, 1995). Unfavorable social comparisons are especially threatening to those with fragile self-esteem (Wood, et al., 1994). Paradise and Kernis (1999) found that women with highly contingent self-esteem were angrier in response to an insulting evaluation. Additionally, they were more likely to want to retaliate against and hurt the insulter. There is also evidence that negative feedback is more broadly threatening to the self when self-esteem is fragile. Schneider and Turkat (1975) found that people high in defensive self-esteem responded to negative feedback by enhancing their self-presentation beyond the scope of the feedback.

Fragile self-esteem has much in common with narcissism, which is further characterized by grandiosity and entitlement (Brown, Budzek, & Tamborski, 2009), and aggressive reactions to criticism and unfavorable social comparisons (Horton & Sedikides, 2009). Negative feedback is more threatening to the self-worth of

narcissistic individuals (Morf & Rhodewalt, 2001). The contingent nature of feelings of self-worth is consistent with the aforementioned findings on fragile self-esteem. Moreover, narcissism has several components, including Leadership/Authority, Superiority/Arrogance, Self-Absorption/Self-Admiration, and Exploitation/Entitlement. Rhodewalt and Morf (1995) report that the latter two in particular correlate with hostility.

Since malicious envy is characterized by hostility toward the target, those with fragile self-esteem should be more prone to malicious envy than those with secure self-esteem. The fragility of narcissism should also find the reality of a better-off or more talented person to be more threatening to the self. Indeed, Duarte (in preparation) found that individuals higher in narcissism are more prone to malicious envy than low-narcissism individuals. As noted earlier, malicious envy is also characterized by appraisals of unfairness and low perceived control. The latter is theoretically similar to Ryff's (1989) *environmental mastery*. Ryff found that those high in self-esteem were high in environmental mastery. Using Ryff's (1989) measure of psychological well-being, Paradise and Kernis (2002) found that high *stable* self-esteem individuals were higher in environmental mastery and autonomy than those with unstable – but still high – self-esteem. Therefore, when individuals with secure self-esteem do experience envy, they may retain a greater sense of control or efficacy. If so, they should tend to experience benign, rather than malicious, envy.

Intergroup Extrapolations

Since interpersonal envy is structured as an individual response to another individual's greater standing or achievements, intergroup envy can be framed as an individual group member's response to out-group's greater standing or achievement (Fisher & Wakefield, 1998). Crucially, this conception rests on the individual being a member of a group – in other words, the individual must *view* themselves as being a

member of a group. Some people do not identify with their racial-ethnic in-group (Oyserman, Kimmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003), and in such cases we would expect less sensitivity to an out-group's disproportionate achievements. There is considerable research on the effect of upward and downward social comparisons across groups. For example, an upward comparison to an out-group member yields lower state self-esteem than a downward comparison, whereas an upward comparison to an in-group member has the opposite effect (Blanton, Crocker, & Miller, 2000). Notably, in this case the comparison domain was an intelligence test, the participants were African-American females, and the out-group members were White females. In an apparent contradiction of the above finding, a study employing male participants (presumably White, for the most part) found that upward comparisons with (lab-induced) out-group members were much less relevant to participants' self-esteem than upward comparisons with in-group members (Major, Sciacchitano, & Crocker, 1993).

In the Blanton, Crocker, and Miller study (2000), the participants were members of a stigmatized group (African-Americans), and the comparison centered on a stigmatized domain (intelligence). The more positive response to an upward comparison with another African-American woman was taken to be the result of an affiliative and group-validating motive (in that a group member defied the stereotype of lower black intelligence). In the Major, Sciacchitano, and Crocker study (1993), the participants were not members of a stigmatized group, their group affiliation was created in the experiment by a sham personality test ("X-Types and Z-Types"), and the comparison centered on intelligence as well, but more narrowly (verbal-spatial ability). The negative response to an upward comparison with a similar or in-group other was presumably driven by the effect of perceived similarity and therefore an

implied shared standard for ability – if a member of your group can do it, so should you.

Where anti-Semitism is concerned, the above findings are challenging. Jews achieve more than non-Jewish Americans. In general, White Americans are not a stigmatized group where achievement is concerned. However, anti-Semitic beliefs often center on dimensions where non-Jewish White Americans fall short of Jewish Americans. Also, anti-Semitic beliefs describe the aggregate achievements or advantages of a *group* – unlike the typical research on intergroup effects on self-esteem, the upward comparison here is against a group as a whole (Jews), not an individual member of that out-group. Thus, it is not a personal comparison, and the extent to which a person's self-esteem is contingent on their group's standing should bear heavily on the subsequent processes. In this respect, a strong group identity which is based on perceptions of group standing and achievements will be threatened when confronting the greater achievements of another group, much as an individual with fragile self-esteem would be threatened by negative feedback or constructive criticism.

Drawing from the above-mentioned findings, we should expect that when Jewish high achievement is salient, non-Jewish Americans' self-esteem will be threatened to the extent that their self-esteem is contingent on their group's standing, or when their self-esteem is contingent on achievements in the relevant domains (of Jewish overachievement). Here we can draw on an extensive body of research on contingencies of self-esteem. As reviewed by Crocker and Knight (2005), self-esteem can be contingent on any of a plethora of life domains: academic achievement, family support, appearance, God's love, and so forth. For those college students whose self-esteem is contingent on their academic achievements, self-esteem increases and decreases in response to their academic successes and failures,

respectively. Crocker and Knight also note that failures in a domain relevant to self-esteem can motivate performance in that domain, or conversely, drive individuals to disengage from that domain, weakening its link to their self-esteem. This resembles the benign vs. malicious envy split, particularly the link between benign envy and achievement motivation.

To the extent non-Jewish Americans' self-esteem is contingent on the standing of their in-group relative to other groups, or on relevant achievement domains (e.g. income, intellectual contributions, etc.), their self-esteem should be threatened when Jews' greater achievements are salient, and processes of malicious envy will ensue. At this point, there are several strategies for dealing with this self-esteem threat. Research on threats to self-esteem show that individuals will make excuses for their failure, appraise the outcome as unfair, blame others, and disengage from the domain (rating it less important to them) (Crocker and Wolfe, 2001). The unfairness appraisal and blame/hostility toward others describes the malicious envy profile uncovered by van de Ven, Zeelenberg, and Pieters (2009).

Drawing from this framework, anti-Semitism is very plausibly an instance – or recurrent instance – of envy, and that it may rest on a compensatory mechanism geared around the management of self-esteem. Thus, this is a compensatory model, psychodynamic in the same sense as the Meaning Maintenance Model (Heine, Proulx, & Vohs, 2006), where a threat to meaning causes people to compensate by asserting more meaning in life. A more complex example is the sublimation mechanism isolated by Kim, Zeppenfeld, and Cohen (2013), which rests on another apparent defense mechanism, where certain Protestant participants were more creative if they were confronted with forbidden sexual desires or feelings. The stimuli that spark anti-Semitism in the present model (reports of Jewish achievement) are not expected to produce the sort of guilt that devoutly religious people might have

over forbidden sexual desires – rather, salience of Jewish achievement should constitute feedback, something of a sociometer (Leary, Tambor, Terdal, & Downs, 1995) indicating that another, very small group is substantially outpacing one’s own.

In fact, a self-esteem threat manifesting as anti-Semitism has already been demonstrated. Fein and Spencer (1997) found that people who are given negative feedback rate Jewish individuals unfavorably relative to controls (Italians) in a purported job qualification rating task. In fact, rating such a target unfavorably yielded higher levels of self-esteem after doing so (for those who had initially been given negative feedback). This clearly highlights the compensatory function that negative stereotyping can serve. Notably, all three of these models – the Meaning Maintenance Model, sublimation, and the restoration of self-esteem by dishing negative feedback after receiving it – can be described as mechanisms where negative feelings in the participant are channeled into strategies that reduce those negative feelings and restore self-esteem.

The present model differs from Fein and Spencer (1997) in that it centers on the salience of Jewish achievements, not negative feedback directed toward the participant. There is a structural similarity between the two: one *elevates* another group (or reminds a person of their already elevated status), and the other *lowers* one’s own standing. In both cases, a disparity or divergence is created, one that the individual is motivated to reduce. Also, while the present model is placed in the context of compensatory and psychodynamic models, it does not rule out any functional value of envy, even malicious envy, and the underlying processes of self-esteem management. For example, self-esteem has been described as a functional sociometer – an index of one’s social standing and social support (Leary & Baumeister, 2000).

Maintaining one's self-esteem might serve to maintain good standing in one's in-group, especially when the maintenance method serves to diminish the superior achievements of an out-group. Moreover, self-esteem management is likely to improve mood, which has tangible and broad benefits (Fredrickson, Mancuso, Branigan, & Tugade, 2000). And as noted earlier, malicious envy might be functional in zero-sum, high scarcity environments, such as those that might have prevailed in the ancestral era. If an individual has notably more resources, food, etc. than others in a tribal setting (say one where all hunting was done in groups), it might have reliably signaled malfeasance or cheating. Thus, a malicious envy mechanism could plausibly rest on underlying egalitarian intuitions, although this functional apparatus would not extend well to a modern positive-sum globalized market economy. In any case, moral intuitions that fairness requires equal distribution of resources – as opposed to a proportionality/meritocratic view of fairness (Graham et al., 2013) – are likely to amplify the effect of Jewish achievement on anti-Semitic beliefs. This is especially likely given that an appraisal of unfairness is central to malicious envy (van de Ven et al., 2009), and one group being much better off than other groups would be perceived as inherently unfair given an equity view of fairness.

Types of anti-Semitism

From these findings, and the research on malicious and benign envy, we can make the following predictions concerning anti-Semitism. When Jewish achievement is salient, individuals whose self-esteem is contingent on the relevant factors will be more likely to endorse anti-Semitic stereotypes in the following categories:

- Stereotypes that *undercut* Jewish achievements. That is, beliefs that attribute Jewish achievements to unfair practices or strategies: e.g.

behind-the-scenes conspiracies, conniving, manipulative business practices, and so forth.

- Stereotypes that *offset* Jewish achievements. That is, beliefs that attribute negative traits to Jews, but are unrelated to their achievements. For example, a stereotype that Jews are short or unattractive would not directly undercut their achievements, but would serve to offset those achievements by balancing them against negative traits. Also, willingness to embrace claims of Jewish biological difference, unique (fictional) diseases, and so forth would be examples of offsetting stereotypes.

Both of these stereotype categories match malicious envy processes in that they are prejudicial towards Jews and serve to level Jews *down* in the manner described by van de Ven (2009). Characterizing another's achievements as unfair undercuts the achievement – it makes the achievement less legitimate, less deserved, since it was gotten unfairly. Undercutting the achievement reduces the disparity between oneself and the target – instead of a comparison between one's legitimate achievements and another's legitimate achievements, it becomes a comparison between one's legitimate achievements and another's ill-gotten achievements, making the comparison less valid, and therefore less threatening to one's self-esteem.

