

A Lot More Bad News for Conservatives, and a Little Bit of Bad News for Liberals? Moral Judgments and the Dark Triad Personality Traits: A Follow-up Study

Marcus Arvan
University of Tampa

Abstract: In a recent study appearing in *Neuroethics*, I reported observing eleven significant correlations between the “Dark Triad” personality traits – Machiavellianism, Narcissism, and Psychopathy – and “conservative” judgments on a 17-item Moral Intuition Survey. Surprisingly, I observed no significant correlations between the Dark Triad and “liberal” judgments. In order to determine whether these results were an artifact of the particular issues I selected, I ran a follow-up study testing the Dark Triad against conservative and liberal judgments on fifteen additional moral issues. The new issues examined include illegal immigration, abortion, the teaching of “intelligent design” in public schools, the use of waterboarding and other “enhanced interrogation techniques” in the war on terrorism, laws defining marriage as the union of one man and one woman, and environmentalism. 1154 participants (680 male, 472 female; median age 29), recruited online through Amazon Mechanical Turk, completed three surveys: a 15-item Moral Intuition Survey (MIS), the 28-item Short Dark Triad personality inventory, and a five-item demographic survey. The results strongly reinforce my earlier findings. Twenty-two significant correlations were observed between “conservative” judgments and the Dark Triad (all of which were significant past a Bonferonni-corrected significance threshold of $p=.0008$), compared to seven significant correlations between Dark Triad and “liberal” judgments (only one of which was significant past $p=.0008$). This article concludes by developing a novel research proposal for determining whether the results of my two studies are “bad news” for conservatives or liberals.

1. Introduction

I recently reported finding eleven significant correlations between “conservative” moral judgments on a 17-item Moral Intuition Survey and three antisocial personality traits: the so-called *Dark Triad* of Machiavellianism, Narcissism, and Psychopathy. (Arvan, in press) Specifically, I found conservative judgments to correlate significantly with one or more of these dark traits (and in some cases, all three traits) on the issues of capital punishment, gay marriage, the right of a government to wage war in defiance of UN resolutions, the right to detain suspected terrorists indefinitely without trial, and finally, the view that

government should never intervene in free markets except to prevent force or fraud. Surprisingly, I did not observe a single significant correlation between liberal moral judgments and the Dark Triad. Although I have conceded that it is an open empirical question which levels of a particular Dark Triad trait are “morally bad” – a question that I will provide a novel research program for resolving later in this article – I suggested in my previous article that my findings raise provocative *prima facie* concerns about conservative moral judgments. Because even mild to moderate levels of the Dark Triad tend to be morally disturbing – we do not normally admire people who have even mild tendencies to deceive others (Machiavellianism), or who think they are inordinately better than others (Narcissism), or who lack guilt, empathy, or remorse (Psychopathy) – I have suggested that the relationships I detected between the Dark Triad and conservative moral judgments may indicate something morally problematic about the personality traits that underlie (at least some) conservative judgments.

One issue with my previous study, however, is that my results could have been an artifact of the particular moral issues I examined (e.g. gun control, capital punishment, etc.). Might my results have been different if had I investigated a different, more representative array of issues that traditionally divide liberals and conservatives? The present study examines whether this is the case. I was particularly interested in examining several “hot button” social issues: abortion, illegal immigration, the teaching of “intelligent design” in public schools, laws defining marriage as the union of one man and one woman, the use of “enhanced interrogation techniques” (such as waterboarding), and climate change. As I argue below, I have now examined, between my two studies, a representative array of issues that traditionally divide social liberals and conservatives. As such, my results

suggest systematic differences between how liberal and conservative judgments relate to the Dark Triad. Although there are some isolated positive relationships between liberal judgments and the Dark Triad, conservative judgments and the Dark Triad are far more strongly and systematically related.

2. Methods

2.1. Subjects

1154 participants (680 male, 472 female; median age 29) were recruited online through Mechanical Turk, and received a small monetary compensation (US\$0.50) for participating. IRB approval was obtained for research on human subjects, informed consent was obtained from all participants, and all relevant laws and other institutional guidelines were followed.

Because many in the popular press objected that my initial study – having recruited respondents online – might not have targeted a representative demographic (i.e. a representative sample of liberals, conservatives, and moderates), I would like to share detailed demographic data about my present sample. My demographic survey (see appendix) asked respondents to self-report their “social” leanings along a 1-7 scale where ‘1’=“social conservative”, ‘4’=“social moderate”, and ‘7’=“social liberal.” I understood the two most extreme responses, ‘1’ and ‘7’, as representing *strong social conservatism* and *strong social liberalism*, respectively; ‘4’ as representing *socially moderate*; ‘2’ and ‘3’ together as representing *moderate social conservatism*; and ‘5’ and ‘6’ together as representing *moderate social liberalism*. Here is a complete breakdown of the sample:

- 136 members (or 11.8%) self-identified as *strong social-conservatives*.
- 215 members (or 18.6%) self-identified as *moderate social conservatives*.

- 327 members (or 28.3%) self-identified as *social moderates*.
- 353 members (or 20.6%) self-identified as *moderate social liberals*.
- 123 members (or 10.7%) self-identified as *strong social liberals*.

