



Correcting honest errors versus incorrectly portraying them: Responding to Ludeke and Rasmussen[☆]



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ARTICLE INFO

Article history:

Received 22 April 2016

Received in revised form 18 May 2016

Accepted 20 May 2016

Available online 1 August 2016

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1. Introduction

The relationship between personality traits and political attitudes is a topic filled with alarming levels of vitriol that at times overshadows the substantive scientific findings that ought to be the cornerstone of academic discourse. A series of papers by Verhulst and colleagues (Verhulst, Eaves, and Hatemi, 2012; Verhulst, Hatemi, and Martin, 2010; Verhulst and Estabrook, 2012; Hatemi and Verhulst, 2015b) converged on the finding that relationships between personality traits and political attitudes were spurious. We found no evidence that personality traits play a causal role in the formation of political attitudes. Our papers are wildly unpopular as countless scholars are dedicated to a theory where personality traits cause the formation of attitudes. Given the lack of evidence of a causal relationship, and the generally modest correlations between personality traits and political values, our results question extant interpretations of the association between the constructs, and calls for the development of a more detailed theory. Not central to the thesis of these papers, and having no substantive impact on the primary analyses or conclusions, in the descriptive statistics we reported the signs of several correlations between personality traits and political attitudes that we later found to be reverse coded due to a codebook error. In July of 2015, corrections were submitted and published to this effect (Hatemi and Verhulst, 2015b; Verhulst, Eaves, and Hatemi, 2016; Verhulst, Hatemi and Martin, 2016).¹

In the manuscript, “Personality correlates of sociopolitical attitudes in the Big Five and Eysenckian models”, Ludeke and Rasmussen (2016) misrepresented our work, taking a minor error and falsely portraying it as something of great importance. Specifically, Ludeke and Rasmussen erroneously stated our papers were focused on the phenotypic correlations, that we were the first to report such correlations, and that our goal was to link certain personality traits with liberalism and others with conservatism. The goals of the Verhulst et al.'s papers and the principal results were clearly focused on the opposite, showing the lack of a causal relationship. We felt obliged to reply to correct Ludeke and Rasmussen's mischaracterization of our work. Their erroneous portrayal that the coding error had a major outcome on the papers, misrepresentation of communication and data accessibility, and their choice to selectively discuss and avoid discussing published corrections, false portrayal of how our papers were used, combined with the claim that our findings were motivated by political bias has created a false sense of controversy, and detracted from the scientific enterprise.

2. Misrepresentations of the Verhulst et al. findings

Ludeke and Rasmussen made many unfounded assertions. After review, the only claim they made about our work that can be verified as true was that we had a coding error. This is not surprising since we published errata in July 2015 stating this, and additional errata were on-line at the same time. We do not, however, address all of their inaccurate and derisive innuendo and instead focus on the false representation of our work. First, throughout their paper they falsely claimed that our research focused on the signs of the correlation between personality traits and political attitudes. In reality, whether a specific personality trait was positively or negatively correlated to liberal or conservative attitudes was tangential, having no role in our theory or impact on our analyses

[☆] Note: Elsevier's legal team edited the current paper *after* it had been accepted for publication. This was required for publication.

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¹ The corrigendum for *Personality and Individual Differences* was accepted for publication in July 2015 but was not sent to press until recently.

or conclusions. The general directions of the correlations we showed had been reported for decades. Rather, our focus and novel results showed that whatever the directions of the correlations are between personality traits and attitudes, the relationships are spurious. Second, Ludeke and Rasmussen selectively avoid acknowledging the published errata that clearly identified and discussed the coding error in the original manuscripts, all of which were accepted and either in print, in press or on-line before they submitted their article.² Third, they argued that our conclusions were motivated by a bias to demonstrate that liberals possessed positive personality traits and conservatives possessed negative personality traits, when nothing could be further from the truth. We address each of these misrepresentations in turn.

