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Political Ideology and Support for Universal Health Care: The Roles of Thinking Styles and
Executive Functioning in the Judgments of Older Adults

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This research was partially funded by the Hunter Rawlings III Presidential Research Scholarship. The author would like to thank his thesis advisor, Dr. Joseph Mikels, for his invaluable support and guidance on this project. He would also like to thank Dr. Elaine Wethington and Dr. Marianella Casasola for their suggestions and feedback throughout this process.

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Abstract

In contemporary American politics, Democrats and Republicans have become increasingly polarized along ideological lines. This division is especially apparent in the debates surrounding the possibility of universal health care given the passage of the new health care reform bill this past year. Converging evidence from historical and psychological accounts of ideology suggest that differences in thinking styles are associated with ideological differences. Given their importance as a unique political cohort, as well as known age differences in information processing styles and executive functioning, older adults (N=86) completed self report measures and a verbal fluency task to elucidate the relationship between information processing styles, executive function, political ideology and support for universal health care over the period when the 2010 Patient Protection and Affordable Care Act was debated and then passed. We found that older adults' political beliefs formed cohesive ideologies along a liberal/conservative spectrum. Ideology significantly accounted for differences in party support for increased government funded healthcare, whereas understanding of the health care bill had no effect on participant support of the bill. We also found that preferences for rational thinking styles and maintained executive functioning were associated with liberal ideology in older adults. Moreover, rational processing and executive function were uniquely correlated with support for universal health care in addition to party affiliation. These results are discussed within the context of Cognitive-Experiential Self-Theory in addition to general psychological and sociological accounts of political beliefs in older adults.

Keywords: political ideology, Cognitive Experiential Self Theory, executive function, health care, older adults

Political Ideology and Support for Universal Health Care: The Roles of Thinking Styles
and Executive Functioning in Older Adults

In contemporary American politics, the Democrat and Republican parties have become increasingly divided on almost all major policy issues (Layman, Carsey, & Horowitz, 2006). This political split is exemplified by the debates surrounding government funded health care and the possibility of universal health care coverage in the United States. A 2008 Harvard School of Public Health poll found that while 70% of Republicans thought government funded medicine would be worse than our current health care system, the same percentage of Democrats believed it would be better (Harvard School of Public Health/Harris Interactive, 2008). The health care debate has become increasingly salient with the passage of Patient Protection and Affordable Care Act on March 23, 2010, which will extend health care coverage to thirty-two million Americans who are currently uninsured (“Understanding the Affordable Care Act,” 2011). Still, the United States remains the only Western industrialized country in the world without a universal health care system. Despite the United States having the highest health care expenditures as percent of GDP of any country in the world, the Commonwealth Fund Commission on a High Performance Health System ranked the US system last in a study of seven Western nations (Davis, Schoen, & Stremikis, 2010). Although the economic and political possibilities of a universal health care system in the US are out of the scope of this paper, the current study investigated the roles of party affiliation, and political ideology and its psychological determinants, in peoples’ support of increased government funded health care in light of the new health care reform bill.

Scholars, philosophers, and historians have shed light on the underpinning of political belief, but many unanswered questions remain as to the determinants of political ideology and

support for specific policy issues. Research in the psychological correlates of political ideology has had a tumultuous history beginning in 1950 with Adorno et al.'s *The Authoritarian Personality*. This seminal study was the first to consider political belief as a manifestation of psychological motivations. Ever since, psychologists and sociologists have disagreed over the behavioral and motivational significance of ideology, whether individual differences in psychological traits underlie the liberal-conservative distinction, and even whether most ordinary citizens maintain political attitudes which form a coherent ideology (Jost, 2006; Converse, 1964). Despite the “end of ideology” declaration by social scientists after World War II (Jost, 2006), a plethora of recent research findings in social, personality, and political psychology have revealed that most people demonstrate coherent political ideologies and that many psychological motives, traits and dispositions underlie conservative and liberal belief (Jost, Nosek, & Gosling, 2008). The purpose of this project was to further elucidate the personality factors and cognitive determinants of political ideology and support for specific policy issues; namely, for increased government funded health care.