Because this sample approximates a normal distribution – it contained only 2% more moderate liberals than moderate conservatives, and only 1% more strong social conservatives than strong social liberals – I am confident that my results are not the result of biased sample. Nevertheless, as an added precaution, I cross-checked my results against three additional samples: (A) a smaller sample more heavily populated with liberals than conservatives, (B) an artificially “pruned” sample more heavily populated with conservatives than liberals, and finally, (C) an artificially “normalized” sample, or perfect bell-curve containing an identical number of strong liberals and strong conservatives, as well as an identical number of moderate liberals and moderate conservatives. Because the results of all three samples essentially matched the results of the larger sample I report in this article, I am confident that my results are not due to sample bias.¹

2.2. Design, Materials, and Procedures

Participants were presented with three surveys: a 28-item Short Dark Triad personality survey (Paulhus & Jones 2011), a 15-item Moral Intuition Survey (MIS), and a 5-item demographic survey [see appendix for all three surveys]. To control for ordering effects, half of the participants were presented with the Short Dark Triad before the MIS, and the other half were presented with the MIS before the Short Dark Triad. The demographic survey questions were always presented last. Due to logistical issues with Amazon Mechanical Turk, controlling for individual question-ordering effects was infeasible.

¹ All three additional data sets are available upon request.

However, portions of my original study (those carried out by Yale Experiment Month Staff on Qualtrics) did control for individual question-ordering effects, and no significant ordering effects were observed.

The Short Dark Triad is a 28-item personality inventory which asks participants to respond to particular statements on a standard 1-5 Likert scale (where '1'=disagree strongly, '3'=neither agree nor disagree, and '5'=agree strongly). The Short Dark Triad's construct for Machiavellianism is the mean response to items 1-10 (with item 10 reverse-scored); its construct for Narcissism is the mean response to items 11-19 (with items 12, 16, and 18 reverse-scored); and its construct for Narcissism is the mean response to items 20-28 (with items 21 and 26 reverse-scored). The Short Dark Triad is a valid measure of all three Dark Triad traits (Jones & Paulhus 2011).

The Moral Intuition Survey (MIS) is a 15-item survey of my own construction which asks respondents to morally judge individual moral propositions on a 1-5 scale, where '1'=morally wrong, '3'=morally neutral (neither good nor bad), and '5'=morally required). It is important to note that, as in my original study, I did not analyze sums or mean responses across items to represent a construct of some moral characteristic or psychometric trait. Instead, I treated each MIS question as an individual Likert item in order to examine specific moral judgments on individual moral issues for correlations with the Dark Triad. The rationale behind this approach is simple. A person's moral judgment of a particular moral issue (e.g. illegal immigration) is only a judgment about that specific issue, and should not be assumed to bear any substantive relationships to other moral judgments on other issues (though later statistical analysis may reveal important relationships between different judgments). Although the MIS is an untested instrument,

both my original and current Moral Intuition Survey have strong face validity (measuring exactly what they appear to measure: individuals' moral evaluation of specific issues). Furthermore, the results also indicate external validity of the MIS, as all but one of my classificatory hypotheses heading into the study (see §2.3.1 below) were confirmed by the demographic results (see §3.1.).

The primary aim of this study was to test the external validity of my original findings, and explore whether the relationships I observed between the Dark Triad and socially conservative views exist across a broader, more representative range of issues. Accordingly, I selected the issues for this study – illegal immigration, the protection of traditional marriage, enhanced interrogation techniques on the war on terror, abortion, environmentalism and climate change, etc. – with the aim of measuring a truly *representative* sample of social issues that traditionally divide social liberals and social conservatives. One obvious difficulty in creating such a representative sample is that social liberals and conservatives are diverse groups of people. Since there is no single, unanimous political body or mission statement for either group, it is very hard to pin down a set of canonical issues that divide them. Still, the issues examined in my two studies – abortion, illegal immigration, gay marriage, gun control, capital punishment, the teaching of intelligent design in public schools, etc. – are not only clearly recognized in popular culture as a representative set of issues that traditionally divide liberals and conservatives; they are also regularly discussed in historical scholarship on liberal/conservative social divides (see e.g. Himmelstein 1989, Kerlinger 1984, Smith et al. 2011, Wilson & Patterson 1968).

I also took much more care than in my original study to control against certain issues of item-wording and experimenter bias. In my previous experiment, all but one of

the significant correlations between conservative judgments and the Dark Triad occurred in items where affirmative MIS answers (i.e. response-types '4' or '5') represented conservative judgments. The only significant correlation between a conservative judgment and the Dark Triad where negative answers (i.e. response-types '1' or '2') represented a conservative judgment occurred with MIS item#10 ("Gay marriage is:"). In addition to the fact that a great majority of the significant correlations I detected involved items where conservative judgments were represented by affirmative answers, I only tested three social issues where liberal judgments were represented by affirmative answers. Consequently, my results could have been due to experimenter bias or an artifact of question-wording. In order to control for these issues, the present study contained a near-equal number of affirmative answers representing liberal and conservative judgments (seven MIS items represented liberal judgments with affirmative answers, and eight items represented conservative judgments with affirmative answers).

I would also like to address a concern about a particular MIS item that was raised after my original study: MIS item#9 ("Abortion is: "). A response of '5' to this item represents a judgment that abortion is "morally required." An obvious issue is that it is unclear how respondents might have understood this response-type.² Could respondents have understood it as meaning "*always* morally required" (a seemingly absurd response, as presumably nobody believes such a thing), or might respondents have understood the response as meaning "*sometimes* morally required" (a response that is not so obviously absurd, e.g. cases where a mother's life is threatened)? I recognize the issue with these types of questions, and therefore the new MIS included only one question exhibiting this

² I thank an anonymous reviewer for pressing this point.

ambiguity (the aforementioned item on abortion). This item was included because I could not construct a better-worded item to test judgments of whether the act of abortion is morally wrong, given the formulation of our 1-5 Likert scale. I hypothesized that almost no one would judge abortion to be morally required (i.e. '5'), and the results generally supported this: only 5.3% of respondents who answered the item (63 of 1143) gave this odd-sounding response. This question did indeed produce an “anomaly” of sorts, which I will discuss further in Section 4. In any case, since the present study only included one such ambiguous item, I submit that issues with question-wording are not a major concern.