2.1. Correlation not causation

The series of papers in question are clearly about challenging the presumed causal relationship between personality traits and political attitudes. This is important to reiterate because anyone who has not read the original papers or our corrections, but has read Ludeke and Rasmussen's critiques, would be left with the inaccurate impression that our papers were focused on the opposite, making claims about the direction of the phenotypic correlations. Challenging the presumed causality, not making connections between personality and attitudes, is unmistakably the primary aim of our papers. It is also clear the only theory we sought to address was the theory that personality mattered at all for political attitude development. We elaborate on the goals and findings of the Verhulst et al. papers in Sections 3 & 4, but just looking at the title's make our aims clear: For example, Verhulst and Estabrook (2012) is titled "Using Genetic Information to Test Causal Relationships in Cross-Sectional Data"; Verhulst et al. (2012) is titled "Correlation not Causation: The Relationship between Personality Traits and Political Ideologies"; Hatemi and Verhulst (2015a) is titled "Political Attitudes Develop Independently of Personality Traits", referencing the lack of a causal relationship between personality traits and political attitudes.

A simple way to underscore the minimal importance of the direction of the phenotypic relationships in our original papers is to look at the number of words dedicated to explaining these correlations.³ Only a handful of words in Hatemi and Verhulst (2015a) and Verhulst and Estabrook (2012) and a handful of sentences in Verhulst et al. (2012) describe these associations. The majority of discussion on the correlations, though still a minor part of the paper, occurred in Verhulst et al. (2010). This made sense given the reviewer and editorial guidance as the special issue was dedicated to Tom Bouchard, who spent a great deal of time exploring similar relationships.

Ludeke and Rasmussen falsely claimed that our papers are highly cited for the direction of the phenotypic correlations, and that we were the first to find such correlations. In truth, two papers are modestly cited, but in contrast to what Ludeke and Rasmussen claim, these papers are almost entirely referenced in the discussion of the lack of a

² For a full description we refer readers to the issued corrections (Hatemi & Verhulst, 2015b; Verhulst et al., 2015; Verhulst et al., 2016). Briefly, the potential for error became known through a blind-review request in June of 2015. This manuscript provided some hint that a coding error might be present in our work, and based upon this we immediately re-examined the issue. Because of identification and confidentiality concerns, and best practices, the data are cut on a project-by-project basis. Our personality-attitudes project was unique because it required two large data sets, collected 25 years ago, from different countries to be merged. In one country, the attitudes were coded 1 = Yes, 2 = ?, 3 = No, while in the other, they were coded 3 = Yes, 2 = ?, 1 = No. After comparing the data files with the hard copies of the surveys, we found that when the datasets were merged, the values were reversed in the codebook. The error occurred before we even began analyzing the data. This specific extraction of the data was used in a total of four papers. Upon finding the coding error, within hours we discussed it with the editors of the journals that published the manuscripts, and shortly thereafter, issued corrigenda/errata. The journal editors found that the analyses and conclusions of our papers remained unchanged, but agreed with us that errata were needed to address the discrepancy in the descriptive statistics.

³ Less than 6% of the words in the combined papers, including the literature reviews, are focused on the correlations.

causal relationship between political attitudes and personality traits. Less than a handful of citations even mention or hint at the descriptive analyses or phenotypic correlations, including Ludeke and Rasmussen. This is likely true because such relationships are old news and were reported more than 40 years ago (e.g., see Wilson & Brazendale, 1973) and were not central to our papers; we elaborate on this aspect of Ludeke and Rasmussen's fallacious claims in Section 2.3. Rather, the point of our papers, which Ludeke and Rasmussen avoid, was to show that the direction of the correlations between personality and attitudes are immaterial.

2.2. Not acknowledging published corrections and selectively acknowledging others

Ludeke and Rasmussen were aware errata had been issued, given the journal requested their permission in July 2015 to credit them (Verhulst, Eaves, & Hatemi, 2016), but they only mention one of the corrections in a footnote and quote from it, although they actually do not cite the real correction, oddly leaving out the primary author. In all other places, however, they make no reference to the corrections and avoid acknowledging these previously published corrections as they directly contradicted their argument (see Hatemi & Verhulst, 2015b; Verhulst et al., 2015, 2016). This allowed Ludeke and Rasmussen to erroneously contend that a major controversy currently exists regarding the direction of the correlations between our papers and the rest of the field. This falsehood has several implications.

Throughout the paper Ludeke and Rasmussen made several statements, such as we "now acknowledge" the coding error or have "now issued" corrections, which insinuates that we attempted to hide, cover-up or otherwise resist disclosing the error and creates a false impression that the corrections were not issued or published by the time they submitted their paper. Further, they repeatedly made statements like "leaving aside the studies by Verhulst and Hatemi", which erroneously suggests that the coding error was not corrected and remained unknown to the field of research. These allegations are clearly not true given all errata were submitted in the summer of 2015, with the first one published in July of 2015, almost one year before their paper was submitted to the current journal, and the remainder went on-line shortly thereafter, and the correlations presented in their paper are in the same direction as those stated in our earlier corrections (Hatemi & Verhulst, 2015b; Verhulst et al., 2015, 2016).