In this study, we explored information processing styles within the context of Epstein's (2003) cognitive experiential self theory (CEST), and executive functioning (EF), as psychological correlates of political ideology, party affiliation, and support for government funded health care in older adults. In addition to finding differences in government funded health care by party affiliation, the 2008 public health poll cited above also found differences between young (under 35) and old (65+) adults such that 55% of young adults support government funded health care, while only 30% of older adults did. Moreover, the unique psychological and cognitive development of older adults (Carstensen & Mikels, 2005) and their importance as a unique political cohort in the United States (Riggle & Johnson, 1996), make older adults a

crucial population with which to further elucidate the personality and cognitive factors involved in political belief and action.

Political Ideology

The meaning of the term “ideology” has evolved since it was first coined in 1796 by the French Enlightenment philosopher, Destutt de Tracy, as the “science of ideas” (Kennedy, 1979, p. 353). Ideology adopted its political connotations with Marx and Engels’ rendering of ideology as both a totalizing world-view and a “false consciousness” by which beliefs were systematically distorted to perpetuate class structure (Marx & Engels, 1970). Although there is still debate as to the precise definition of ideology, contemporary social scientists generally conceive ideology as an abstract, stable and coherent set of beliefs and attitudes which inform political positions and action (Gerring, 1997; Jost, Nosek, & Gosling, 2008). In North America and Western Europe, the most global distinction of ideological belief is the liberal-conservative distinction. Although specific beliefs associated with liberal/conservative affiliation are culturally and historically determined, there are several stable traits that define liberal/conservative ideology primarily concerning attitudes towards inequality, and social change vs. tradition. Whereas conservatives value tradition, order and authority at the expense of preserving inequality, liberals hold more egalitarian views and hold that planned change can bring about more social and economic equality (Erickson, Luttbeg, & Tedin, 1988).

Liberal philosophy is grounded in the ideals of reason and rationality in its commitment to maximizing liberty for all individuals. An encyclopedia entry, "Liberalism: Impact on Social Science," acknowledges this sentiment: "as rationalists, liberals believe that individuals should behave in a coherent and consistent manner and that decisions in the public domain should be... capable of attaining the reasoned assent of those they affect" (Bellamy, 2001, p. 8797). On the

other hand, conservatism is critical of the application of pure reason in politics. Rather, conservative ideology proposes “a focus on experience and the concrete, as opposed to the universalistic, rationalistic theories of liberalism...” (Muller, 2001, p. 2624). Conservative theorists throughout the centuries have denounced the use of abstract, rationalistic principles in government and politics from the 18th century philosopher and father of modern conservatism, Edmund Burke coining the term, “the abuse of reason” (Burke, 1790), to the contemporary criticisms of Michael Oakeshott on “rationalism in politics” (Oakeshott, 1962). Conservative criticisms of liberalism contend that liberalism’s abstract and rationalistic ideals fail to account for the complexities and histories of the institutions it seeks to transform (Muller, 2001). What becomes apparent in this antagonism between liberalism and conservatism is differential support for reason and experience as a model for life and political decisions. Converging support from contemporary psychological accounts of ideology also suggest basic differences between politically conservative and liberal individuals.

Ideology: A Psychological Perspective

Jost (2006) provides a psychological definition of ideology as an “interrelated set of moral and political attitudes that possess cognitive, affective, and motivational components” (p. 653). Indeed, research findings in the psychological sciences have demonstrated that ideology can be conceptualized along a liberal-conservative spectrum not only because of philosophical and historical justifications, but for psychological reasons (Jost, Nosek & Gosling, 2008). Thorisdottir and colleagues (2007) have demonstrated that general personality traits and values underlie differences between liberals and conservatives such that liberals are more open to novelty, creative endeavors and travel, whereas conservatives prefer order, cleanliness and familiarity. These differences are seen in everyday lifestyle choices; Jost (2006) found that the

bedrooms of conservatives are more likely to have organizational supplies (e.g. calendars, postage stamps) while liberals are more likely to have travel paraphernalia, music CDs and art supplies. Cognitive dispositions have also been implicated in people's political orientation. Several studies have found links between intolerance of ambiguity, the personality disposition to seek certainty by relying on familiar and premature conclusions and stereotypes, and political conservatism (Fibert & Ressler, 1998; Sidanius, 1978). The relationship between close-mindedness and conservatism is also bolstered by the positive correlation between conservatism and the need for closure (Kimmelmeier, 2010; Jost, Glaser, Kruglanski & Sulloway, 2003). Need for closure, characterized by impulsive and rigid decision making, and the preference for security, order and predictability (Webster & Kruglanski, 1994) has been theorized as a motivational account of conservative beliefs that rely on past experience and maintain status-quo power structures (Golec, 2001).