Finally, a 5-item demographic survey asked respondents to self-report their age, gender, social and economic leanings (both on a 1-7 scale, where '1'=conservative, '4'=moderate', and '7'=liberal), and finally, political party affiliation (US citizens only).

2.3. Hypotheses

2.3.1. Classificatory Hypotheses

Because the MIS covers “social” rather than “economic” issues, responses to each MIS item were classified in advance as either “socially conservative” or “socially liberal” in line with what I perceived to be traditional public divides on the issues. Higher scores (i.e. '4' or '5') on the following items were hypothesized to be *socially liberal*, and lower scores (i.e. '1' and '2') were hypothesized to be *socially conservative*:

MIS Item #5: “Illegal immigrants ought to be provided with emergency medical treatment (example: emergency room treatment), even if they cannot afford it.”

MIS Item #6: “The children of illegal immigrants ought to receive public education, because their illegal immigrant status is not their fault, but their parents’.”

MIS Item #9: “Abortion is: “

MIS Item #10: “A woman ought to have a legal right to have an abortion upon request.”

MIS Item #12: “The government ought to work within the rules of the United Nations.”

MIS Item #13: “The government ought to do more to protect the environment.”

MIS Item #14: “The government ought to do more to prevent climate change.”

Conversely, higher scores (i.e. ‘4’ and ‘5’) on the following items were hypothesized to be *socially conservative*, and lower scores (i.e. ‘1’ and ‘2’) were hypothesized to be *socially liberal*:

MIS Item #1: “The government ought to do more about illegal immigration.”

MIS Item #2: “The United States government ought to build a fence along the US-Mexico border to prevent illegal immigration.”

MIS Item #3: “The government ought to seek out and deport illegal immigrants.”

MIS Item #4: “English ought to be the official language of the United States.”

MIS Item #7: “The government ought to use ‘enhanced interrogation techniques’ (including waterboarding) on suspected terrorists, in order to prevent terrorist attacks.”

MIS Item #8: “The theory of ‘intelligent design’ ought to be taught in public schools.”

MIS Item #11: “The government ought to do what is in its own national interests in foreign and international relations.”

MIS Item #15: “The government ought to define marriage as the union of one man and one woman.”

2.3.2. Primary Hypotheses

I tested two hypotheses about the relationship between the Dark Triad and MIS judgments, both of which were based on the results of my initial study. Out of eight questions on social

issues, my previous study found nine significant correlations between conservative judgments and the Dark Triad — or roughly one significant relationship per question – past a very high significance threshold of $p < .00001$. Because I detected far fewer significant relationships between conservative judgments and economic issues, I chose to exclude economic issues from the present study. Given that my previous study found approximately one significant positive correlation between conservative judgments and the Dark Triad per social issue examined, my first hypothesis was: (H1) *The present study would detect roughly the same proportion of significant correlations between conservative judgments and the Dark Triad, past the same significance threshold as in my original study ($p < .00001$).* Because the present study examined 15 social issues, my first hypothesis, (H1), can be stated more precisely as follows: *approximately 15 significant relationships would be detected between conservative social judgments (as defined by the MIS) and the Dark Triad, past a significance threshold of $p < .00001$.* Similarly, because my previous study found no significant relationships between liberal judgments and the Dark Triad past the $p < .00001$ threshold, my second hypothesis was: (H2) *no significant relationships would be detected between the Dark Triad and socially liberal MIS judgments, past the same $p < .00001$ threshold.*

2.3.3. Statistical Methods

Due to the exploratory nature of my initial study (there were no previously published studies on the Dark Triad and liberal/conservative judgments), I had utilized a Bonferroni correction to set a very high baseline threshold for significance ($p = .0008$). This method greatly diminishes the probability of Type I errors (i.e. false positives), and is therefore appropriate in exploratory research between variables which have no previously demonstrated relationship. However, in guarding strongly against Type I errors,

Bonferroni corrections run a corresponding risk of Type II errors (i.e. false negatives). Accordingly, because the present study is now building on existing literature (i.e. my previous findings), I have chosen to use both a Bonferroni-corrected threshold of $p=.0008$ (i.e. the standard .05 significance threshold divided by the number of statistical tests ran [60]), and also the two standard significance thresholds of $p=.05$ and $p=.01$.

3. Results

3.1. Results for Classificatory Hypotheses

Demographic data confirmed all but one of my classificatory hypotheses. As Table I indicates, ten out of fifteen classificatory hypotheses were confirmed past the highest possible significance threshold ($p<.00001$). Four other classificatory hypotheses – for MIS items 1 (“The government ought to do more about illegal immigration”), 5 (“Illegal immigrants ought to receive emergency medical treatment...”), 6 (“The children of illegal immigrants ought to receive public education...”) and 7 (“enhanced interrogation techniques”) – were confirmed at a lower significance threshold of $p = .01$. The only disconfirmed hypothesis was that social conservatives would support, and social liberals oppose, MIS item 11 (“The government ought to do what is in its own national interest in foreign and international affairs”). The demographic data showed a significant correlation in the opposite direction, with self-identified social liberals more likely to morally support, and self-identified social conservatives morally oppose, the statement expressed in item 11.

Let me briefly explain the results displayed in Table I. Each MIS item was tested for correlations with responses to the demographic survey item, “I consider myself to be a: [select from a 1-7 scale, where 1=social conservative, 4=social moderate, 7=social liberal.]”