I predict that a number of anti-Semitic beliefs are driven by this same process. For example, consider the stereotype of Jews as conniving or manipulative in their business dealings. Such tactics would represent an unfair advantage, helping to explain the gap between Jewish achievements and those of one's own group without having to focus the spotlight on one's own group. Confronted with the reality of Jewish achievements, embracing beliefs that undermine or invalidate those

achievements is a sensible strategy against the threat to group standing or self-esteem.

Some anti-Semitic stereotypes are structured differently. For example, negative stereotypes about Jewish appearance and facial features (Wilson, 1996). Notable achievements in business or scholarly domains cannot be undercut or de-legitimized by a hooked nose – that is, a hooked nose is not a plausible reason for success, unlike conniving behaviors or cheating. Rather, we view such stereotypes as attempts to *offset* Jewish achievements. This is posed as a compensatory process, like the undercutting stereotypes, but works in a different way. If we imagine Jewish achievements as a weight on one side of a scale, undercutting those achievements would be equivalent to removing some of the weight, since ill-gotten achievements are not legitimate achievements, much like a NCAA football championship can be vacated years after the fact because of newly discovered violations of NCAA recruiting rules. By contrast, an offsetting stereotype is equivalent to adding weights to the other side of the scale, offsetting the weight of Jewish achievements with various unrelated flaws (14% of Americans agreed with the item “Jews have lots of irritating faults” in the ADL survey). If the salience of greater Jewish achievement translates into a threatening implicit belief that “Jews are better than us/me”, finding unrelated flaws in Jews would help weaken this threatening belief, much like an immature teen might respond to defeat in some dimension by saying “But you’re fat anyway!” The negative attribution has nothing directly to do with the achievements or their legitimacy, but simply serves as a compensatory subtraction from the other’s score, so to speak, and thus narrows the gap between oneself and the other.

Hypotheses

Our core framing hypothesis is: Priming Jews' disproportionate success will increase endorsement of anti-Semitic stereotypes (H1). Moreover, this effect will be partly mediated by envy (H2). That is, we expect that priming Jewish success will induce people to feel envy and then they more strongly they will endorse anti-Semitic stereotypes. Note that there is room here for both a direct effect and a mediated effect – i.e. partial mediation. It may be the case that salience of Jews' achievements will drive some people to endorse anti-Semitic stereotypes without feeling envy *per se*. The mechanism in that case is unclear, but possibilities include a dispositional negative reaction toward others' achievements, or an appraisal that the disparity is unjust, without feeling any particular envy or desire to have what Jews' have.

Given the earlier discussion of how low self-esteem and high narcissism predict malicious envy, we can make some further predictions. The effect of the salience of Jewish achievements on envy will be moderated by fragile self-esteem (H3). Note that narcissism may be a suitable proxy measure of fragile self-esteem. Therefore, this is a *moderated mediation* model (Muller, Judd, & Yzerbyt, 2005), and is illustrated in Figure 1.

Moral Intuitions

Since anti-Semitism appears to involve appraisals of unfairness and in-group identification, it is worth exploring individual differences in moral intuitions as potential moderators. Moral foundations theory includes *in-group loyalty* and *equity-fairness* as two of six foundations (Graham, Haidt, & Nosek, 2009). By this account, there are two diverging conceptions of what fairness means – *equity*, or equality of outcomes, or *proportionality*, where variance in outcomes is not

problematic so long as they are commensurate with effort or ability. Thus, if one small group is much more successful than everyone else, this should be troubling for those who take an equity view of fairness, but is less likely to trouble those who take a proportionality view. The equity view prevails among political liberals (in the modern American usage, not the European usage, which describes a pro-market orientation), while the proportionality view prevails among conservatives and libertarians (and European liberals). The in-group loyalty dimension is also likely to matter, since anti-Semitism is a prejudice against a group, and a rather small group at that.

Our framework here assumes that our modal participants are non-Jewish white Americans. The perspectives and processes of various minority group members – blacks, Latinos, Native Americans, etc. – may differ from those of typical white Americans, but we have no predictions for specific minority groups at this stage of the research. In any case, whether Jewish-Americans are viewed as part one's in-group – say, the group America/Americans – is likely to bear on how Americans react to Jews' extraordinary achievements. Moreover, the salience and relevance of in-group / out-group distinctions in general is an individual difference most notably defined by the moral foundation of *in-group loyalty* (Graham et al., 2012). This leads to a double-moderation hypothesis (H4): The effect of the salience of Jews' disproportionate achievements on endorsement of anti-Semitic views will be moderated by in-group loyalty intuitions – the higher a person's in-group loyalty, the more they will endorse anti-Semitic views. However, the effect of in-group loyalty intuitions will itself be moderated by whether Jews are viewed as part of the in-group, or an out-group – only when Jews are viewed as an out-group will in-group loyalty moderate the main effect. See Figure 3 for an illustration of the double-moderation hypothesis, setting aside envy effects for illustration purposes.

In cases where in-group loyalty and the exclusion of Jews from the in-group drive greater endorsement of anti-Semitic views, not all stereotypes need be endorsed equally. Since Jews are viewed as an out-group in this case, participants should be more likely to endorse *offsetting* stereotypes over *undercutting* stereotypes (H5). The offsetting stereotypes highlight Jews' inherent flaws or defects, rather than their strategies. For example, while an undercutting stereotype might attribute Jewish success to cheating, an offsetting stereotype might refer to large noses or irritating personalities. Inherent traits of this sort highlight their status as an out-group.

There are a number of context-driven groups that Americans may identify as their in-group, including America itself (Graham et al., 2009), Christians, or political orientations like conservatives, liberals, or libertarians (Crawford, 2012). Different group identities have different implications for the inclusion or exclusion of Jews in the group. For example, if Christians' are primed with reflections on their Christian faith, Jews are more likely to be viewed as an out-group. By default, most conservatives might view Jewish-Americans as fellow Americans, but perhaps this would change when primed with thoughts of Israel or the "Israel lobby" in DC, or given a report that number of Jews serving in the US military is extremely low in proportion to their population. This suggests ways in which the status of Jews as part of the in-group can be experimentally manipulated, providing a fuller test of the above predictions (H4 and H5).

For people high in equity-fairness concerns, the in-group/out-group framing should be less powerful. Instead, the apparent inequality represented by Jewish achievements should be more concerning. H6: The effect of salience of Jews' overachievement on endorsement of anti-Semitic stereotypes will be moderated by equity-fairness intuitions – the greater a person's equity-fairness intuitions, the more they will endorse anti-Semitic views. Moreover, equity-fairness intuitions should

drive more endorsement of *undercutting* stereotypes in particular, relative to offsetting stereotypes. This prediction is the inverse of H5 above, where in-group loyalty is expected to differentially motivate endorsement of offsetting stereotypes. Here the issue is the fact that Jews are disproportionately successful – the manifest inequality of the situation. People high in equity-based fairness concerns are unlikely to be high in in-group loyalty, since the former is associated with liberals and the latter with conservatives. They are not likely to be motivated to accentuate Jewish-Americans as an out-group. Rather they are more likely to be concerned about the inequality of outcomes, to see it as unfair, and to embrace explanations and stereotypes that fit with an unfairness narrative. For example, attributions of cheating and of too much power would suit this perspective – the undercutting stereotypes.

We do not expect that each moral intuition will *only* drive one type of anti-Semitic stereotypes – only that one will be preferred more than the other. The intuitions may moderate the effects of salience of Jewish achievement on anti-Semitic views through several possible mechanisms. For our purposes, we do not make specific predictions about those paths at this stage. These moral foundations are included in the research because people’s views regarding economic equality and in-group loyalty are logically implicated in how they view a small minority group that stands out for its economic and broader success.

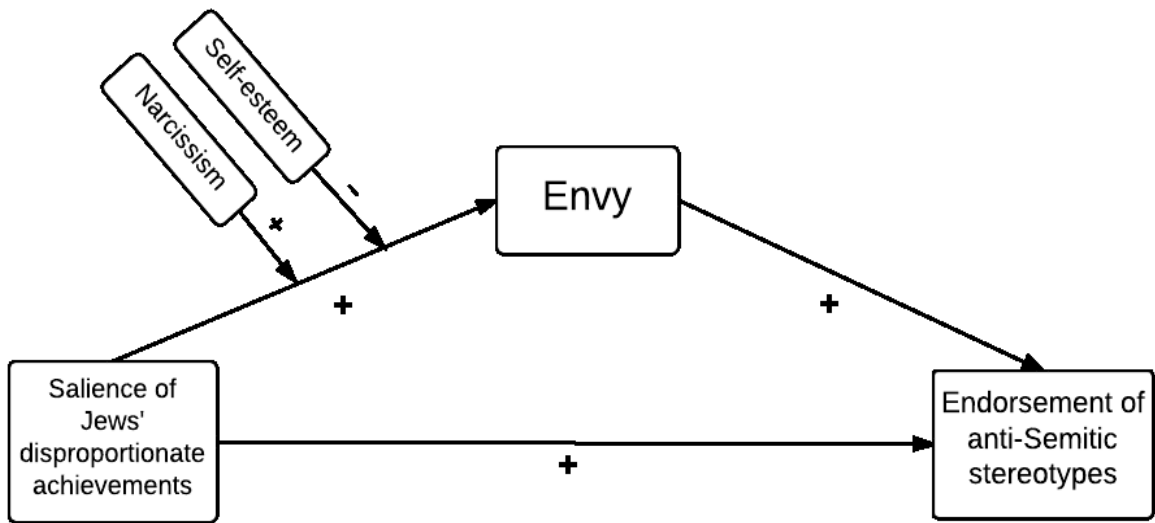


Figure 1. Mediated moderation model of the effects of the salience of Jewish achievement on endorsement of anti-Semitic stereotypes.

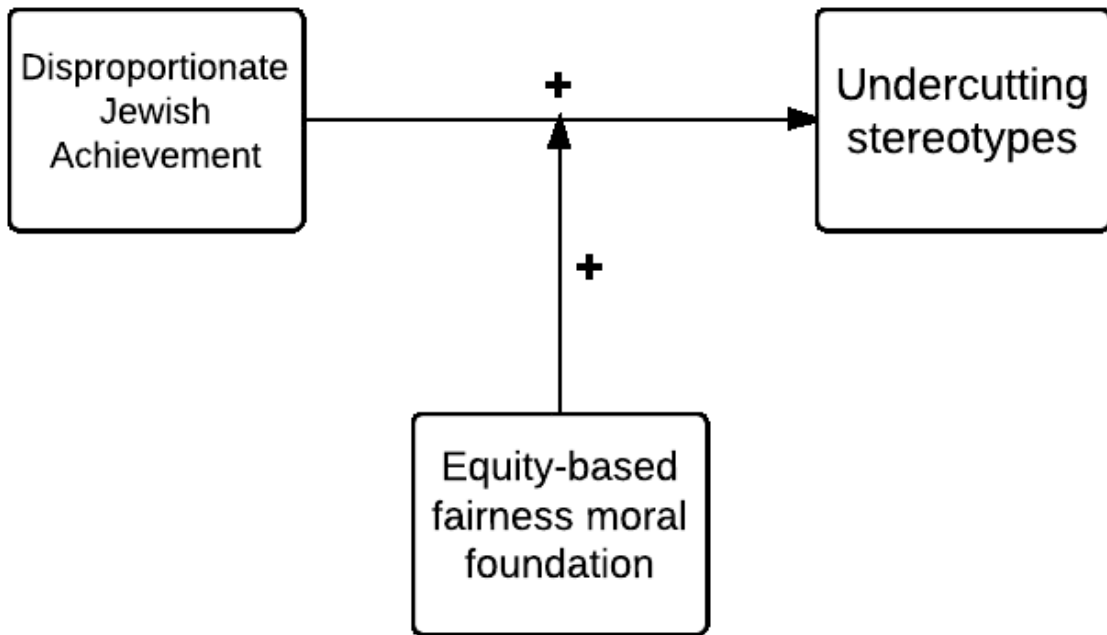


Figure 2. Equity-fairness moderation model.