Taking historical and psychological accounts of political belief together suggest that an individual's preference for rational or experiential thinking may be an important personality determinate of her political ideology. Moreover, the capacity to engage in rational, deductive thought depends as much on one's thinking dispositions as one's cognitive ability and the maintenance of one's executive functions (Stanovich & West, 1998). Interestingly, older adults are consistently more politically conservative than younger adults (Cornelis, Hiel, Roets & Kossowska, 2009), and preference for rational thinking styles and cognitive ability decline with age (Finucane & Gullion, 2010). To understand psychological differences between liberalism and conservatism as the preference and capacity for a rational thinking-style, thinking-style disposition and executive function will be approached separately as a personality trait and

cognitive capacity, respectively. The dual information processing perspective of CEST holds the potential to elucidate the psychological basis of political ideology.

Cognitive-Experiential Self-Theory

According to Epstein's (1994) Cognitive-experiential self-theory, there are two basic, distinct modes of information processing which interact to produce human behavior: (1) the experiential system, and (2) the rational system. The experiential system is intrinsically emotional. It learns from experience and operates in a way that is "preconscious, rapid, automatic, holistic, primarily nonverbal, intimately associated with affect, and has a very long evolutionary history" (Pacini & Epstein, 1999, p.972). Experiential processing entails drawing on past experiences to arrive at decisions associatively and preconsciously in a way that is minimally demanding of cognitive resources. CEST assumes that the experiential system in humans is homologous to the systems used by other animals to construct organized models of, and adapt to, their environments (Epstein, 2003). Despite its evolutionary adaptiveness, the experiential system is deficient in solving problems that require abstract reasoning or logical rules (Epstein, Pacini, Denes-Raj & Harriet Heier, 1996). The rational system, on the other hand, is analytic, reason oriented, language-based, conscious, deliberative and effortful. Rational processing involves using deductive reasoning and culturally determined methods of logical inference to arrive at conclusions (Pacini & Epstein, 1999). Unlike the experiential system, according to Epstein (2003), the rational system is evolutionarily recent and is demanding of cognitive resources.

According to CEST, these two information processing modes operate in an independent, yet interactive manner to influence behavior, with their relative contributions varying based on circumstance and personal preference (Pacini & Epstein, 1999). For example, the degree of

emotional involvement or need for an objectively accurate answer facilitates a predominance of experiential or analytic processing, respectively. Moreover, the extent to which people prefer either system has been shown to differ among individuals. The Rational-Experiential Inventory (REI) (Pacini & Epstein, 1999) is an individual differences measure of self-reported preference for rational and experiential thinking styles including subscales of ability and engagement for each. Ability refers to self-reported high levels of ability with respect to logical reasoning or intuitive impressions. Engagement refers to self-reported reliance on and enjoyment of thinking logically, or using intuitions in decision making (Panici & Epstein, 1999). The REI has been a valuable measure in studying individual differences in personality dimensions and basic beliefs. In terms of political ideology, preliminary correlations have demonstrated that conservatism is negatively related to rational processing (Panici & Epstein, 1999). In addition, conservatism has been linked to lower scores on Cacioppo and Petty's (1982) Need for Cognition Scale (NFC), which measures an individual's engagement and enjoyment in intellectual activity (Crowson, 2009). In fact, the REI's rational scale was constructed as a modified version of the NFC, the components of which are important factors in Epstein's (Epstein, Pacini, Denes-Raj & Heier, 1996) theorized model of rational thinking. Moreover, given age related changes in emotion and cognition, the REI could potentially illuminate individual differences in political beliefs.

CEST and Aging

Although CEST has not explicitly been considered from a developmental perspective, aging research fits well within the context of CEST. Research on the psychology of aging has documented myriad declines in cognitive ability including speed of processing (Salthouse, 1991), verbal and spatial working memory (Park et al., 1996), and reasoning and problem