A *positive* r -value (correlation coefficient) for any particular MIS item thus indicates that

affirmative answers to that item (i.e. “morally good” or “morally required”) correlated with *self-reported social liberalism*. Similarly, a *negative r*-value indicates that affirmative answers to the particular item a correlated with *self-reported social conservatism*.

TABLE I. Results for Hypothesized Categorizations

MIS Survey Item 1=morally wrong 3=morally neutral 5=morally required	Demographic Survey Item “I consider myself to be a: [select from scale 1-7, where 1=social conservative, 4=social moderate, 7= social liberal]”
<u>Item#1</u> : “The government <u>ought</u> to do more about illegal immigration.”	$r = -.085^{**}, p = .004$ (confirms hypothesis – conservative judgment)
<u>Item#2</u> : “The United States government <u>ought</u> to build a fence along the US-Mexico border to prevent illegal immigration.”	$r = -.191^{***}$ $p < .00001$ (confirms hypothesis – conservative judgment)
<u>Item#3</u> : “The government <u>ought</u> to seek out and deport illegal immigrants.”	$r = -.219^{***}, p < .00001$ (confirms hypothesis – conservative judgment)
<u>Item#4</u> : “English <u>ought</u> to be the official language of the United States. “	$r = -.188^{***}, p < .00001$ (confirms hypothesis – conservative judgment)
<u>Item#5</u> : “Illegal immigrants <u>ought</u> to be provided with emergency medical treatment (example: emergency room treatment), even if they cannot afford it.”	$r = -.080^{**}, p = .007$ (confirms hypothesis – liberal judgment)
<u>Item#6</u> : “The children of illegal immigrants <u>ought</u> to receive public education, because their illegal immigrant status is not their fault, but their parents’.”	$r = .121^{***}, p < .00001$ (confirms hypothesis – liberal judgment)
<u>Item#7</u> : “The government <u>ought</u> to use “enhanced interrogation techniques” (including waterboarding) on suspected terrorists, in order to prevent terrorist attacks.”	$r = -.088^{**}, p = .003$ (confirms hypothesis – conservative judgment)
<u>Item#8</u> : “The theory of “intelligent design” <u>ought</u> to be taught in public schools.”	$r = -.171^{***}, p < .00001$ (confirms hypothesis – conservative judgment)
<u>Item#9</u> : “Abortion is:.”	$r = .331^{***}, p < .00001$ (confirms hypothesis – liberal judgment)
<u>Item#10</u> : “A woman <u>ought</u> to have a legal right to have an abortion upon request.”	$r = .282^{***}, p < .00001$ (confirms hypothesis – liberal judgment)
<u>Item#11</u> : “The government <u>ought</u> to do what is in its own national interests in foreign and international relations.”	$r = .102^{**}, p = .001$ (disconfirms hypothesis – a liberal judgment, not conservative)
<u>Item#12</u> : “The government <u>ought</u> to work within the rules of the United Nations.”	$r = .105^{***}$ $p < .00001$ (confirms hypothesis – liberal judgment)
<u>Item#13</u> : “The government <u>ought</u> to do more to protect the environment: “	$r = .096^{**}$ $p = .001$ (confirms hypothesis – liberal judgment)
<u>Item#14</u> : “The government <u>ought</u> to do more to prevent climate change.”	$r = .121^{**}$ $p < .00001$ (confirms hypothesis – liberal judgment)

<p>Item#15: “The government <u>ought</u> to define marriage as the union of one man and one woman.”</p>	<p style="text-align: right;">$r = -.305^{***}$ $p = <.00001$ (confirms hypothesis – conservative judgment)</p>
--	--

**Correlation is significant at the .01 level (2-tailed)

***Correlation is significant at the <.00001 level (2-tailed).

3.2. Results: MIS Judgments and the Dark Triad

As Table II (below) indicates, my results strongly support – and indeed, well surpass – my first primary hypothesis: (H1), that approximately fifteen significant correlations would be detected between conservative moral judgments and the Dark Triad at the highest possible level of significance ($p < .00001$). I found twenty-two such correlations — seven more than expected. Conservative judgments correlated significantly with one or more members of the Dark Triad, past $p < .00001$, on MIS items 1 (“The government ought to do more about illegal immigration”), 2 (“The United States ought to build a fence along the US-Mexico border...”), 3 (“The government ought to seek out and deport illegal immigrants”), 4 (“English ought to be the official language of the United States”), 5 (“Illegal immigrants ought to be provided with emergency medical care...”), 6 (“The government ought to receive public education”), 7 (“The government ought to use ‘enhanced interrogation techniques’ (including waterboarding)...”), 8 (“The theory of ‘intelligent design’ ought to be taught in public schools...), 12 (“The government ought to work within the rules of the United Nations”), 13 (“The government ought to do more to protect the environment”), 14 (“The government ought to do more to prevent climate change”), and 15 (“The government ought to define marriage as the union between one man and one woman”). Strikingly, conservative judgments correlated significantly with all three Dark Triad traits (Machiavellianism, Narcissism, and Psychopathy) on MIS items 7 (“The government ought to use ‘enhanced interrogation techniques’ ...), 8 (“The theory of ‘intelligent design’ ought to

be taught in public schools”), and 15 (“The government ought to define marriage as the union of one man and one woman”). It is also striking that with respect to the five MIS items dedicated to the topic of illegal immigration (MIS items 1-3, 5 and 6) I found eight significant correlations between the Dark Triad and anti-illegal immigration judgments.

My results also strongly support my second hypotheses: (H2), that no significant correlations would be detected between liberal judgments and the Dark Triad (past a $<.00001$ threshold) – with one notable exception: liberal judgments on MIS item 9 (“Abortion is:”) correlated significantly with Psychopathy past $p<.00001$.