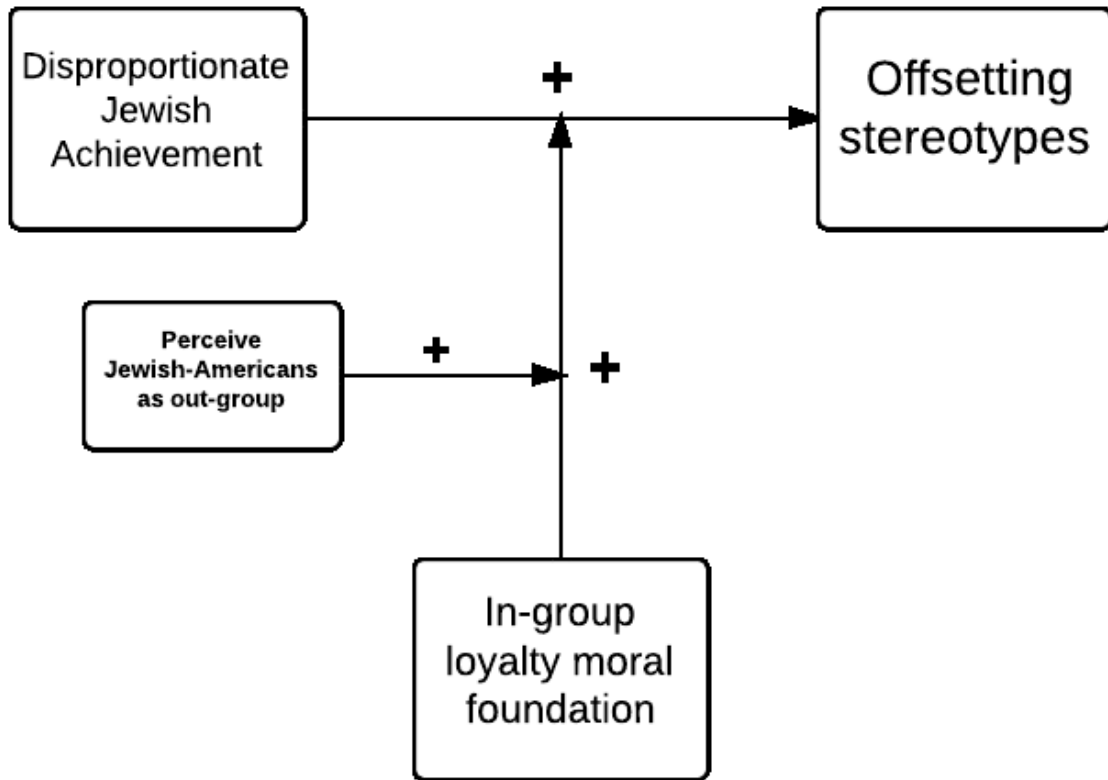


Figure 3. Double-moderation model of in-group loyalty and Jews' status as in-group or out-group.

Other Factors

Size of the gap

There are several other plausible factors that could drive or influence anti-Semitic stereotype endorsement. The present research will not investigate all of them, but we outline them here to help frame follow-up research. The perceived size of the achievement gap between Jews and one's own group should trigger compensatory processes. These processes would generate or endorse purported negative attributes of Jews that would compensate for their greater achievement, and the size of the reported gap between Jewish achievement and that of one's own group should predict anti-Semitic beliefs. Relatedly, Cohen et al (2009) found that mortality salience caused Israel to "loom larger" in people's minds – participants in that condition overestimated Israel's geographic size. So we are in essence predicting an effect in the reverse direction: The larger the gap looms, the greater the endorsement of anti-Semitic beliefs – e.g. reading that Jews earn 30% more than one's own group should be more powerful than reading that Jews earn 10% more.

Religion

The work on mortality salience by Cohen et al (2009) suggested that anti-Semitism was in part driven by worldview defense. The extent to which Jews strain one's worldview should be influenced by one's religion. Since Judaism most directly contests Christianity, Christian religiosity should predict cognitive dissonance and worldview defense. Jews contest the central premise of Christianity – that Jesus was

the Messiah. Jews are closest to Christianity in that the Christian narrative started with Jews and branched off with Jesus' appearance and gospel. Jews witnessed the same events that would-be Christians did. They were there, at the scene, and they rejected the notion that Jesus was the Messiah. This should spark more dissonance for Christians than the beliefs of Muslims or Hindus, for example, since those faiths did not co-witness Jesus, and having done so, reject him. That Jews are extraordinarily successful should only add to the dissonance – why should people who rejected the Messiah be so successful, more successful than Christians? It is plausible that people implicitly assume that having correct metaphysical beliefs should bear favorably on life outcomes, so the Jewish/Christian disparity will be a source of dissonance for Christians.

This might also be explained in terms of balance theory, where interpersonal attraction is predicted by congruence of attitudes toward some object (Broxton, 1963; Heider, 1958). Here the “object” is the true nature of Jesus, the central premise of the Christian faith. For a Christian, being wrong about Jesus would be catastrophic, since it would invalidate their entire faith. Jews may be constant reminders – by virtue of their mere existence – that there are quite a few people in the world who think Christians have made a terrible mistake. Moreover, these Jesus-spurners are reportedly more intelligent than non-Jewish whites, and appear to be considerably more successful, both of which may serve as discomfoting cues of competence or wisdom. The core mechanisms of self-esteem threat are the same in this case, but a new contingency arises, one which Crocker (2005) identified as common. Thus, the extent to which a person's self-esteem is contingent on their identity as Christians should predict greater self-esteem threat when considering Jews' greater achievements, and greater endorsement of anti-Semitic stereotypes (H7). This is not an envy process per se, but simply a dissonance and self-esteem management

mechanism. However, it could dovetail with the other stipulated predictors and exacerbate feelings of envy.

With Christians in particular, there is another specific issue that might explain significant variance in anti-Semitic views – the narrative that Jews killed Jesus, or that Jews were complicit in his death. This research program will include a hopefully subtle measure of this belief, as elaborated in the methods section below.

Contrast groups

Jews are not the only group stereotyped as high achievers. In American culture, beliefs about Asian academic and financial excellence are widespread (Lin, Kwan, Cheung, & Fiske, 2005). The core mechanisms for anti-Asian prejudice should be similar to those postulated for anti-Semitism and Asians should be subject to the same undercutting and offsetting stereotypes of anti-Semitism. Indeed, there is empirical support for this, as stereotypes of Asian high competence/achievement correlate with negative attributions regarding their social skills (Lin et al., 2005), which is consistent with the offsetting mechanism – Asian achievements in one domain are countered and *offset* by presumed deficits in another domain.

As mentioned earlier, Major, Sciacchitano, and Crocker (1993) found that perceived similarity drove a more negative response to upward comparisons, including lower self-esteem. Assuming white American participants, this suggests that anti-Semitic stereotyping will be stronger than anti-Asian stereotyping. Jews are racialized as white, and have a historically joined religious faith. Asians are not racialized as white and do not presumptively operate within a Judeo-Christian framework. Jewish similarity, from the standpoint of a white American Christian, might imply a shared standard of achievement. Moreover, as discussed above, there may be significant dissonance effects for devout Christians when reminded of the fact

that a large number of people explicitly dismiss Christ as a Messiah, and have carried on with such a worldview for the last 2,000 years. This dissonance effect would not likely exist when contemplating Asian-American achievements, given their non-Abrahamic background.

One factor that may spark a similar dissonance mechanism for Asian achievements would be *distance climbed* – that is, when Asian-Americans are reported to have started in a very disadvantaged place, and yet ultimately out-pace white Americans, the latter should be more motivated to undercut and offset Asian achievements. For example, a story of how many Vietnamese immigrants arrived as refugees in the 1970s, and worked in shrimp processing plants on the Louisiana coast or in nail salons, only to outstrip white American average income in one generation, could spark a dissonance response. In this case, the dissonance would be rooted in the fact that they live in the same country as white Americans, and started in a much lower position with all the disadvantages of culture, language, racism, adapting to a new country and so forth. That they ultimately out-paced white Americans might beg certain uncomfortable questions about why white Americans have not been as successful, given their much more favorable context.

Priming in-group identification and out-group salience

As noted above, a positive stereotype of an out-group's disproportionate achievement should strain one's perception of in-group achievements. In-group identification is an individual difference that can be measured as such. However, it is also subject to priming, and such priming should predict anti-Semitic beliefs. For example, priming a generalized American identity with the American flag may strengthen the in-group identification of white Americans, and drive a greater

propensity to see Jews as an out-group. If so, this should result in greater endorsement of anti-Semitic stereotypes through the same core processes hypothesized above. Likewise, Jews-as-outgroup could be explicitly primed by showing images of the Israeli flag or photos of Hasidic Jews.

Given the moral foundations research discussed above, conservatives will likely be more responsive to in-group and out-group priming. Priming Israel may be effective for leftists as a negative prime (one that leads to more anti-Semitism), but this would more likely be due to concrete political views with respect to Israel's policies toward Palestinians, not to in-group/out-group priming per se.

Summary

This model lays out a framework for understanding anti-Semitism as an expression of malicious envy. In particular, malicious envy is characterized by hostility toward the envied other rather than an effortful achievement motivation (van de Ven et al., 2009). Such processes are well-documented outcomes of self-esteem threat, and this model predicts that anti-Semitism is partly driven by the salience of disproportionate Jewish achievement and the ensuing intergroup social comparison.

Perceptions of unfairness are key features of malicious envy (van de Ven et al., 2009), and of many anti-Semitic stereotypes. Leveraging this insight, this framework makes different predictions for anti-Semitic processes based on the moral intuitions people have about fairness and inequality. Anti-Semitism might also involve perceptions of Jews as fundamentally or biologically different, and the extent to which people see Jews as an out-group is likely to shape the sorts of anti-Semitic stereotypes they embrace when Jewish achievement is salient. In general, people vary

in these underlying moral intuitions about fairness, equality, and in-group loyalty and such intuitions are likely moderators of core envy mechanisms.