solving (Salthouse, 1996). Interestingly, greater decline is seen in "resource-intensive processing" relative to automatic processing (Craik & Salthouse, 2000). In terms of CEST, what becomes apparent is a differential developmental trajectory for rational processing and experiential processing. While the maintenance and ability of the rational system declines with age, experiential processing vis-à-vis emotional processing appears to be maintained or increase with age (Cartesenson & Mikels, 2005). For example, older adults have maintained working memory abilities for emotional stimuli, report greater emotional control, increase levels of positive affect, and more complex emotional experiences when compared to younger adults (Carstensen, Mikels & Mather, 2006). Socioemotional selectivity theory (SST) (Carstensen & Mikels, 2005) provides a motivational account for this developmental trajectory in older adults. SST states that personal goals are always set in a temporal context. When time is perceived as expansive, as in young adulthood, goals are focused on the acquirement of knowledge and new experience. Conversely, when time is perceived as limited, as in older adulthood, emotional goals are paramount, such as maintaining important social relationships and feeling socially connected. Thus, the theory posits that these age-related motivational shifts are what promote the maintenance of emotional processing, emotional regulation, and mood. Age related changes in motivation and cognitive style have already been implicated in the trend of increased political conservatism with age (Cornelis, Hiel, Roets & Kossowska, 2009). The cognitive emotional development of older adults makes them a unique population to study the relationship between information processing styles and political beliefs.

Executive Function, Aging, and Political Ideology

So far, we have explored the potential relationship between older adults' information processing styles within a CEST framework, and their political orientation. Changes in motivated

cognition and reduced preference for rational thinking styles seem to, in part, account for increased conservatism in older adults (Cornelis, Hiel, Roets & Kossowska, 2009; Pacini & Epstein, 1999). Conversely, we expect that a rational thinking style will be associated with a liberal ideology in older adults. Stanovich and West (1998) acknowledge that the capacity for rational thought is the product of both the preference for rational thinking styles and the cognitive capacity for deliberative thought. Thus, we will also explore whether the cognitive processes involved in executive function (EF) can contribute to our understanding of older adults' political ideology.

Although the precise cognitive processes and neurological correlates of EF are still debated (Garcia-Barrera, Kamphaus, & Bandalos, 2011), EF can generally be understood as an organized set of cognitive abilities which coordinate the conception, planning, and monitoring of goal directed behavior. EF also includes the concepts of mental flexibility, working memory and attention (Ardila, 2008). Although EF has not been linked to decision making abilities in the political domain, EF is important for successful decision making in experimental tasks with explicit rules and outcomes (Brand et al., 2004). In one such task with uncertain outcomes (the Iowa Gambling Task), EF is unrelated to performance on early trials while knowledge of outcomes is still implicit, but predicts performance in later trials where decisions become more influenced by explicit knowledge of outcomes (Brand, Recknor, Fabian, Grabenhorst, & Bechara, 2007). In the context of CEST, these findings suggest that EF is crucial for processing explicit information in accordance with rational processing. Importantly, EF shows similar decline with aging along with deliberative processing and decision making ability (Finucane & Gullion, 2010). Indeed, EF is an important marker of pathological aging (Meinzer et al., 2009).

Political ideology, specifically conservatism, has been implicated in several traits associated with cognitive shortcuts such as personal need for structure and need for closure. These traits increase with age and are mediated by decreases in cognitive ability and a motivation to conserve cognitive resources (Hess, 2001). The relationship between decreased EF and cognitive shortcuts which are linked with conservatism, paired with the maintenance of EF in promoting successful deliberative decisions (hypothesized to correlate with liberal ideology), suggest that EF may be strongly related to political ideology in older adults.

In this study, EF will be measured by semantic and phonemic verbal fluency tasks in which participants must retrieve words from memory. Verbal fluency is a general measure of EF and has been implicated in a wide range of cognitive abilities. Indeed, verbal fluency tasks taps into many aspects of executive function as it requires participants to search their memory using phonological and categorical rules, while taxing working memory to monitor past responses and employing executive skills to block irrelevant words (Kemper & McDowd, 2008).

The Present Study

Ideology is a pervasive aspect of our lives, and liberal-conservative dispositions appear to arise "from basic, underlying preferences that are apolitical in nature" (Jost, Nosek & Gosling, 2008, p. 128). From a CEST perspective, our underlying ability and engagement for rational and experiential processing predict a wide range of personality traits and beliefs (Pacini & Epstein, 1999). In this study, individual differences in information processing styles and executive function were explored as psychological correlates of political ideology and support for universal healthcare in older adults.

Although core dimensions of political ideology are stable across time and cultures, specific policy issues, such as support for universal health care in the United States, are also

determined by cultural and situational circumstance relevant to a particular time and place. To examine the roles of both political ideology and the external political environment on older adults' support for government funded health care, we gathered information before and after the March 23, 2010 health care reform bill to also evaluate the effects of the bill's passage.