2.3. Claims of political bias

Ludeke and Rasmussen argue that our motivation was biased in order to intentionally vilify conservatives and portray liberals in a more positive light. They further argued we attempt to generate new theory in this regards. In reality, the history of professionalism, research interests, and diversity of the author team would make any such bias impossible. The facts simply contradict their claims. None of us had any interest in the directions of the correlations, simply looking at our published research makes this clear, but more to the point we explicitly stated in each article that the choices of the relationships we explored had nothing to do with the sign of the correlations, but were based upon the magnitude of the correlations (e.g. "We focus on the combination of personality traits and attitude dimensions identified in the extant literature that share the largest covariance"; see Verhulst et al., 2010, p. 309; Verhulst et al., 2012, pp. 40–41; Hatemi & Verhulst, 2015a, pp. 4–5). Further, by using traits labeled Neuroticism and Psychoticism, there was no situation where either conservatives or liberals could avoid a correlation with a personality trait with a negative connotation. We "inherited" the measures and used them without endorsing any derogatory connotations that they may have implied. In fact, in an earlier, peer-reviewed version of our first submitted article that is still present on the editorial manager, we stated:

Because of its label, “psychoticism” carries with it negative connotations for those unfamiliar with the personality trait; having a high psychoticism score is not a diagnosis of being clinically psychotic or psychopathic. We use Eysenck’s label to remain consistent with the literature, but acknowledge that the label is ambiguous. Unfortunately, many of the reported relationships between personality and political preferences are rife with one sided normative valuations, more often portraying conservatives negatively and liberals positively. To explicitly clarify, by using the term psychoticism, we do not wish to exacerbate this tendency by implying that if conservatives or liberals are associated with high levels of the trait, they are somehow bad. There are many positive aspects of both conservatism/traditionalism as well as psychoticism such as work ethic, locus of control, and stability. Narrowly focusing on the negative implications of a trait and the positive implications of the other creates a false juxtaposition of a good versus bad dichotomy.

Through the review process, and not of our own preference, this paragraph was removed. Nevertheless, this clearly refutes Ludeke and Rasmussen’s claims.

We took our interpretation of Psychoticism and the associated theory of personality from its originator, Hans Eysenck and a longstanding published literature that *already identified a positive correlation between conservatism and Psychoticism* (Eysenck & Wilson, 1978; Francis, 1992; Nias, 1973; Pearson & Grotorex, 1981; Powell & Stewart, 1978; Wilson & Brazendale, 1973). The literature also suggested Psychoticism is associated with Authoritarianism and Social Dominance Orientation, both of which are typically correlated with conservatism (e.g., Pratto, Sidanius, Stallworth, & Malle, 1994; Stenner, 2005). This, coupled with research that found a positive correlation between Psychoticism and the same type of Wilson and Patterson (1968) measure we used for conservatism (Pearson & Grotorex, 1981; Wilson, 1973, p. 189; Wilson & Brazendale, 1973), aligned with our original (but later reversed) descriptive analyses. We simply replicated relationships already found in the existing literature, and thus had no reason to suspect they were in error. While Ludeke and Rasmussen claimed bias on our part they opportunely left out that our descriptives were perfectly reasonable to expect given such correlations matched what has been in print for over 40 years. Here again, Ludeke and Rasmussen made a false claim that our paper was the first to show this relationship and that our work was in contrast to the field. Given the directions of the correlations were not relevant to our research questions, analyses or conclusions, and they had been in print for decades, there was no reason to consider anything was out of the ordinary. As it turns out the authoritarian or tough-minded facets were not driving Eysenck’s Psychoticism in both Ludeke and Rasmussen’s and our data. Instead, in both of our datasets the rule-breaking and non-conforming elements appears to be driving the factor⁴, yet this is inconsistent with other findings and data sets as noted above. It is therefore reasonable to expect a correlation with liberalism or conservatism depending on which conceptualizations of Psychoticism, attitudes, or data are used.