Prior work (Cohen et al., 2009) has suggested “worldview threat” as a cause of anti-Semitism, and looked specifically at attitudes toward Israel. The framework in this paper highlights the issue of Jewish overachievement, and how people may attempt to manage the implications of such achievements for their own group or their self-esteem. It also examines a broad range of anti-Semitic beliefs – beliefs about Jewish success, presumed tactics or techniques Jews use to succeed, the extent of Jewish power, Jewish biological differences, etc. – and how those beliefs flow from reactions to Jewish achievements. The research anticipated by this paper will attempt to manipulate perceptions of fairness and group inclusion and track how those factors shape the specific sorts of stereotypes people embrace.

Study 1

Method

Participants

263 participants were recruited from Amazon’s Mechanical Turk (Mturk) system, of whom 56% were female. Mean age was 38, and all participants were adult residents of the United States. Participants were paid a nominal sum (\$0.50 - \$1.00). Jews were removed from the sample.

Materials

Self-Esteem Scale (Rosenberg, 1965). This 10-item scale is a well-established and validated measure of global self-esteem (Blascovich & Tomaka, 1991).

Participants are asked to respond according to how they feel about themselves most of the time. Our version employs a 5-point Likert-type scale, ranging from 0 (*Disagree Strongly*) to 4 (*Agree Strongly*). Scores are computed as the mean of all item scores (after accounting for reverse-coded items). It demonstrated high reliability in this sample, Cronbach $\alpha = .89$.

Envy measures. Envy was measured after the induction with two self-report items. The first item was one of seven emotion words that participants rated according to their current state: happy, worried, frustrated, excited, envious, angry, and energetic (each word was rated separately.) The second item, presented twelve items later, asked: “Did reading about your assigned group’s achievements make you feel envious at all?” Both items featured the same five-point response scale: (1) *Not at all*, (2) *a little bit*, (3) *somewhat*, (4) *very much*, (5) *extremely*. (Numbers were not displayed to participants, just the wording.) Unless otherwise noted, post-induction envy is computed as the mean of the two item scores. Cronbach $\alpha = .73$ and $r = .59$, $p < .001$.

Moral Foundations Scale (Graham, Haidt, & Nosek, 2008). This 30-item scale is a well-established and validated measure of moral foundational intuitions. Only two of the five foundations were used here: fairness and in-group loyalty, for a total of twelve items. Items include “I am proud of my country’s history” and “I think it’s morally wrong that rich children inherit a lot of money while poor children inherit nothing.” Each item presents a 6-point scale of agreement/disagreement.

Narcissism Personality Inventory – 16 (Ames, Rose, & Anderson, 2006). This is a compact measure of narcissism, employing 16 paired-choice items. Sample pair: “I find it easy to manipulate people” (narcissistic) and “I don’t like it when I find myself manipulating people” (non-narcissistic). Narcissistic responses were scored as

2, and non-narcissistic responses were coded as 1. Scores are computed as the mean item score. It demonstrates fair reliability in this sample at $\alpha = .71$.

State Self-Esteem Scale (Heatherton & Polivy, 1991). This 20-item scale measures three subsidiary factors of state self-esteem: performance, appearance, and achievement. Sample items include “I feel good about myself” (appearance factor), and “I feel confident about my abilities” (performance factor). Participants respond on a 1 – 5 agreement scale, from 1 – *Not At All* to 5 – *Extremely*. Cronbach $\alpha = .892$.

Americanness Scale. This is three-item scale constructed for this study. It lists the major ethnic groups in the United States, including Jewish-Americans, and asks the participant to rank them in order of how American they are. A second item asks for a ranking of groups in order of their loyalty to the United States, and a third question asks for a ranking in order of how much they have contributed to the United States.

Apology Scale. This is a three-item scale constructed for this study. It explains that Jews are involved in a number of historical issues, and asks: whether the Catholic Church should apologize for its feeble efforts to assist Jews during the Holocaust; whether Germany should formally apologize to Jews for the Holocaust; and whether Jewish rabbinical leadership should apologize for the way Jesus Christ was treated by the Jewish authorities of his day. Each item presents a 7-point agreement/disagreement scale. (We are aware that both the Catholic Church and the German government have in fact already issued such apologies. However, we don't think that will undermine our purposes here, which is to determine whether Christians blame Jews for Christ's treatment.)

Procedure

Participants were directed to a study website hosted by ASU's Qualtrics system. After consenting to participate, participants completed a demographic questionnaire, the Moral Foundations Subscale, Rosenberg Self-Esteem Scale, and the NPI-16 narcissism scale. Next, participants were given the following instructions:

Different nations have different statistics in terms of their average incomes, achievements, birth rates, representation in fields like science, politics, technology, medicine, etc. – and all sorts of other things.

Likewise, different ethnic groups within one nation also have different statistics and averages on those same factors.

What we are going to do is give you some basic statistics about different groups – actual data from research – and then we'll ask for your opinions on what you think the causes of those statistical differences are, and how you think those statistics will change in the future, if at all.

For example, you'll see something like this:

Percent of Catholics in each group:

1. Mexican-Americans: 75%
2. Irish-Americans: 60%
3. Italian-Americans: 58%

Then we'll want to know why you think a given group has a given statistical outcome. For example:

Mexican-Americans tend to be Catholic because Mexico was colonized by Spain, a Catholic country.

Disagree-----Agree

Mexican-Americans tend to be Catholic because they are very family-centered, and the Catholic Church is compatible with these values.

Disagree-----Agree

We want the collected opinions and insights of a large number of people on the causes of different statistical outcomes for different groups. You may have heard that “all knowledge is local”, and we’d like the collected knowledge of lots of people and their own experiences and insights, similar to the “crowdsourcing” tools like InTrade where people could predict elections and so forth.

For some groups, researchers already know the causes of some statistical differences – for example, we know the gene behind blacks’ greater rates of sickle cell anemia.

But we don’t know the answers to lots of other statistical differences. For example, no one seems to know why Asians have higher math SAT scores – no one has discovered a “math gene”, or isolated specific cultural factors (although there are some theories).

The questions we’ll ask here are those that are not well answered in the scientific literature. Maybe you – you and a bunch of other adults – have some answers.

Participants were then randomly assigned to one of four conditions: Jewish-American achievement, Asian-American achievement, Jewish-American culture, and a general American achievement condition with no ethnicity or subgroup identified.

In the Jewish achievement condition, participants were given a summary of various statistics about Jewish Americans and Jews in general. These statistics included:

- 1) The proportion of Nobel prizes in various fields awarded to Jews, contrasted with the proportion of Jews in the general population, and an estimate of the disproportionality (e.g. “Jews have won 50 times as many Nobel prizes in Physics as their proportion of the population would predict.”)
- 2) The average household income of Jewish Americans, non-Jewish white Americans, and America as a whole.
- 3) A listing of mean IQ scores by ethnic group, from highest to lowest, with Ashkenazi Jews listed first/highest.

Those in the Asian achievement condition read nearly identical report on Asian achievements, some of which was inaccurate in order to maintain greater experimental control (e.g. the Nobel statistics were the true statistics for Jews, but inaccurate for Asians.) Participants in the Jewish culture condition read about the differences between reform, conservative, and Orthodox Judaism, with no mention of achievements. Finally, those in the American Achievement condition read about America’s greater standard of living and per capita GDP, even compared to other developed countries. In this condition, no ethnic or racial groups are mentioned, and the comparisons are between nations.

After reading through the induction, participants completed a simple emotions scale, self-esteem items drawn from both Rosenberg and the State Self-Esteem Scale (Heatherton & Polivy, 1991), and several items gauging their life satisfaction and confidence.

Next, participants were presented with various stereotypes drawn from the ADL survey (2011), where they ranked each group from those most fitting the stereotype to those least fitting it. The groups included White Americans, African-Americans, Latino-Hispanic Americans, Jewish Americans, and Asian Americans. The stereotypes included statements like “They are more willing than others to use shady tactics to get what they want”, and “They have too much control and influence on Wall Street.”

Participants then completed the three-item Apology Scale. Finally, the participants completed the same emotion, self-esteem, and confidence scales mentioned above, which was followed by a debrief page.

Results

Characteristics of the sample

As noted above, the sample was drawn from Amazon’s Mturk system, and restricted to residents of the US. Self-reported Jews were removed from the data before analyses, as were participants who completed the study in less than three minutes. Additionally participants accessing the study from duplicate IP addresses were removed (The same IP address implies the same computer or at least the same home, and may indicate that a participant attempted the study twice, compromising random assignment and the validity of their responses. If a participant had the same IP address as another participant, all participants with the same IP were

removed.) After this data cleaning, 163 participants remained across the three groups that are the focus of this study: Jewish Achievement, Jewish Culture/Control, and American Achievement (additional conditions were included, which are outside the scope of the present work.)

Mean age was 37, and median age was 33. Gender was 60.1% female and 39.9% male. The only state with double-digit representation was California at 16%. Participants were predominantly White-Caucasian (74.8%), followed by African-Americans (10.4%) and Asian / Pacific Islanders (9.2%). Christians comprised 44.2% of the sample (61% Protestant and 31% Catholic, the remainder being Evangelical/Pentecostal or Mormon/LDS.) 39.3% reported being agnostic or atheist. Participants reported total household income by choosing one of nine brackets. Simplifying the brackets here, 20.2% reported income of \$20,000 or less, 60.7% reported \$50,000 or less, and 91.4% reported \$100,000 or less.

Stereotypes

We first performed factor analyses on the stereotype items (Appendix A). Two of the fourteen items – those asking about power in agriculture and in the technology sector – were distractor items unrelated to our hypotheses, and were excluded from analyses. The first factor analysis includes all three groups – Jewish Achievement, Jewish Culture/Control, and American Achievement – and employs principal axis factoring and an oblique Promax rotation, retaining factors with eigenvalues greater than one. This yields three factors. Factor 1 explains 40.4% of the variance, while Factors 2 and 3 account for 12.5% and 9.4%, respectively. Loadings are presented in Table 1. Factor 1 cleanly maps onto our theorized undercutting stereotypes, with items that focus on power, advantages at birth, and shrewd business tactics. Factor 2 includes items centered on warmth, shady practices, and irritating faults, which map

to the offsetting class of stereotypes we expected. However, Factor 3 carries at least one item we would expect in the offsetting group – “they don’t care about anyone but their own kind”, which would seem to fit with the warmth and other personality-trait centered items on Factor 2.

In a second factor analysis, we added two conventional scale items (not rank-order) meant to represent offsetting stereotypes. The first item outlined the theory that the same genes responsible for Jews’ extraordinary average IQ are also responsible for several Jewish health problems. The second item asks whether intelligent people tend to be physically unattractive. See Table 2 for the factor loadings. The pattern is similar to the analysis in Table 1, with the genetic tradeoff item loading lightly on the offsetting factor, and the intelligence and physical attractiveness item loading only on a distinct fourth factor (which carries no other items.)

In constructing our composite scales for undercutting and offsetting stereotypes, we are guided principally by theory, with some weight given to the factor analysis. Since the third (Table 1) and fourth factors (Table 2) are sparse and explain little variance, we will not construct variables from them. The “they stick together” item dominates Factor 3, has trivial loadings on the two factors of interest, and has no obvious theoretical connection to the undercutting or offsetting categories. Therefore, we will discard it. Likewise, the intelligence and physical attractiveness item is isolated on a fourth factor and does not refer to Jews explicitly, so we will discard it as well.