Interestingly, I also detected six correlations between liberal judgments and the Dark Triad at the two lower significance thresholds of $p=.05$ and $p=.01$. Three significant correlations were detected at $p=.05$: Machiavellianism with liberal judgments on MIS item 12 (“The government ought to work within the rules of the United Nations”), and Narcissism with liberal judgments on MIS items 11 (“The government ought to do what is in its own national interests in foreign and international relations”) and 14 (“The government ought to do more to prevent climate change”). At $p=.01$, liberal judgments correlated significantly with Machiavellianism on the following three MIS items: 11 (“The government ought to do what is in its own national interests in foreign and international relations”), 13 (“The government ought to do more to protect the environment”), and 14 (“The government ought to do more to prevent climate change”). It is important to note, however, that these relationships in fact support hypothesis (H2). None of these six correlations were significant past $p<.00001$ – the most conservative significance threshold, and by definition, the one least likely to result in Type I errors (false positives).

No ordering effects were detected between subjects who received the Short Dark Triad before the MIS, and vice versa – with one exception: MIS item 1 (“The government ought to do more about illegal immigration”). The significant correlations observed for this item (between conservative judgments and both Machiavellianism and Narcissism) only occurred when subjects received the Short Dark Triad survey before the MIS. Furthermore, there was a significant correlation between liberal judgments and Psychopathy on this item ($p=.124^{**}$, $r=.007$) for respondents who received the MIS before the Short Dark Triad – a relationship that did not show up in the overall results (see Table II below). These interesting observations may be artifacts of a faulty classificatory hypothesis for MIS item 1, which supposed this item to be a socially conservative judgment. This item was confirmed to be a conservative judgment, but only weakly, with a very small correlation coefficient ($r=-.085^*$, $p=.007$). Indeed, out of the 15 MIS items, this item had the second-lowest correlation coefficient and significance level (only MIS item 5 was lower on both counts). These results suggest that MIS Item 1 may be only *marginally* a socially conservative judgment, and indeed, that it might be a judgment that many social liberals share as well (note: this fits well with public discourse, for although conservatives tend to focus more on illegal immigration than liberals, and propose to address it differently, both sides generally appear to agree that illegal immigration is a problem). I speculate that liberals and conservatives may have judged MIS Item 1 similarly *for different reasons*, and that the ordering of the two surveys differentially primed these reasons.

In any case, let me briefly explain the results displayed in Table II. Because affirmative responses (i.e. ‘4’ or ‘5’) were coded as “liberal” for some MIS items (e.g., liberals *agree* with MIS item 10 that, “A woman ought to have a legal right to have an

abortion upon request) but as “conservative” for other MIS items (e.g., conservatives *agree* with MIS item 1 that, “The government ought to do more about illegal immigration”), positive r-values (i.e. correlation coefficients) represent correlations with *liberal* judgments for some MIS items but correlations with *conservative* judgments for other items. For the sake of clarity, I have taken the liberty to explicitly state, in each box where a significant correlation was observed, the significant correlation’s direction (liberal or conservative).

Table II. MIS Judgments and the Dark Triad

MIS Item	MACHIAVELLIANISM	NARCISSISM	PSYCHOPATHY
Item#1: “The government <u>ought</u> to do more about illegal immigration.”	$r = .172^{***}, p < .00001$ (correlation with conservative judgment)	$r = .151^{***}, p < .00001$ (correlation with conservative judgment)	$r = -.014, p = .640$
Item#2: “The United States government <u>ought</u> to build a fence along the US-Mexico border to prevent illegal immigration.”	$r = .183^{***}, p < .00001$ (correlation with conservative judgment)	$r = .110^{***}, p < .00001$ (correlation with conservative judgment)	$r = .067, p = .024$
Item#3: “The government <u>ought</u> to seek out and deport illegal immigrants.”	$r = .175^{***}, p < .00001$ (correlation with conservative judgment)	$r = .126^{***}, p < .00001$ (correlation with conservative judgment)	$r = .036, p = .222$
Item#4: “English <u>ought</u> to be the official language of the United States.”	$r = .129^{***}, p < .00001$ (correlation with conservative judgment)	$r = .141^{***}, p < .00001$ (correlation with conservative judgment)	$r = -.007, p = .816$
Item#5: “Illegal immigrants <u>ought</u> to be provided with emergency medical treatment (example: emergency room treatment), even if they cannot afford it.”	$r = .003, p = .931$	$r = .040, p = .177$	$r = -.143^{***}, p < .00001$ (correlation with conservative judgment)
Item#6: “The children of illegal immigrants <u>ought</u> to receive public education, because their illegal immigrant status is not their fault, but their parents’.”	$r = -.021, p = .476$	$r = .026, p = .371$	$r = -.158^{***}, p < .00001$ (correlation with conservative judgment)
Item#7: “The government <u>ought</u> to use “enhanced interrogation techniques” (including waterboarding) on suspected terrorists, in order to prevent terrorist attacks.”	$r = .334^{***}, p < .00001$ (correlation with conservative judgment)	$r = .204^{***}, p < .00001$ (correlation with conservative judgment)	$r = .299^{***}, p < .00001$ (correlation with conservative judgment)
Item#8: “The theory of	$r = .221^{***}, p < .00001$	$r = .231^{***}, p < .00001$	$r = .129^{***}, p < .00001$