To underscore the diversity of the literature on this point, in our original (uncorrected) papers our descriptives showed that Neuroticism was associated with Economic Liberalism, consistent with many others (e.g., Burton, Plaks, & Peterson, 2015; Gerber, Huber, Doherty, & Dowling, 2011; Riemann, Grubich, Hempel, Mergl, & Richter, 1993). As it turns out, after our corrections, the results in our data suggest that Neuroticism is instead correlated with Economic Conservatism, consistent with other conceptualizations (Jost, Glaser, Kruglanski, & Sulloway, 2003; Jost et al., 2007). A similar situation exists with social desirability. This epitomizes the relationship between most personality traits and political attitudes: inconsistent, nonexistent, and dependent on the sample and measures (for examples of inconsistent findings on

Psychoticism, see Pearson & Sheffield, 1976; Ray, 1982). Not only did we state this in our original papers and in our corrections, but the inconsistency of the relationships between most personality traits and political attitudes is so entrenched in the established wisdom and supported by the literature⁵ that not one reviewer or editor reported any concerns on any of our manuscripts regarding the directions of the correlations.

3. The goals and findings of the Verhulst et al. papers and the insignificance of the coding error

The impact of the coding error was limited to discussions of the preliminary analyses and descriptive sections of our papers and largely present in one paper, as we noted above, and further evidenced by the journal editors’ reviews of our work. The overwhelming focus and primary results of our papers remained unchanged; specifically the lack of empirical support for a causal relationship between the personality traits and political attitudes. How it is possible for the primary conclusions to remain unaffected when some of the descriptive statistics are incorrect? The answer is based upon the fact that our theory and analyses focused on the magnitude, not direction, of the correlations. Whether a personality trait is positively or negatively correlated with liberalism or conservatism had no bearing on the research questions or subsequent analyses. They were included as descriptives, which is standard practice. One simply cannot jump right into the core analyses without describing the data. The 4 papers rely on 3 separate tests of causality: testing for pleiotropic genetic effects (Verhulst et al., 2010); testing the direction of causation (Verhulst & Estabrook, 2012; Verhulst et al., 2012); and longitudinal mediation (Hatemi & Verhulst, 2015a). In all cases, the test of causality was agnostic to the direction of the relationships.

Verhulst et al. (2010) decomposed the covariance between personality traits and ideological variables and found genetic pleiotropy explained the primary pattern of relationships between Psychoticism and the various political attitudes, while unmeasured environmental factors explained the primary pattern or relationships for Social Desirability and the political attitude dimensions. Thus, whether Psychoticism was positively or negatively related to liberalism was irrelevant. It only mattered that the magnitude of the relationship was large enough to decompose into genetic and environmental sources of covariance. Our results questioned the assumed causal relationship that was pervasive in the literature at the time; opposite of what Ludeke and Rasmussen portray was our aim.

Verhulst et al. (2012) provided a stronger test of the causal hypothesis using what has been dubbed a direction of causation (DoC) model. This test of causality rests not on the direction of the relationship between two variables but on the ratio of the cross-twin cross-trait covariance in MZ twins relative to DZ twins. We found no evidence that personality traits cause people to develop political attitudes. In most cases, the correlation between the two was a function of pleiotropic genetic effects. Similarly, Verhulst and Estabrook (2012) provided a demonstration of the application of the direction of causation model rather than a substantive argument about the correlation between personality traits and political attitudes.

Finally, Hatemi and Verhulst (2015a) used structural equation modeling techniques and cross-lagged correlation models to demonstrate that after accounting for the autoregressive structure of the political attitude dimensions, *the relationship between personality traits and political ideologies was trivial*. We also explored Openness to Experience’s positive relationship with Liberalism, emphasizing the generalizability of our results. Specifically, using two independent samples that explored changes in personality and attitudes over a ten-year

⁴ We also suggested it was possible that Psychoticism could be related to liberalism (Verhulst et al., 2012).

⁵ The major exception is Openness to Experience, which was designed to capture and is consistently related to liberal attitudes (we also find this in Hatemi & Verhulst, 2015a), and to a lesser extent Conscientiousness, which is associated with conservative attitudes.

period we found changes in personality did not predict changes in political values (Hatemi & Verhulst, 2015a).⁶ Political attitudes were at least as stable as personality traits and the vast majority of genetic variation in political attitudes was not shared with personality traits. Simply put, contrary to a causal theory of personality, *there was no evidence that personality had a meaningful role in changes in political attitudes*. Again, this is almost entirely opposite of what Ludeke and Rasmussen claimed our research was about. Our research challenged the use of the strong causal language found in the majority of extant studies when such claims were based on small or moderate correlations. That is, after decades of research there is little, if any, empirical evidence that personality traits cause political attitudes.