The remaining items are used to construct our undercutting and offsetting subscales. See Appendix A for the exact item listing for each subscale. Composite scores on each were computed by taking the mean of the item scores (factor scores or loadings were not used.)

Note on Analyses

Where condition is the only predictor of interest, ANOVA is used. Where individual difference or scale variables are included as predictors, either by themselves or along with condition, linear regression is used. In that case, conditions are dummy coded as per the following table.

Condition	Coding 1	Coding 2
Jewish Achievement	1	0
Jewish Culture Control	0	1
American Achievement	0	0

When all three conditions are included in the model, there will be two predictors representing condition: JA_Code and JC_Code. The third condition, American Achievement, is the baseline condition and is accounted for by the intercept term in that case – the intercept in the regression output is the mean score on the DV for the American Achievement condition. When only the two Jewish conditions are included in the model, there will be one predictor for condition – the JA_Code – and Jewish Culture becomes the baseline condition represented by the intercept.

Salience of Jewish achievement

Our first hypothesis was that presenting Jews' greater achievements and intelligence would lead to greater endorsement of anti-Semitic stereotypes. This was tested with separate one-way ANOVAs for undercutting and offsetting stereotypes,

and including the following groups: Jewish Achievement, Jewish Culture, and general American Achievement.

For undercutting stereotypes, the Jewish Achievement condition saw the highest level of endorsement ($M = 3.96$ on a 1 – 5 scale, $SD = .71$), followed by American Achievement ($M = 3.76$, $SD = .77$) and Jewish Culture ($M = 3.65$, $SD = .96$). The main effect of condition was not significant, $F = 1.67$, $p = .191$, $\eta^2 = .024$, observed power = .348. The difference between the Jewish Achievement and Jewish Control conditions is marginally significant in a pairwise comparison, $p = .073$. No other pairwise comparisons approached significance (all p -values > .25.)

Turning to the offsetting stereotypes, the analysis is reduced to two groups – Jewish Achievement and Jewish Culture. There was no context for asking about Jewish health tradeoffs in the American Achievement condition and the item was thus omitted. There was no effect of condition on endorsement of offsetting stereotypes, $F = .106$, $p = .745$. Those in the Jewish Control condition endorsed these stereotypes slightly more ($M = 2.92$, $SD = .67$) than those in the Jewish Achievement condition ($M = 2.87$, $SD = .62$), but this difference was not significant – since this was a two-group analysis, the same $p = .745$ applies to the simple comparison.

Envy as mediator

Our second hypothesis was that the effect of Jewish achievement on anti-Semitic stereotype endorsement would be mediated by envy. First, we examine the effect of condition on envy. A one-way ANOVA including Jewish Achievement, Jewish Culture, and American Achievement conditions does not yield a significant main effect, $F = 2.19$, $p = .116$. However, pairwise comparisons reveal that those in the Jewish Achievement condition reported significantly more envy, $M = 1.51$, than

those in the Jewish Culture condition, $M = 1.22$, $p = .038$. The American Achievement condition, $M = 1.38$, was not significantly different from either.

Our next step is to regress stereotype endorsement on both condition and envy. Condition was dummy coded such that the baseline is the American Achievement condition, and dummy codes are entered for each of the two Jewish conditions. Starting with undercutting stereotypes as the dependent variable, neither predictor is significant, as shown in Table 5. To examine the effects on endorsement of offsetting stereotypes, we drop to the Jewish Achievement and Culture conditions for reasons noted above. Here again, neither condition nor envy is a significant predictor of stereotype endorsement (Table 6). The fact that relatively few participants reported envy likely constrains our ability to detect effects in these models. Only 20.3% and 25.5% of participants reported any level of envy on the two items (any option above 1 – *Not At All* on the 5-point scale), and only 7% and 10.2%, respectively, reported a level above 2 – *Slightly*.

Moderation by fragile self-esteem

Our third hypothesis was that fragile self-esteem would moderate the effect of Jewish achievement on envy. Given the current lack of a single-scale measure of fragile self-esteem, we measured both narcissism and self-esteem separately to explore this hypothesis. First, in a regression model with condition and self-esteem as predictors of envy, we find that self-esteem predicts less envy, $b = -.30$, $p < .001$, $r^2 = .122$. Condition was not a significant predictor (Jewish Achievement, Jewish Culture, or American Achievement.) Replacing self-esteem with narcissism as a predictor, we find a small, marginal effect, $b = .03$, $p = .101$, $r^2 = .044$, and again no effect of any condition. With both self-esteem and narcissism in the model, self-

esteem remains a strong predictor, $b = -.34$, $p < .001$, $r^2 = .157$, and narcissism remains a faint predictor, $b = .04$, $p = .031$.

We then test for the hypothesized interaction effects separately. First, with condition, self-esteem, and the self-esteem \times condition interaction as predictors, the one significant effect is that of self-esteem, $b = -.33$, $p = .019$, $r^2 = .125$. With condition, narcissism, and the narcissism \times condition interaction as predictors, there are no significant effects, $r^2 = .055$, $p = .141$.

Finally, we test the full model with the three-way interaction between condition, narcissism, and self-esteem. We can potentially measure fragile self-esteem by detecting an interaction between narcissism and self-esteem, where individuals high in self-esteem but low in narcissism individuals are distinguished from high self-esteem and high narcissism individuals (the latter indicative of fragile self-esteem.) Testing the three-way interaction requires that we include all possible two-way interactions in the model: narcissism \times condition, self-esteem \times condition, and narcissism \times self-esteem. Once again, self-esteem predicts less envy, $b = -.34$, $p < .001$, $r^2 = .194$. Narcissism predicts slightly increased envy, $b = .06$, $p = .010$, and there is a self-esteem by narcissism interaction, $b = -.086$, $p = .014$. The three-way interaction between condition, self-esteem, and narcissism is not significant, $b = .08$, $p = .176$, yet allows us to clarify the self-esteem by narcissism interaction.

Simple slopes were calculated regressing envy on self-esteem for both high and low narcissism, and for each condition (Jewish Achievement and Control.) In three of the four combinations, self-esteem predicts less envy, and the negative slopes are significant (Figures 4 and 5.) However, low narcissism participants in the control condition reported little envy, and the simple slope is essentially flat and non-significant, having little room to decrease, $slope = -0.065$, $p = .568$ (Figure 4.)

In-group loyalty intuitions

We predicted that moral intuitions would also play a role. Our fourth hypothesis predicted that in-group loyalty intuitions (Graham et al., 2009) would drive greater endorsement of anti-Semitic stereotypes, and offsetting stereotypes in particular. Loyalty is a marginally significant predictor of offsetting stereotype endorsement when it is the sole predictor in the model, $b = -.09$, $p = .074$, $r^2 = .041$. Adding condition to the model yields no significant effects (for offsetting beliefs, only the Jewish Achievement and Jewish Culture conditions are analyzed.) However, adding the interaction of loyalty by condition yields two significant predictors: loyalty, $b = -.21$, $p = .003$, and the interaction, $b = .23$, $p = .043$, $r^2 = .109$. The Jewish Culture condition is the baseline control group in this model, so the coefficient for loyalty ($b = -.21$) is the effect of loyalty in that condition (where the dummy code for the Jewish Achievement condition is zero, wiping out that term.) That is, loyalty intuitions predict lower endorsement of offsetting stereotypes in the Jewish Control condition. In the Jewish Achievement condition, loyalty has the near-opposite effect – it predicts slightly greater endorsement of offsetting stereotypes, $b = .02$. See Figure 6 for the simple slopes. As a reminder, the stereotype variables use a 1 – 5 scale, and the loyalty intuitions use a 1 – 10 scale. (See Table 7 for the complete model.)

In-group loyalty was negatively correlated with endorsement of undercutting stereotypes, $b = -.090$, $p = .047$, $r^2 = .028$. The effect is quite small, but remains significant when condition is added to the model, $b = -.085$, $p = .059$, $r^2 = .059$. In this model, the Jewish Achievement condition is the largest predictor, as we saw before, but only marginally significant, $b = .265$, $p = .102$. When the interaction of loyalty intuitions and condition is added to the model, no interaction effects are

found. The only predictor that approaches significance in the final model is the Jewish Achievement condition, $b = .260$, $p = .111$.

Double-moderation between in-group loyalty and in-group status

We also measured the perceptions of Jewish loyalty to the United States, where participants ranked Jews along with six other groups. We expected the moderating effect of in-group loyalty intuitions to itself be moderated by the extent to which Jews were seen as an out-group. Using loyalty to the US as our measure, we did not find evidence for the double-moderation hypothesis, though we were admittedly underpowered to detect such an effect. Starting with offsetting stereotypes, if we add loyalty to the US to our full regression model, it is not a significant predictor, $b = -.048$, $p = .272$, $r^2 = .082$. In-group loyalty and its interaction with condition remain significant predictors in the same pattern as before, $b = -.113$, $p = .066$ and $b = .209$, $p = .032$, respectively. We test the double-moderation hypothesis by adding the interactions of US loyalty \times condition, US loyalty \times in-group loyalty, and the three-way interaction between US loyalty, condition, and in-group loyalty. The three-way interaction is not significant, $b = .045$, $p = .590$. Among the remaining predictors, we find three significant effects: the main effect of US loyalty, $b = -.184$, $p = .006$, the interaction between US loyalty and condition, $b = .246$, $p = .014$, and the interaction between in-group loyalty and condition, $b = .257$, $p = .023$, $r^2 = .254$. Thus, perceived Jewish loyalty to the US predicts less endorsement of offsetting stereotypes.

Turning to undercutting stereotypes, US loyalty is not a significant predictor when added to the full model, $b = -.018$, $p = .673$, $r^2 = .065$. When we test the three-way interaction, including all constituent two-way interactions, the only effect that

approaches significance is that of the Jewish Achievement condition, $b = .292$, $p = .080$, $r^2 = .095$.

Equity-Fairness Intuitions

We predicted the equity-fairness would predict greater endorsement of undercutting stereotypes compared to offsetting stereotypes. In fact, equity-fairness moral foundations did not predict either class of stereotype. For offsetting stereotypes, $b = -.013$, $p = .876$, $r^2 = .000$. Adding condition to the model yields no significant effects, nor does the interaction between condition and equity-fairness. Similarly equity-fairness moral foundations did not predict endorsement of undercutting stereotypes, $b = .082$, $p = .195$, $r^2 = .013$. Adding condition and the interaction between condition and equity-fairness does not yield any significant predictors, $r^2 = .041$.

We also hypothesized that self-esteem contingent on one's identity as a Christian would predict more endorsement of anti-Semitic beliefs. Ultimately, we did not test this hypothesis – measures of contingent self-esteem were omitted.

Discussion

Reading about Jewish achievements led to greater endorsement of undercutting stereotypes – those that focused on purported advantages Jews enjoy that would bear on their worldly achievements, such as excessive power behind the scenes, shrewd business tactics, and group cohesion. Offsetting stereotypes, however, were not bolstered by the Jewish achievement condition.