Participants' support for increased government funded health care and universal health care was measured by employing a willingness to pay (WTP) paradigm, which is commonly used to quantify the value that individuals assign to various decision alternatives in health care domains (Mikels, Reed & Simon, 2009). We predict that support for increased government funded health care will match the results of the Harvard 2008 poll (Harvard School of Public Health/Harris Interactive, 2008) such that Democrat older adults will support government funded health care more than Republican older adults. In line with Jost's (2006) assertion that everyday citizens have coherent and stable political ideologies, we hypothesize that older adults' party affiliation will align with a coherent pattern of support for various policy issues, and that Republican and Democrats' differential support for government funded health care can be explained by differences in conservative/liberal political ideology, respectively. Although the United States has a predominantly two-party system, an increasing amount of party-unaffiliated voters identify themselves as independents. In a 2009 Pew Research Center Survey, 36% of respondents identified themselves as independents ("Independents Take Center Stage," 2009). Thus, our study also included older adults who identified as independent in addition to Democrat and Republican. No specific a priori hypotheses were made with regard to independent older adults.

Regarding the role of CEST in older adults' political ideology, we predicted that liberalism will be positively associated with rational processing and unrelated to experiential processing, while conservatism will be negatively related to rational processing, positively

correlated to experiential processing, or both. I also predict that EF, as measured by verbal fluency, will be positively correlated with liberal ideology. If information processing and EF underlie political ideology, which in turn accounts for participant's party affiliation, we also predict that rational processing and EF will be uniquely related to support for universal health care in addition to party affiliation.

Given that higher levels of education are associated with liberalism (Dixit, 2007), and that education supports rational thinking styles (Aarnio & Lindeman, 2005) while slowing the effects of cognitive aging (Wilson et al., 2009), we include education and income in our analyses as potential confounding variables.

METHODS

Participants:

86 older adults (51 females, 35 males, $M_{age} = 72.5$ years, $SD = 7.7$) between the ages of 61 and 89 from Tompkins County of New York State participated in this study. Participants received \$15 in the mail along with the first questionnaire packet and an additional \$10 with the completion of the follow up survey conducted over the phone. Participants were recruited from a database of potential research experiment volunteers. Eight participants included in the study did not disclose their party affiliation, and were excluded for analyses involving party affiliation. In total, there were 26 Democrats, 23 Independents, and 29 republicans.

Measures:

Information Processing Styles

Rational Experiential Inventory (REI). The REI (Pacini & Epstein, 1999) is a self report measure of rational and experiential thinking styles with subscales of ability and engagement for each. The scale consists of 40 statements (10 for each subscale). Participants rate the extent to

which the statements apply to them on a 5-point Likert-type scale from 1 (*not at all*) to 5 (*extremely*). The names of the four subscales are Rational Ability, Rational Engagement, Experiential Ability, and Experiential Engagement. Rational Ability refers to a self-reported high ability to think logically and analytically (e.g., “Usually logic works well for me in figuring out problems in my life.”) Rational Engagement refers to a reported preference for, and reliance on, thinking in a logical, analytic manner (e.g., “I enjoy intellectual challenges.”). Experiential Ability refers to a reported high ability in using one’s intuitions and feelings (e.g., “I trust my initial feelings about people.”). Experiential Engagement refers to the reported preference for, and reliance on, using one’s intuitions and feelings when making decisions (e.g., “I tend to use my heart as a guide for my actions.”). Ratings for each subscale are averaged to create an Ability and Engagement score for each scale, as well as a total composite score for Rational and Experiential thinking styles.

Executive Function

Verbal Fluency. The Verbal fluency task (Benton & Hamsher, 1976) entails listing as many words as possible from three phonemic categories (words that begin with the letters f, a, or s) and one semantic category (animals) in 60 seconds. Verbal fluency scores were reported as the total number of words produced from the four categories.

Political Ideology

Political Party Affiliation. To obtain information on how strongly participants identified themselves as Democrat, Independent or Republican, participants reported their party affiliation on a 7-point Likert-type scale from 1 (*Strong Democrat*) to 7 (*Strong Republican*), with a response of 4 denoting: *Independent, close to neither*. If participants preferred not to identify their party affiliation on the Democrat-Republican spectrum, they could fill in their party

identification as an 8th choice. To group participants into a political party, participants that scored from 1 (*Strong Democrat*) to 2 (*Not very strong Democrat*) were grouped as Democrat.