Importantly, none of our analyses relied on any information about the sign of the relationships. That is, the coding error has no effect on the main findings of any of our papers. Since we found no evidence of a causal relationship, we conclude that the correlation is spurious, making the sign of the correlation between the phenotypes of little consequence. Whether psychoticism is positively not causally related or negatively not causally related, it is not causally related to conservatism. The same is true for other traits. Ludeke and Rasmussen conveniently sidestep this critical point entirely, which was the main goal of our research.

4. The need for theoretical development

The findings of our papers strongly question the proposition that personality traits cause political attitudes, and suggest new theoretical development is essential. If the relationship between political attitudes and personality traits is spurious, being a function of pleiotropic genetic effects and unmeasured environmental factors, then it follows that joint predictors of political attitudes and personality traits can be identified.

Finding specific genetic factors that account for part of the correlation between personality and attitudes will be difficult. For complex phenotypes, individual genetic variants account for a minuscule portion of the variance. The combinations of thousands of genetic variants are required to produce variation in a trait. This means samples in the hundreds of thousands are required to detect reliable associations accounting for genetic covariance. Accordingly, it may be some time before the nature of these pleiotropic genetic effects is understood. Additionally, the potential for a conditional relationship between genes and environments must be considered. People may select into environments based on their attitudes or personality, and these environments may foster predispositions for a personality trait and/or attitude (active gene-environment correlation). Alternatively, an individual's genotype may alter their sensitivity to the environment, which may accentuate or attenuate the correlation between personality traits and political attitudes (gene-environment interaction). Furthermore, environmental exposure to constructs during critical periods may have profound effects on the development of both political attitudes and personality traits, while at other times the same constructs may be irrelevant. Statistical methods for testing these types of developmental effects are currently underdeveloped.

Identifying the environmental components of the correlation however, may be less difficult. We take as a starting point the observation that both personality and political attitudes have a role in how individuals shape and select into their environments. However personality traits have been treated as exogenous, despite the evidence that personality is an equal function of genes and environments, and are situation specific (Mischel, 1973; Roberts, Robins, Trzesniewski, & Caspi, 2003). Yet there has been relatively little exploration regarding the environmental factors that cause personality. While there has been almost a century of research attempting to find a causal arrow from personality

to political values, one possibility that has not been considered is that attitudes, and the environments they provide, may influence the development or expression of personality traits, something presaged in Verhulst et al. (2012).

Political attitudes have a profound role in some of the most critical and sustained environments that influence the contexts in which personality and other psychological traits emerge. The selection into, response to, interpretation, and construction of our social world, is guided by political values. Political values are potent because they reflect not only what an individual believes for themselves, but also how they believe others in society ought to feel, think and behave. They influence literal environments, such as where and how we choose to educate ourselves, the occupations we choose, the social groups we join, where we live, what we eat, the products we surround ourselves with, but also our expectation regarding hypothetical future environments, such as how resources are allocated, how sex is regulated, the use of force, where we get our information and the credibility we attach it, what we deem as legitimate science, our definition of in-groups and out-groups, and the nature and categorization of social identity. These environments profoundly influence many factors that guide our daily lives and interactions with others, including the expression of a host of psychological traits (for a review, see Hatemi & McDermott, 2016). Perhaps no component of the environment we create is more omnipresent in our daily lives than whom we choose to inhabit it, including our life partner, the friends we have and the people we avoid, all of which are related to political values (e.g., Fowler & Christakis, 2014; Posner, Baker, Heath, & Martin, 1996). The most poignant example is that spouses are virtually uncorrelated for most personality traits,⁷ while spouses are highly correlated ($r = 0.6\text{--}0.7$) for political ones (Alford, Hatemi, Hibbing, Martin, & Eaves, 2011). Ideological assortment is not due to convergence, rather, individuals seek out like-minded others (e.g., Luo & Klohnen, 2005). In sum, the environments that influence the majority of our time and the downstream influences that result from such engagements are strongly related to political values.