Conversely, in the Jewish achievement condition, in-group loyalty predicted greater endorsement of offsetting stereotypes. In the Jewish culture condition, it

predicted less endorsement of these views. This is consistent with our moderation hypothesis (though we did not predict a negative correlation in the Jewish culture condition.) Disproportionate Jewish achievement should be more distressing to those non-Jews who are more strongly tied to their in-groups and prize their achievements. A preference for offsetting over undercutting stereotypes might be explained by the fact that undercutting items tar Jews for “sticking to their own kind”, being born with advantages, employing shrewd business tactics, etc. These sorts of complaints may not resonate strongly with people who prize in-group loyalty, and to the extent that such participants tend to be politically conservative, the undercutting items may lodge equity complaints that seem less valid to them.

Why was there no main effect of Jewish achievement on the offsetting stereotypes? One explanation is the skew of the sample. While in-group loyalty drove endorsement, it was not a heavily-endorsed moral foundation. The mean score was 5.9, compared to 7.8 for equity-fairness intuitions (on a scale of 1 – 10.) More broadly, only 46% of the sample identified as any kind of Christian, while 37% were atheist or agnostic. 14% identified as politically conservative, and 36% as liberal. The undercutting stereotypes tapped issues of equity-fairness, a perspective better represented in this sample.

The negative correlation between in-group loyalty and offsetting stereotypes in the Jewish culture condition was a surprise, and might be explained by the content of that induction. There are two features that in retrospect seem to compromise its quality as a control condition. First, it focused on Jewish religious denominations in particular, not secular cultural features. Second, it laid out three different denominations – reform, conservative, and orthodox. In so doing, it may have primed out-group heterogeneity, making salient the diverse range of Jewish faith.

And in stressing faith and religion overall, it may have made Jews more creditable to participants with more traditional values.

Study 2

Study 1 attempted to induce envy and measured subsequent endorsement of offsetting and undercutting stereotypes. Study 2 is a simple study that reverses the sequence. Here participants were given the various stereotypes as “explanations” for Jewish achievement, in the same text that outlined the achievements (the text of the Jewish Achievement condition from Study 1.) We wish to see if different types of stereotypes have different implications for feelings of envy. Stereotype endorsement was not measured here because the stereotypes were part of the induction, not the dependent variables.

Method

Participants

150 adult residents of the United States were recruited via Amazon’s Mturk system. 54% were female, and mean age was 37.

Procedure

Participants were randomly assigned to one of three conditions. In every condition, participants read the same report as those in the Jewish Achievement condition from Study 1, describing Jews’ exceptional intellect and income. But they additionally were presented with an “Explanations” passage. In one condition, we included various undercutting stereotypes as explanations for the disparity, including

the idea that Jews are tougher negotiators, that they're born with advantages, raised to be financially adept, etc. In the second condition, we offered a genetic explanation, coupled with the tradeoff of disease vulnerability as used in Study 1 – Jews are more intelligent because of their genes, but those same genes also cause various unique health risks. In the third condition, we simply report that genetic differences are the only known explanation for Jewish achievement, with no mention of health tradeoffs.

After reading through the induction, participants completed the same emotions scale as in Study 1, including general and direct envy feelings, and self-esteem items drawn from both Rosenberg and the State Self-Esteem Scale (Heatherton & Polivy, 1991).

Results

Condition was a marginally significant predictor of envy, $F = 2.91, p = .057$. In particular, simple contrasts reveal that those in the innate-difference groups – genes with trade-offs ($M = 1.87, SD = 1.74, p = .028$) and genes without tradeoffs ($M = 1.82, SD = 2.08, p = .028$) – reported significantly more envy than those in the undercutting group (negotiating tactics, advantages, training, etc.; $M = 1.52, SD = 2.04$.) The two genetic conditions were not significantly different from each other. As a reminder, the envy measure uses a 1 – 5 point response scale.

Discussion

All of the conditions here can be seen as presenting Jews as having innate advantages. The difference is that one type of advantage is biological, while the other is cultural. The latter condition included explanations like “Jews are born with lots of advantages” and are taught to be financially savvy, so there is no question of the

presence of advantages. However, the genetic/biological explanations sparked more envy.

This is not surprising given the earlier discussion of malicious vs. benign envy. Malicious envy has been profiled as resting on appraisals that the disparity is unfair and that the person is not confident in their ability to close it – self-efficacy or self-confidence with respect to the domain. Biological factors are clearly less modifiable than upbringing or culture. However, it is surprising that the health tradeoffs did not have an effect – participants reported the same level of envy in the pure genetic advantage condition and in the condition where a genetic advantage in intelligence was offset against worse physical health, increased vulnerability to diseases like Tay-Sachs and so forth. It may be the case that the health tradeoffs were not very compelling, or that Jews' worldly successes and prosperity are more relevant than their health risks.

General Discussion

We recap the hypotheses below:

H1: Salience of Jewish achievement will drive greater endorsement of anti-Semitic stereotypes. We found moderate support for this with respect to undercutting stereotypes, but not offsetting stereotypes.

H2: The effect of Jewish achievement salience on anti-Semitic stereotype endorsement will be mediated by envy toward Jews. We did not find support for such

mediation. We did find that Jewish achievement sparks some envy, but relatively few participants reported envy.

H3: Fragile self-esteem will moderate the effect of Jewish achievement salience on envy. We did not find support for this, though we did find the expected self-esteem by narcissism interaction. Self-esteem predicted low envy, even when narcissism was high. However, low narcissism individuals *in the control condition* reported low envy regardless of self-esteem level (their envy was stoked in the Jewish Achievement condition though.)

H4: In-group loyalty moral foundations will moderate the effect of Jewish achievement salience on anti-Semitic stereotype endorsement, amplifying the effect when in-group loyalty is high. We found partial support for this hypothesis. In-group loyalty predicted less offsetting stereotype endorsement in the Jewish Culture condition, but was a mildly positive predictor of offsetting views in the Jewish Achievement condition.

H5: The moderating effect of in-group loyalty on stereotype endorsement will be moderated by the extent to which participants see Jews as an out-group – the more they see Jews as an out-group, the stronger the effect of in-group loyalty intuitions. We did not find support for this hypothesis.

H6: Equity-fairness moral foundations will moderate the effect of Jewish achievement salience on anti-Semitic stereotype endorsement, such that higher equity-fairness intuitions will amplify the effect. We did not find support for this hypothesis, or any main effects of equity-fairness intuitions.

The salience of Jewish achievements increases self-reported envy and endorsement of undercutting stereotypes. We also find that in-group loyalty intuitions predict undercutting stereotypes in the Jewish Achievement condition, but predicts less endorsement in the Jewish Culture condition. These effects are not surprising, but the lack of movement on the offsetting stereotypes was unexpected. Only undercutting stereotypes were influenced by the independent variables and individual differences. This might be explained by the profound differences between the items that comprised these variables, and the asymmetry in their number. The undercutting stereotypes consisted of items drawn from the ADL survey (2011.) They made explicit reference to various explanations for their achievements – e.g. “They’re born with lots of advantages”, “Their business people are so shrewd that others don't have a fair chance at competition”, and “They have too much power in the business world.”

In contrast, the offsetting variable was driven by the item asking how severe their health-IQ tradeoffs were likely to be, and an oblique question about whether intelligent people tend to be less physically attractive. Notably, these items were presented after the fourteen ADL rank-order items in every condition. It is possible that participants had already offloaded any frustrations with Jewish overachievement at that point. The only significant predictor of offsetting stereotypes was being from the American South ($M = 3.23$, $SD = .67$) compared to the rest of the US, ($M = 2.84$, $SD = .62$), $p = .048$. However there were only twelve Southerners in the sample for that analysis (the Jewish Achievement and Culture groups.)

It is also important to note that while the Jewish achievement condition elicited more envy, envy was not heavily endorsed even in that condition ($M = 1.51$ on a 1 – 5 scale.) This has been the case in all envy studies the author has conducted that

depended on an *exogenous* envy induction – that is, a common passage or scenario presented to participants, unrelated to their own lives or experience. In contrast, study designs that called upon the participant to recall a time they had envied someone – and write about it – generated far more reports of envy. So far, it seems difficult to induce envy with passages about strangers. It may also be the case that admitting envy is seen as an acknowledgement of Jewish superiority or defeat of some kind. In other words, pride may subvert willingness to report envy – no research has yet been reported on the influence of pride on admissions of envy, and it would be worth exploring in future work. Finally, propensity to experience envy toward others may itself be an important personality trait. Extant research has focused on envy episodes and inductions, but a personality disposition may moderate the effects of experimental inductions. Exploring this possibility will require development of a measure of trait measure of envy propensity.

Self-reported envy toward Jews may also be stigmatized as anti-Semitic. This brings us to limitations of the sample.

Limitations and Future Directions

This sample consisted of Mturk participants across the United States. Data on regional variation in anti-Semitic views is not readily available, but anecdotal evidence suggests anti-Semitism is more likely to be found in the metropolitan centers of the American northeast (New York City, Philadelphia, etc.) and in the American South. As noted above, we find some evidence here with respect to Southerners, but a much larger Southern sample will be needed to verify these effects. Also, recent events in Europe suggest that anti-Semitism may be more common there than in the United States (Sacks, 2014.) Thus, a regionally diffuse American sample seems poorly suited for deep investigation of anti-Semitic

stereotypes. In future work, we will oversample, or exclusively sample, the Northeast and the South, and look to other participant pools beyond Mturk. Relatedly, our samples included large numbers of atheists and agnostics (39%), with relatively few Christians (44%) compared to American base rates. Political leftists far outnumbered conservatives, at 33% and 13% respectively, and participants endorsed equity-fairness moral foundations ($M = 7.8$) more highly than in-group loyalty ($M = 5.9$.)

Ultimately, the reality may simply be that anti-Semitism is rare, or that it is driven by factors other than envy. The nature of this sample makes inferences a bit more difficult. Another potential issue is the items themselves. They were drawn from the Anti-Defamation League's survey (2011), and may not be psychometrically ideal. There are apparently no established self-report measures of anti-Semitism in the modern social psychology literature, and investing in scale development may be a good idea.

For example, a larger set of fifty or so items could be evaluated and systematically reduced to a core set based on factor analyses, validation procedures, and reliability tests. The ADL is a political advocacy organization that broadly aligns with the left, an organization that is probably motivated to report more anti-Semitism rather than less. In such cases there is some vulnerability to *caricature scales* (Duarte, in preparation.) Such scales are typically developed by partisans, and the wording of the items makes more sense to the creators than to respondents from opposing camps. We see this caricature phenomenon with Social Dominance Orientation and Right-Wing Authoritarianism, which feature awkwardly worded, cartoonish items that conservatives tend not to endorse – e.g. “To get ahead in life, it is sometimes okay to step on other groups.” Conservatives cluster at the midpoint, not at actual endorsement, but positive correlations between these scales and conservatism are often converted to “conservatives are high in SDO/RWA.” The ADL

scale seems less cartoonish than those, but may still misfire with respect to the actual views of people who hold anti-Semitic beliefs, or are just critical of Jewish culture. Systematic analysis of the items in relation to a large number of alternatively worded items will be necessary to investigate this issue, and it may be worthwhile to collect participants' views of Jews in their own words to hone in on core factors.