“intelligent design” <u>ought</u> to be taught in public schools.”	(correlation with conservative judgment)	(correlation with conservative judgment)	(correlation with conservative judgment)
<u>Item#9</u> : “Abortion is:.”	$r = .011, p = .713$	$r = .000, p = .987$	$r = .184^{***}, p < .00001$ (correlation with liberal judgment)
<u>Item#10</u> : “A woman <u>ought</u> to have a legal right to have an abortion upon request.”	$r = -.024, p = .424$	$r = -.031, p = .298$	$r = -.001, p = .966$
<u>Item#11</u> : “The government <u>ought</u> to do what is in its own national interests in foreign and international relations.”	$r = .089^{**}, p = .003$ (correlation with liberal judgment)	$r = .063^*, p = .034$ (correlation with liberal judgment)	$r = .032, p = .284$
<u>Item#12</u> : “The government <u>ought</u> to work within the rules of the United Nations.”	$r = .074^*, p = .012$ (correlation with liberal judgment)	$r = .044, p = .136$	$r = -.147^{***}, p < .00001$ (correlation with conservative judgment)
<u>Item#13</u> : “The government <u>ought</u> to do more to protect the environment: “	$r = .095^{**}, p = .001$ (correlation with liberal judgment)	$r = .018, p = .537$	$r = -.191^{***}, p < .00001$ (correlation with conservative judgment)
<u>Item#14</u> : “The government <u>ought</u> to do more to prevent climate change.”	$r = .093^{**}, p = .002$ (correlation with liberal judgment)	$r = .069^*, p = .019$ (correlation with liberal judgment)	$r = -.127^{***}$ $p < .00001$ (correlation with conservative judgment)
<u>Item#15</u> : “The government <u>ought</u> to define marriage as the union of one man and one woman.”	$r = .221^{***}$ $p < .00001$ (correlation with conservative judgment)	$r = .215^{***}$ $p < .00001$ (correlation with conservative judgment)	$r = .113^{***}$ $p < .00001$ (correlation with conservative judgment)

*Correlation is significant at the .05 level (2-tailed).

**Correlation is significant at the .01 level (2-tailed)

***Correlation is significant at the <.00001 level (2-tailed).

4. Discussion

Once again, the primary aim of this study was to examine whether the relationships found in my first study between “conservative” moral judgments and the Dark Triad extend to other, broader social issues. I also aimed to retest my initial study’s findings that no significant relationships exist between liberal moral judgments and the Dark Triad. My results here are clear. Using a newer, broader set of social issues, and the same extremely stringent Bonferroni-corrected significance threshold as in my previous study, I found *twenty-two* significant relationships between conservative judgments and the Dark Triad, compared to only *one* significant relationship between liberal judgments and the Dark

Triad. To put this in perspective, at the significance threshold of $p < .00001$ – the strictest significance threshold possible, and the only least likely to give rise to false positives – there were 1.54 significant correlations between conservative judgments and the Dark Triad for every one social issue examined, compared to only 0.06 significant correlations per social issue for liberal judgments. Furthermore, across my two studies combined, I have now found thirty-four significant correlations (at $p < .00001$) between conservative views and the Dark Triad across twenty-three social issues – or 1.48 significant relationships per social issue – compared to only one significant correlation between liberal views and the Dark Triad (at $p < .00001$).

This study's results are a bit more complex, on the other hand, when considering the two lower significance thresholds of $p = .05$ and $p = .01$. When these two lower thresholds are factored in, I detected the same twenty-two significant correlations between conservative judgments and the Dark Triad but also seven significant relationships between liberal judgments and the Dark Triad (including the one relationship significant at $p < .00001$). What should we make of the fact that six additional significant results occurred for liberal judgments at $p = .05$ and $p = .01$? These results suggest – contrary to my previous study – that some relationships exist between liberal judgments and the Dark Triad, but that these relationships are statistically weaker, and far fewer in number, than the relationships between the Dark Triad and conservative judgments. Indeed, there are a few noteworthy things about the six significant correlations that arose for liberal judgments at the two lower significance levels. First, six out of the seven significant correlations for liberal judgments had correlation coefficients of less than $r = 0.1$ (specifically, they were between $r = 0.06$ and $r = 0.095$), which indicates only a weak relationship with the Dark

Triad.³ Indeed, none of the correlation coefficients for conservative judgments were this small (the smallest *r-value* for significant conservative results was $r=.110$, and several conservative results had *r-values* upwards of 0.2 and even 0.3 – indicating far stronger relationships). Second, the only liberal judgment that correlated with a member of the Dark Triad past $p<.00001$ concerned the MIS item with a peculiar question-wording issue (MIS item 9: “Abortion is “). Third, given that six out of the seven significant results detected for liberal judgments only passed one or both of the lower significance thresholds I utilized ($p=.05$ and $p=.01$), it is statistically likely that one or two of significant correlations detected for liberal judgments are false positives. Let me explain. I utilized a Bonferroni-correction in my previous study to guard against false positives. When performing a large number of statistical tests (as I do in both studies), false positives increase in likelihood. For example, the threshold of $p=.05$ entails that out of every 100 statistical tests performed, five will be false positives. Similarly, $p=.01$ entails that out of every 100 tests performed, one will be a false positive. In contrast, the Bonferroni corrected threshold of $p=.0008$ entails that only 8 out of 10,000 tests (or .08 out of every 100 tests) will be false positives. Given that three out of the seven significant findings I observed for liberal judgments only passed the $p=.05$ threshold, it follows that *one or two* of those three findings is likely to be a false positive. Indeed, in all three of the other samples I cross-checked my results with (see §2), two of the six relationships I detected for liberal judgments at $p=.05$ did not appear: namely, the correlations between Narcissism and liberal judgments on MIS items 11 (“The government ought to do what is in its own

³ Cohen’s (1988) famous and oft-cited guidelines for interpreting effect-size in the behavioral sciences are: $r=.10$ indicates a small effect, $r=.30$ a medium effect, and $r=.50$ a large effect. These six liberal relationships all fall short of the $r=.10$ threshold denoting a small effect.

national interests in foreign and international affairs”) and 14 (“The government ought to do more about climate change”).⁴ Given that these two results did not hold in other samples, and the fact that the correlation coefficients were lower than $r=.10$, a conventional threshold for denoting a “small effect,” it is likely that both are false positives. All of these qualifications aside, my results clearly indicate that there are some – though far fewer and weaker – relationships between liberal judgments and the Dark Triad.