The point is not to argue that political attitudes are more important, or that personality does not have a role in creating our environment. But given that there has been so much attention focused on personality, but little evidence of a causal path from personality to political attitudes, combined with a substantial amount of evidence that attitudes have a profound role in so many critical environments that personality and other traits operates in, it is reasonable to consider the possibility that these environments may account for at least some part of the correlation between the two. This possibility, one we suggest in our work, remains unaddressed.

It is also important to reiterate that specific personality traits are correlated with specific attitude dimensions. This fact is largely ignored by Ludeke and Rasmussen. For example, Neuroticism is correlated with economic attitudes, but was not social or defense attitudes. By contrast, Psychoticism was associated with social and defense attitudes, but not economic attitudes. Accordingly, it is plausible that the correlation between personality traits and attitudes is simply a reflection of different measures partly measuring the same underlying construct, albeit with substantial levels of measurement error. Take Openness to Experience as an example. Items used to measure Openness ask whether or not you agree with statements such as: "I believe we should look to our religious authorities for decisions on moral issues" and "I believe that the "new morality" of permissiveness is no morality at all". While these items are measuring personality traits, they are also tapping into an attitudinal dimension. This reflects McCrae and Costa's (1997) conceptualization of Openness, which they state was *designed* to capture liberal and conservative values. From this perspective, this amounts to a difference of labeling, using one measure of a trait to predict a different

⁶ Hatemi and Verhulst (2015a) also used original data collected by Hatemi and colleagues that included "Big 5" measures, these data and associated analyses did not have a codebook error.

⁷ Modest correlations for Openness, which was designed to capture liberalism, are the exception.

measure of the same trait, making causal relationships between personality traits and political attitudes nonsensical.

5. Conclusion

Overall, the majority of the claims Ludeke and Rasmussen made are simply untrue. They misrepresented our papers, avoid the fundamental issues we highlight, ignore corrections we previously made, and instead greatly exaggerate a tangential error that had already been corrected. Additional comments have been made on social media that further misrepresented our work and the error. Unfortunately, we live in a social media world, where truth is of little interest, but spectacle is. Simply stating something as true, however, does not make it true. As Shakespeare said, "Truth will out". This is the difference between media and science. Scholarly research is about facts. The facts here are that our work had an honest error in it and we corrected as soon as it could be verified, despite Ludeke and Rasmussen's avoidance of our published errata. As part of our descriptive analyses we reported correlations that had been identified in the extant literature for decades. It is a fact we had an error in this coding. It is a fact this error was used to incorrectly frame our work. It is a fact that our research was not the first to report the general relationships (direction of the correlations). Published research from the 1970's refutes Ludeke and Rasmussen entirely. It is a fact that our work was not used to make new claims about the personality traits of liberals or conservatives in scholarship or in the media. A look at the papers, citations and review of media before Ludeke and Rasmussen's essay and associated tabloid website claims will show that overwhelming our work was focused on, and cited for, finding no causal relationship between personality and attitudes. Not for finding or promoting a relationship, as they claim. It is fact, that contrary to Ludeke and Rasmussen, the coding error did not affect the primary analyses or conclusions of our manuscripts which fundamentally challenge the assumptions about the nature of the relationship between personality and political attitudes. This is evidenced by simply reading the papers and the journal editors' response to our inquiry on how to correct the errors. It is also a fact that if there was any intentional bias in this circumstance, it was not on the part of our author team. We brought the errors to the journals, not the other way around.

How could so many facets of our research including the error be turned upside down and mischaracterized? The same way the error occurred in the first place. Authors, researchers, data managers, and so forth are imperfect. So too are journal editors and reviewers. As with any human enterprise, mistakes will occur, and finding errors, coding or otherwise, will improve the quality of scientific results. Our work had an error and we corrected it a year before Ludeke and Rasmussen's critique. It is important to recognize errors, even minor ones, and work to remediate them, but it is equally important that such errors be identified honestly and correctly. When inconsequential errors are used to generate spectacle and obfuscate contributions, it detracts from the scientific enterprise.

The atonement for having in error in one's published work is clear; it consists of working with the affected journals to correct the error. We did this, and in our case it was errata, given the tangential nature of the error and that the errors were not inconsistent with extant research, and not used in a manner detrimental to the field of research. What should the penalty be for those who use an error to misrepresent work and make false claims? We leave that to the academy. We do know that advancing this area of research will require new theoretical development, data collection, and methods to disentangle the variegated aspects of attitudinal dimensions and personality traits. We look forward to research into the relationship between political attitudes and personality traits that seriously but honestly address our work.

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