Participants that had a score from 3 (*Independent, close to Democrat*) to 5 (*Independent, close to Republican*) were grouped as Independent. Participants that scored from 6 (*Not very strong Republican*) to 7 (*Strong Republican*) were grouped as Republican.

Political Issues. To obtain information on participants' liberal/conservative political ideologies, participants responded to a series of political issue statements adapted from Inbar, Pizarro, and Bloom (2008). Participants were presented with 10 political issue statements to which they could agree with on a 7-point Likert-type scale from 1 (*Completely disagree*) to 7 (*Completely agree*). Scores were re-coded such that higher scores reflected a more conservative response (e.g., the response to the statement, *Gun control laws are not nearly strict enough*, was coded directly, while the response to the statement, *Homosexuals should have the same right to marry as anyone else*, was reverse-coded). In addition to obtaining scores on individual political issues, scores for each statement were averaged to create a composite political ideology score for each participant such that a high score reflected a more conservative ideology.

Attitudes Toward and Value Placed on Government Funded Health Care

Willingness to Pay (WTP). This measure was constructed to assess support for expanded health care by measuring the willingness of respondents to pay, with their own tax dollars, to reduce the amount of people who are medically uninsured in their state. Subjects were first read a possible scenario: "Suppose there is a new voter referendum in the state. The referendum is a proposal to fund policies that will reduce the people who are uninsured in the state by a quarter. If the referendum passes, you and everyone else will have to pay \$50 more in taxes every year." Participants could choose to vote for, against, or not vote for this bill. If participants voted for,

they were presented with same bill, but instead it would cost \$100 and then, \$250 more in taxes every year. If the participants voted against, or would not vote for the initial proposal, they were presented with the same proposal costing \$25, and then \$5. Participants willingness to pay was measured as the policy they voted for which entailed the highest tax payment. Participants who would not vote, or voted against all proposed bills were assigned the value \$0 for this measure.

Willingness to Pay for Universal Health Care (WTP-U). This measure is an adaptation of the measure above, to assess support for universal health care after the passage of the new health care reform bill on March 23, 2010. The form of this measure is the same as that above; except that in the WTP-U, participants are presented with a scenario in which policies are proposed for universal health care for all Americans.

Reaction to Health Care Bill. Participants were given a series of attitudinal measures to assess understanding and support for the new health care reform bill. To assess understanding, respondents were asked to rate how much they understood the details of the new health reform bill on a 7-point Likert-type scale, from 1 (*minimally understand*) to 7 (*completely understand*). Respondents then rated their level of support for the new health care reform bill on a -3 to +3 scale, -3 being *completely oppose*, +3 being *completely support*, and 0 being *indifferent*. Finally, we assessed respondents feeling towards the new health care reform bill on a -3 to +3 scale, -3 being *completely negative*, +3 being *completely positive*, and 0 being *neutral*.

Procedure

Participants were recruited via telephone to participate in the study. The administration of the measures and tasks occurred in three phases. The first phase, which was conducted over the phone, consisted of obtaining consent, as well as completing the verbal fluency task and the WTP measure (*note*: we refer to the first WTP measure which was administered before the

passage of the health care reform bill as: WTP-1). The second phase was a mailed questionnaire packet which was mailed after the completion of the first phase. The packet consisted of filling in demographic information, the REI, and the party affiliation questionnaire. Responses to these measures were then mailed back in a self addressed envelope included with the packet. The last phase was conducted over the phone 6 to 8 months later, after the passage of the 2010 Patient Protection and Affordable Care Act. This phase included the political beliefs questionnaire, a second WTP measure (referred to as: WTP-2) and a WTP-U measure. All third-phase measures were conducted within two months of the passage of the new health care reform bill.

Results

Means and standard deviations for all variables of interest are reported in Table 1.

Willingness to Pay and Party Affiliation

To determine if participants' willingness to pay for increased government funded health care and universal health care varied by their party affiliation, three one-way ANOVA's were run for each WTP measure (WTP-1, WTP-2, WTP-U), with party affiliation (Democrat, Republican, Independent) as a fixed factor. For each WTP measure, we found a significant effect of party affiliation (see Table 1). Post-hoc comparisons confirmed our hypothesis that Democrats scored significantly higher than Republicans on all WTP measures (WTP-1: $MD = 117.71$, $SE = 29.53$, $p < .01$; WTP-2: $MD = 85.95$, $SE = 25.63$, $p < .01$; WTP-U: $MD = 113.29$, $SE = 26.03$, $p < .01$). The relation of Independent older adult's WTP amounts to Democrat and Republican WTP amounts differed by measure. Independent scores were comparable with Democrat scores for both WTP-1 and WTP-2 (WTP-1: $MD = 40.04$, $SE = 27.45$, ns; WTP-2: $MD = 49.59$, $SE = 24.19$, ns), but lower for WTP-U ($MD = 59.12$, $SE = 24.56$, $p < .05$). Compared to Republicans, Independent scores were higher for WTP-1, ($MD = 77.68$, $SE = 28.80$, $p < .05$), and but not