Future work will therefore focus on regional samples, psychometric development, and will counterbalance the order of the different stereotype categories. The measures of offsetting stereotypes in particular may require more focus. The limited force of envy with these sorts of inductions might be ameliorated with more vivid interpersonal inductions, using a target individual and narrative, as Major et al. did (1993.) The effects in the present studies were small but suggestive, and tightening the inductions and improving the measures seem like the best ways to identify the factors that explain the most variance in anti-Semitic beliefs.

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Table 1

Exploratory factor analysis of anti-Semitic rank-order items (N = 116 after listwise deletion)

Items	Factor Loadings		
	1	2	3
They tend to stick together more than other people	.066	-.057	.648
On average, they're born with lots of advantages	.706	.003	-.039
Rank by how warm and friendly they seem to you (reverse-scored)	-.284	.679	.034
Rank by level of power in academia	.619	-.177	.131
Rank by level of power in politics	.674	-.224	.167
They don't care what happens to anyone but their own kind	-.030	.402	.555
Their business people are so shrewd that others don't have a fair chance at competition	.764	-.020	-.131
They're more willing to use shady practices to get what they want	.392	.611	-.139
They have too much power in the US today	.674	-.003	.113
They have too much power in the business world.	.822	.146	-.114
They have a lot of irritating faults	.128	.347	.181
They like to be in charge of things	.676	.017	.135

Note: The largest loading for each item is bolded. Factor analysis was performed in SPSS using Principal Axis Factoring with Promax rotation, retaining factors with eigenvalues greater than one.

Table 2

Exploratory factor analysis of anti-Semitic rank-order items and two health / intelligence items (N = 116 after listwise deletion)

Items	Factor Loadings			
	1	2	3	4
They tend to stick together more than other people	.044	.125	.720	-.061
On average, they're born with lots of advantages	.748	-.107	.015	.113
Rank by how warm and friendly they seem to you (reverse-scored)	-.267	.608	.083	.150
Rank by level of power in academia	.588	-.251	.278	.005
Rank by level of power in politics	.656	-.119	.116	-.145
They don't care what happens to anyone but their own kind	.186	.342	.394	.204
Their business people are so shrewd that others don't have a fair chance at competition	.784	-.063	-.048	-.064
They're more willing to use shady practices to get what they want	.438	.588	-.124	-.071
They have too much power in the US today	.765	-.003	-.002	.080
They have too much power in the business world.	.865	.126	-.160	.043
They have a lot of irritating faults	.162	.388	.136	-.258

They like to be in charge of things	.715	.013	.055	.047
Intelligence / health tradeoffs	-.211	.390	.322	-.041
Intelligent people physically unattractive	.074	.043	-.033	.815

Note: The largest loading for each item is bolded. Factor analysis was performed in SPSS using Principal Axis Factoring with Promax rotation, retaining factors with eigenvalues greater than one.

Table 3

Descriptive statistics by group.

	Group							
	American Achievement		Jewish Culture Control		Asian Achievement		Jewish Achievement	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self-Esteem (Post)	3.51	.647	3.53	.846	3.56	.762	3.45	.833
Envy	1.34	.615	1.27	.709	1.88	1.09	1.469	.802
Asian Power	-.095	.976	-.289	1.025	.296	.941	.057	.996
Asian Personality	-.004	1.099	-.006	1.012	-.008	.908	.019	1.017
Jewish Power	-.007	.904	-.290	1.194	.122	.919	.164	.926
Jewish Personality	-.200	1.000	.097	.082	-.150	.995	.185	.927
Intelligence	NA		1.87	.842	1.58	.785	1.95	.788
Ugly	NA							
Health Defects			2.76	1.015	2.26	1.065	2.48	.809

NOTE: The Power and Personality variables are standardized in reference to global mean rank-orders for Asian-and Jewish-Americans on those items.

Table 4

Self-reported feelings of envy after induction (raw data)

Condition	Not at all		Slightly		Moderately		Somewhat		Extremely	
	W	G	W	G	W	G	W	G	W	G
Jewish Achievement	41	32	9	14	0	2	2	3	1	2
Jewish Culture	44	45	5	3	2	2	1	1	0	0
American Achievement	41	40	7	7	5	3	0	2	0	1

Note: There were two envy items at this stage, denoted *W* and *G* above. The first (*W*) asked participants if they were feeling “envious”, one of seven emotion words. The second item (*G*), presented twelve items later, asked more specifically “Did reading about your assigned group’s achievements make you feel envious at all?”

Table 5

Effect of condition and envy on endorsement of undercutting stereotypes

	<i>B</i>	<i>SE(B)</i>	β	<i>t</i>	<i>p</i>
Constant	3.769	.118		31.826	.000
Jewish Achievement	.185	.170	.105	1.088	.278
Jewish Culture	-.102	.169	-.058	-.600	-.549
Envy	.053	.101	.045	.526	.600

Table 6

Effect of condition and envy on endorsement of offsetting stereotypes

	<i>B</i>	<i>SE(B)</i>	β	<i>t</i>	<i>p</i>
Constant	3.136	.127		24.777	.000
Jewish Achievement	-.085	.176	.056	.481	.632
Envy	-.104	.126	-.096	-.828	.410

NOTE: The Jewish Achievement condition is reported as contrasted to the Jewish Culture condition. Offsetting stereotypes were not measured in the American Achievement condition.

Table 7

Effects of condition, narcissism, and self-esteem on envy

	<i>B</i>	<i>SE(B)</i>	β	<i>t</i>	<i>p</i>
Constant	1.325	.067		19.906	.000
Jewish Achievement (JA)	.179	.116	.118	1.537	.127
Self-esteem	-.341	.094	-.346	-3.638	.000
Narcissism	.061	.023	.253	2.619	.010
JA × Self-Esteem	-.057	.158	-.035	-.360	.719
JA × Narcissism	-.042	.038	-.108	-1.098	.274
Self-Esteem × Narcissism	-.086	.035	-.236	-2.475	.014
JA × Self-Esteem × Narcissism	.080	.059	.132	1.361	.176

 $R^2 = .194, p < .001$

Table 8

Hierarchical Regression Analysis for MFQ Loyalty Predicting Offsetting Stereotypes

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Loyalty	-.122	.055	-.244	-.122	.055	-.245	-.208*	.068	-.418
Jewish Achievement				-.012	.167	-.008	-.024	.164	-.016
Loyalty × Jewish Achievement							.230**	.112	.282
<i>R</i> ²	.06			.06			.109		

**p* = .003, ** *p* = .043

3-Way Interaction Between Condition, Self-Esteem and Narcissism (narcissism = 1 SD below mean)

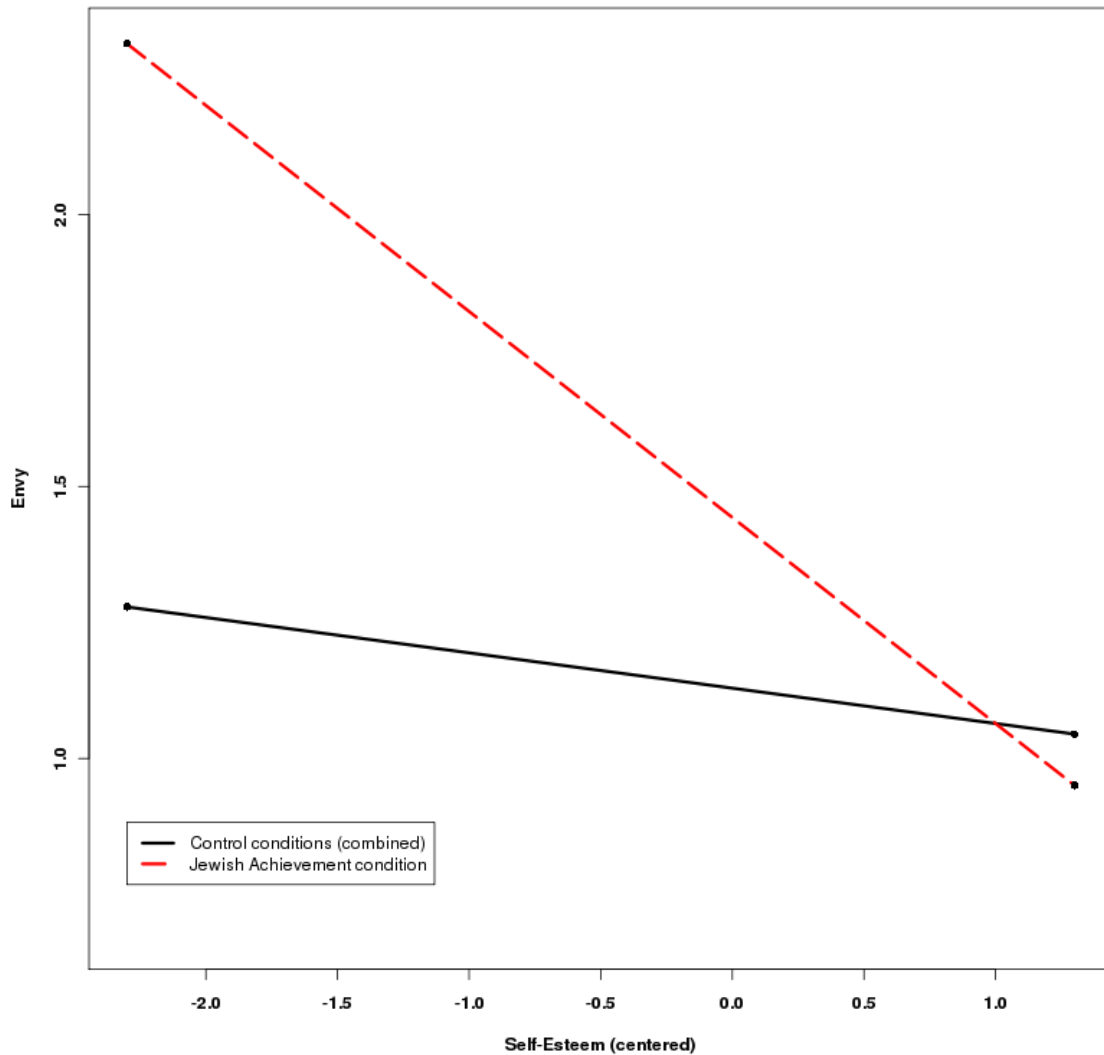


Figure 4. Interaction between Condition, Self-Esteem, and Narcissism. This figure presents the effect of self-esteem when narcissism is **low**. Simple slope in the Jewish Achievement condition is -0.38 , $SD = 0.17$, $t = -2.18$, $p = 0.031$. Jewish Culture condition is -0.06 , $SD = 0.11$, $t = -0.57$, $p = 0.57$.