Skeptical readers might suggest that insofar as I did detect several significant correlations between liberal views and the Dark Triad, the results across my two studies may still be an artifact of the particular social issues I chose to investigate. Might I have found more relationships between the Dark Triad and liberal judgments if I had chosen yet *another* set of issues that traditionally divide liberals and conservatives – for example, the legalization of illicit drugs, advocacy of sexual abstinence versus progressive sexual education, etc.? My reply is that although this is of course a logical possibility – and one that I hope to investigate in future studies – my two studies comprise strong inductive evidence against it. After all, as I noted in §2 (Methods), my two studies together approximate a *representative sample* of social issues that traditionally divide social liberals and conservatives. The set issues that I have investigated across my two studies – abortion, gay marriage, environmentalism, gun control, capital punishment, enhanced interrogation techniques, etc. – cover a very broad spectrum of traditional disagreements between liberals and conservatives. The fact that after examining twenty-three different social issues, I have found *thirty-four* significant relationships between conservative judgments and the Dark Triad (all at $p<.00001$) compared to only seven significant relationships

⁴ Again, these additional samples are available from me upon request.

between liberal judgments and the Dark Triad (only one of which passed $p < .00001$), strongly indicates that (A) conservative social judgments are *systematically* related to the Dark Triad across a wide array of social issues, whereas (B) relationships between liberal judgments and the Dark Triad are weak and few in number.

My new results are particularly provocative for a couple of reasons. First, three particularly controversial conservative views – that the government ought to define marriage as the union of a man and a woman, the view that “intelligent design” should be taught in public schools, and the view that the government ought to use “enhanced interrogation techniques” (such as waterboarding) on suspected terrorists – each correlated significantly with all three Dark Triad traits. Second, liberal and conservative judgments on the environment and climate change both correlated significantly with *different* members of the Dark Triad: Machiavellianism correlated with liberal judgments on MIS item 13 (“The government ought to do more to protect the environment”), Machiavellianism and Narcissism both correlated with liberal judgments on MIS item 14 (“The government ought to do more to prevent climate change”) – however, *conservative* judgments correlated with Psychopathy on these same two items. These results indicate that liberal and conservative positions on the environment and climate change are *both* related to (different) antisocial personality traits. What should we make of these results – and indeed, my original results more generally?

Before I address this question, I would like to raise and briefly address a concern some readers might have about both of my studies. The worry is that although I found numerous correlations between conservative social views and the Dark Triad between my two studies, the strength of the correlations were only small to medium, and not large

enough to warrant real concern (the correlation coefficients of my significant results were generally between 0.1 and 0.3). My reply, first, is that r values between .10 and .30 are widely recognized as respectable effect sizes within the behavioral sciences. Second, even if the relationships between moral judgments (liberal and conservative) and the Dark Triad are only small or moderate, this is enough to raise *prima facie* worries about those judgments. After all, suppose I were to tell you that although many people who hold your moral views do not have an antisocial trait, it is nevertheless the case that *people who share your moral views are mildly to moderately more likely to possess an antisocial trait*. Surely this fact is worrisome. Secondly, and more importantly, I believe there is a way to empirically test whether the correlations I have found are significant enough to constitute the kind of “bad news for conservatives” I suggested in my previous study.

My proposal is simple. In order to determine which levels of the Dark Triad are morally bad, we should seek to determine which levels of those traits correlate with higher levels of behaviors that are *widely or universally considered to be morally bad* – for example, criminal activity. Here, I believe, is one way this might be done: conduct a study in which participants fill out (A) a Dark Triad inventory, but also (B) a misconduct inventory, such as the Comprehensive Misconduct Inventory (Williams et al. 2001 & Williams et al. 2007), a 50-item survey which has participants self-report a wide variety of misbehaviors including criminal behavior, driving misconduct (e.g. “road rage”), bullying, alcohol and drug abuse, and aggression towards persons and structures of authority. If particular levels of the Dark Triad are then found to correlate significantly with the kinds of moral misbehaviors respondents self-reported, we would then have real empirical evidence that *those* levels of the Dark Triad are related to *morally bad behavior*. What we could then do is test the data

from my studies to see whether the *morally bad levels* of the Dark Triad correlate significantly with conservative or liberal judgments on the social issues examined in the MIS. If we did find that morally bad levels of the Dark Triad correlate with conservative (or alternately, liberal) views on particular issues – for example, illegal immigration, capital punishment – then we would have *strong correlational evidence* that those (conservative or liberal) judgments *are related to morally bad behavior*. That, obviously, would seem to be “bad news.” If, for example, liberal or conservative views on the death penalty correlated with *morally bad behavior*, we would have real evidence that people with certain views on the death penalty *are bad people* – and so we could make the kind of inductively justified *ad hominem* argument that I suggested in my previous study (we could say things like, “Those views on the death penalty are not good, as *bad people* systematically favor them”). If, on the other hand, we did not find the conservative (or liberal) judgments in my studies to correlate with the morally bad levels of the Dark Triad, we would in that case have evidence that the correlations between conservative (or liberal) views and the Dark Triad are *not* necessarily indicative of moral badness. Either way, I believe this sort of study is the next important step to take in determining whether my results are “bad news” for conservatives (or liberals).