significantly different for WTP-2 ($MD = 36.36$, $SE = 25.00$, ns) and WTP-U measures ($MD = 54.17$, $SE = 25.39$, ns). These findings demonstrate that Democrats consistently supported increased government funded health more than Republicans. Independents' support for increased government funded health care was higher than Republicans' support and comparable to Democrats' support before the passage of the new health care reform bill, but dropped to levels in between Democrat and Republican scores for both partially increased health care and universal health care after the passage of the bill.

WTP and the health care reform bill

To further understand the effects of the new health care reform bill, we gathered information on participants' support, feelings and understanding of the bill using attitudinal measures. Three one-way ANOVA's were run for each attitudinal measure with party affiliation as a between-subject fixed factor. We found a main effect of party affiliation on support and feelings for the bill (see Table 1). Post hoc analyses revealed that Democrats supported and felt better about the bill more than both Republicans and Independents (all $ps < .01$). Moreover, Independents and Republicans did not differ in their level of support ($MD = .93$, $SE = .55$, $p = .31$) or feelings towards the bill ($MD = 1.15$, $SE = .51$, $p = .09$). These attitude scores match the WTP responses for both Independent and Republican older adults, both of whom had lower WTP-U scores than Democrat older adults after the passage of the bill.

Interestingly, understanding of the bill did not differ by party affiliation (see Table 1), nor did understanding of bill correlate to post-bill WTP measures (WTP-2 & WTP-U, see Table 3). In fact, a one sample t-test revealed that participants' understanding of the bill was significantly lower than the middle score on the Likert type scale (i.e. a score of 4), and thus trending towards a minimal understanding of the bill, $t(84) = -4.41$, $p < .01$. This suggests that participant's post

bill-WTP scores were less dependent on the bill itself, than participants' preconceived support for such a policy. To test this, we ran an ANCOVA with WTP-2 as a dependent variable, party affiliation as a fixed factor, and WTP-1 as a covariate. Participants' WTP-2 score was significantly accounted for by their WTP-1 score ($F(1, 73) = 21.97, p < .01$), while differences in WTP-2 by party affiliation became non-significant ($F(2, 73) = 2.02, p = .13$), after adding WTP-1 as a covariate. Given the limited effect of the bill, we next explored political ideology and its relationship to party affiliation and support for increased government funded health care.

Political Ideology

A One-Way ANOVA with the political belief score as a dependent variable and party affiliation as a between subject fixed factor, revealed a main effect of party affiliation $F(2, 75) = 20.62, p < .001$. As expected, post hoc analyses revealed that older adult Democrats had a significantly lower, and thus more liberal, political belief score than both Republicans, $MD = 2.00, SE = .31, p < .001$, and Independents, $MD = .79, SE = .29, p < .05$ (see Table 1). Moreover, Independent older adults had a more liberal ideology than Republican older adults, $MD = 1.20, SE = .30, p < .001$, suggesting that the ideological distinction between Democrats, Independents, and Conservatives can be conceived along a single liberal/conservative ideological spectrum. All political belief items correlated strongly with self reported political party affiliation in the expected direction – r s ranged from .32 (gun control) to .53 (death penalty) - with all p s $< .01$ (Table 2). The ten items also correlated highly with each other (Cronbach's Alpha = .85). This result demonstrates that older adults' political beliefs are strongly interrelated and consistent along a liberal-conservative ideological spectrum, and that this constellation of political beliefs is manifested in participants' party affiliation.