3-Way Interaction of Condition, Self-Esteem and Narcissism (narcissism = 1 SD above mean)

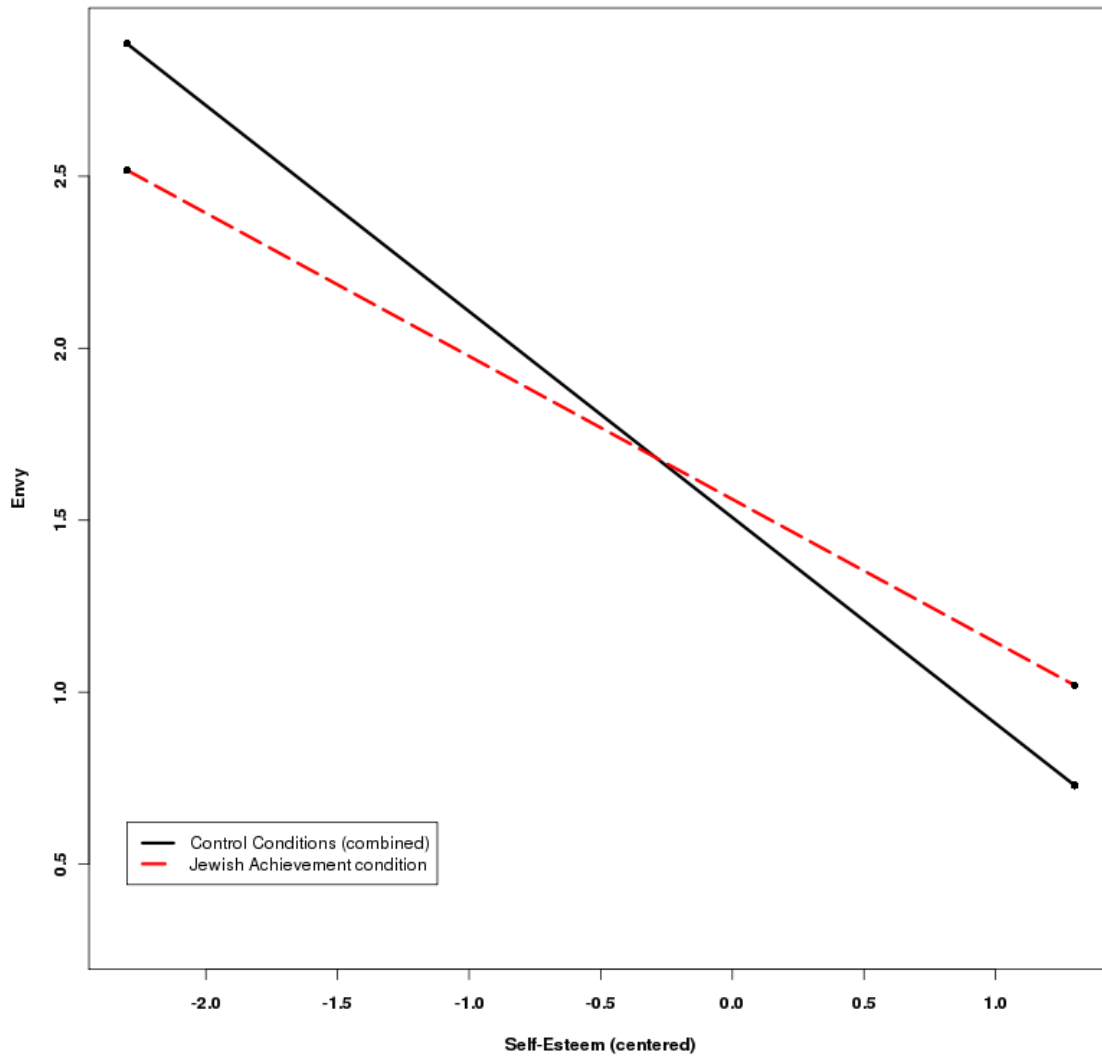


Figure 5. Interaction between Condition, Self-Esteem, and Narcissism. This figure presents the effect of self-esteem when narcissism is **high**.

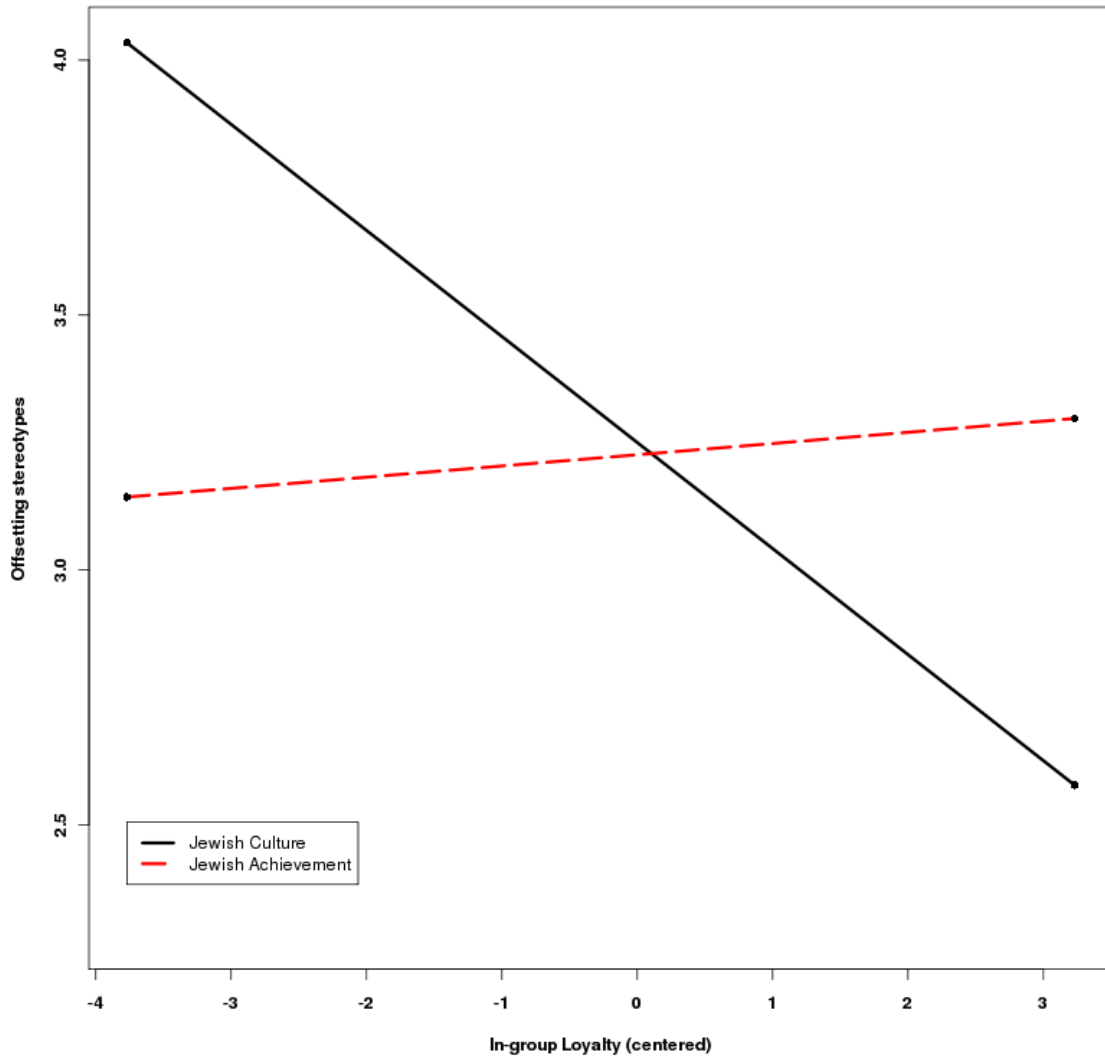


Figure 6. Interaction between condition (Jewish Achievement and Jewish Culture) and in-group loyalty moral foundations (Graham et al., 2009) in predicting offsetting stereotype endorsement.

Appendix A: Anti-Semitic Stereotype Scales

Alright, please complete the following items by rank-ordering the groups listed. Just click and drag the group labels into the order you want, where #1 is the group that most fits the statement, and #5 is the group that least fits the statement.

We're interested in your intuitions about why Jewish-Americans have stood out on the variables we reported -- income, intellectual achievements, and IQ. Some of the statements are what other participants endorsed in a study we conducted earlier this year, and some are just sort of random. So tell us what you think, and don't worry about being sensitive -- this is an anonymous and encrypted study, and no one is hurt by you expressing your sincere intuitions here.

Undercutting stereotypes:

1. On average, they're born with lots of advantages.
2. Please rank each group by their level of power or influence in universities and academia.
3. Please rank each group by their level of power in politics.
4. Their business people are so shrewd that others don't have a fair chance at competition.
5. They have too much power in the US today.
6. They have too much power in the business world.
7. They like to be in charge of things.

Offsetting stereotypes:

1. They have a lot of irritating faults.
2. They don't care about anyone but their own kind.
3. Please rank each group by how warm and friendly they seem to you, on average.
4. They're more willing to use shady practices to get what they want.
5. Some academic researchers have proposed that there are genetic causes of Jews' higher intelligence, but that these genetic factors *also* cause Jews to have a number of biological abnormalities and diseases -- a classic genetic trade-off. This is fairly new research, and will take a few years to confirm. You can see a quick summary at Wikipedia right now if you like: https://en.wikipedia.org/wiki/Ashkenazi_Jewish_intelligence

How serious do you think these health problems might be?

Not serious at all; mildly serious; moderately serious; very serious; extremely serious

Appendix B: Self-esteem scale

1. I feel confident in my abilities.
2. I feel as smart as others.
3. I feel confident that I understand things.
4. I feel that others respect and admire me.
5. I feel good about myself.
6. I feel that I am a person of worth, at least on an equal plane with others.

Response scale: Not at all; a little bit; somewhat; very much; extremely

Appendix C: NPI-16

Read each pair of statements below and place an “X” by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. **Please complete all pairs.**

1. ___ I really like to be the center of attention
 ___ It makes me uncomfortable to be the center of attention

2. ___ I am no better or no worse than most people
 ___ I think I am a special person

3. ___ Everybody likes to hear my stories
 ___ Sometimes I tell good stories

4. ___ I usually get the respect that I deserve
 ___ I insist upon getting the respect that is due me

5. ___ I don't mind following orders
 ___ I like having authority over people

6. ___ I am going to be a great person
 ___ I hope I am going to be successful

7. ___ People sometimes believe what I tell them
 ___ I can make anybody believe anything I want them to

8. ___ I expect a great deal from other people

- ___ I like to do things for other people
9. ___ I like to be the center of attention
___ I prefer to blend in with the crowd
10. ___ I am much like everybody else
___ I am an extraordinary person
11. ___ I always know what I am doing
___ Sometimes I am not sure of what I am doing
12. ___ I don't like it when I find myself manipulating people
___ I find it easy to manipulate people
13. ___ Being an authority doesn't mean that much to me
___ People always seem to recognize my authority
14. ___ I know that I am good because everybody keeps telling me so
___ When people compliment me I sometimes get embarrassed
15. ___ I try not to be a show off
___ I am apt to show off if I get the chance
16. ___ I am more capable than other people
___ There is a lot that I can learn from other people