Forthcoming in *Neuroethics* – The Final Publication is available at www.springerlink.com

Acknowledgements

I would like to thank Neil Levy and an anonymous reviewer at *Neuroethics* for their very helpful comments.

References

Arvan, Marcus (in press). "Bad News for Conservatives? Moral Judgments and the Dark Triad Personality Traits," *Neuroethics* (available Online First at: <http://www.springerlink.com/content/k86q25k2278188gw/>).

Cohen, Jacob (1988). *Statistical Power Analysis for the Behavioral Sciences* (second ed.). Lawrence Erlbaum Associates.

Himmelstein, Jerome L. (1990). *To the Right: The Transformation of American Conservatism*. Berkeley: University of California Press.

Kerlinger, Fred Nichols (1984). *Liberalism and conservatism: The nature and structure of social attitudes*. Lawrence Erlbaum Assoc Inc.

Paulhus, D.L., & Jones, D.N. (2011). *Introducing a short measure of the Dark Triad*. Presented at the meeting of the Society for Personality and Social Psychology, San Antonio.

Smith, K. B., Oxley, D. , Hibbing, M. V., Alford, J. R. and Hibbing, J. R. (2009). "The Ick Factor: Disgust Sensitivity as a Predictor of Political Attitudes" *Paper presented at the annual meeting of the Midwest Political Science Association. Online <PDF>. 2011-06 07 from http://www.allacademic.com/meta/p362242_index.html.*

Williams, K., McAndrew, A., Learn, T., Harms, P., & Paulhus, D.L. (2001). *Dark Personalities: Anti-social behavior and entertainment preferences*. Presented at meeting of the American Psychological Association, San Francisco.

Williams, K.M., Paulhus, D.L., & Hare, R.D. (2007). "The four facet structure of psychopathy in non-forensic samples." *Journal of Personality Assessment*, 88, 118-129.

Wilson, G. D. & Patterson, J. R. (1968). "A new measure of conservatism." *British Journal of Social and Clinical Psychology*, 7, 264-269.

APPENDIX

Short Dark Triad Survey

Please rate the degree to which you agree with the following statements.

Disagree Strongly 1	Disagree a little 2	Neither agree nor disagree 3	Agree a little 4	Agree Strongly 5
---------------------------	---------------------------	------------------------------------	------------------------	------------------------

1. It's not wise to tell your secrets.
2. Generally speaking, people won't work hard unless they have to.
3. Whatever it takes, you must get the important people on your side.
4. Avoid direct conflict with others because they may be useful in the future.
5. It's wise to keep track of information that you can use against people later.
6. You should wait for the right time to get back at people.
7. There are things you should hide from other people because they don't need to know.
8. Make sure your plans benefit you, not others.
9. Most people are suckers.
10. Most people deserve respect. (R)
11. People see me as a natural leader.
12. I hate being the center of attention. (R)
13. Many group activities tend to be dull without me.
14. I know that I am special because everyone keeps telling me so.
15. I like to get acquainted with important people.
16. I feel embarrassed if someone compliments me.(R)
17. I have been compared to famous people.
18. I am an average person.(R)
19. I insist on getting the respect I deserve.
20. I like to get revenge on authorities.
21. I avoid dangerous situations. (R)
22. Payback needs to be quick and nasty.
23. People often say I'm out of control.
24. It's true that I can be cruel.
25. People who mess with me always regret it.
26. I have never gotten into trouble with the law. (R)
27. I like to pick on losers.
28. I'll say anything to get what I want.

Scoring: Reverse the scoring on all the reversals items (marked with R). Then calculate the mean of the items within each subscale: Machiavellianism (items 1-10); Narcissism (items 11-19); Psychopathy (items 20-28).

Moral Intuition Survey

Directions: Please rate the following statements following the scale below. You can be honest because your name will not be attached to the answers.

Morally Wrong 1	Morally bad but not forbidden 2	Morally neutral (neither good nor bad) 3	Morally good but not required 4	Morally Required 5
--------------------	---------------------------------------	--	---------------------------------------	--------------------------

1. "The government ought to do more about illegal immigration."
2. "The United States government ought to build a fence along the US-Mexico border to prevent illegal immigration."
3. "The government ought to seek out and deport illegal immigrants."
4. "English ought to be the official language of the United States. "
5. "Illegal immigrants ought to be provided with emergency medical treatment (example: emergency room treatment), even if they cannot afford it."
6. "The children of illegal immigrants ought to receive public education, because their illegal immigrant status is not their fault, but their parents'."
7. "The government ought to use "enhanced interrogation techniques" (including waterboarding) on suspected terrorists, in order to prevent terrorist attacks."
8. "The theory of "intelligent design" ought to be taught in public schools."
9. "Abortion is:."
10. "A woman ought to have a legal right to have an abortion upon request."
11. "The government ought to do what is in its own national interests in foreign and international relations."
12. "The government ought to work within the rules of the United Nations."
13. "The government ought to do more to protect the environment: "
14. "The government ought to do more to prevent climate change."
15. "The government ought to define marriage as the union of one man and one woman."

Demographic Survey

1. My age is: [fill in the blank].
2. My gender is: [select from: male, female, transgendered (identify male), transgendered (identify female)].
3. My political party affiliation is best described as (*United States citizens only*): [select from the following: Democrat, Republican, Independent, Tea Party].
4. I consider myself to be a: [select from scale 1-7, where 1=fiscal/economic conservative, 4=fiscal/economic moderate, 7=fiscal/economic liberal].
5. I consider myself to be a: [select from scale 1-7, where 1=social conservative, 4=social moderate, 7=social liberal].