Participant's political belief scores also correlated strongly with all WTP responses (see Table 3) in the expected direction, suggesting that participant's political ideology strongly influenced the amount they were willing to pay for increased government funded health care. Moreover, differences in WTP amounts by party affiliation were completely explained by political ideology. Three separate ANCOVA's were run with each WTP measure as a dependent variable, party affiliation as a fixed factor and political belief score as a covariate. For each ANCOVA, the covariate, political belief score, was significantly related to older adults' WTP (WTP-1: $F(1, 70) = 9.00, p < .01$; WTP-2: $F(1, 74) = 23.27, p < .001$; WTP-U: $F(1, 74) = 18.60, p < .001$). Subsequently, the effect of party affiliation became non-significant for all WTP measures (WTP-1: $F(2, 70) = 1.68, ns$; WTP-2: $F(2, 74) = .36, ns$; WTP-U: $F(2, 74) = .34, ns$).

REI, Political Ideology, and Support for Universal Health Care

So far we have established that for older adults, political ideology is an important determinant of party affiliation, and that differences in support for increased government funded health care by party affiliation can be accounted for by differences in political ideology. To investigate the psychological correlates of political ideology and belief, we first explored the relationship between rational-experiential processing, political ideology and party affiliation. As predicted, we found a significant negative correlation between conservative ideology and rationality ($r(79) = -.25, p < .05$, see Table 3). Examining rationality subscales of ability and engagement, we found that the correlation between political ideology and rationality was accounted for by the significant correlation between ideology and rational engagement ($r(80) = -.30, p < .01$). We found no significant correlation between rational ability and political ideology. Also, we found no significant relationship between experientiality and its subscales, and political ideology (Table 3).

As expected, income and years of education were significantly correlated with both liberal ideology and rational engagement (see Table 3). To determine if the relationship between rational engagement and political ideology was confounded by income and education, we ran a partial correlation controlling for those two variables; still, rational engagement remained significantly correlated with political ideology in the expected direction, $r(73) = -.19, p = .05$ (1-tailed). Despite these positive correlations, engagement of a rational thinking style by no means creates a full account of political ideology. Although rational engagement predicts political ideology in a simple linear regression model ($\beta = -.61, p < .01$), the model explains less than 10% of the variance in participants' political belief scores ($R^2 = .09$) (see Figure 1). Implications for theorizing political ideology within a CEST framework are elaborated in the discussion section of this report.

We also found that rational engagement was significantly related to party affiliation ($r(75) = -.27, p < .05$) and WTP-U scores ($r(80) = .317, r < .01$) in the hypothesized directions, such that rational engagement was related to Democrat party affiliation and increased support for universal healthcare. To determine the unique relationship between rational engagement and support for universal healthcare, we ran a partial correlation controlling for party affiliation and income, both of which were significantly related to WTP-U scores (see Table 3); still, we found a significant correlation between rational engagement and WTP-U scores in the hypothesized direction, $r(68) = .28, p < .01$ (1-tailed).

Executive Function, Political Ideology and Support for Universal Health Care

Our theoretical link between rational thinking styles and political ideology suggests that both the preference for rational thinking and maintained executive function in older adults will be associated with both liberal ideology and support for universal health care. In the section

above, we demonstrated the associations between the engagement of a rational thinking style, liberal ideology and support for universal health care. Next, we explored the relationship between executive function as measured by verbal fluency, political ideology, and support for universal health care in older adults. We found a strong correlation between verbal fluency and political ideology, $r(74) = -.47, p < .01$) in the expected direction such that maintained executive function was associated with a more liberal ideology. In addition, executive function was significantly related to party affiliation, such that higher verbal fluency performance correlated with Democrat party affiliation ($r(78) = -.32, p < .01$). Interestingly, verbal fluency, in addition to its relationship to rationality and its subscales (see Table 3), was uniquely correlated with political ideology: in a partial correlation controlling for both rational engagement and income, executive function was still significantly associated with political ideology, $r(76) = -.31, p < .01$. In a simple linear regression model, executive function significantly predicted political ideology ($\beta = -.03, p < .01, R^2 = .19$) (see figure 2). As expected, executive function also correlated strongly with WTP-U scores, $r(84) = .39, p < .01$. A partial correlation controlling for political party further demonstrated the unique positive correlation between executive function (verbal fluency) and support for universal health care (WTP-U), $r(75) = .25, p < .05$.

Discussion

In this study, we investigated the relationship between political belief, thinking styles and executive function in older adults within the context of cognitive experiential self-theory (CEST). Specifically, we examined these relationships with regard to support for universal health care over the time when the 2010 Patient Protection and Affordable Care Act was passed. As hypothesized, we found that older adult Democrats consistently supported increased government funded health care both before and after the new health care reform bill more than older adult

Republicans. Furthermore, older adults demonstrated coherent liberal/conservative political ideologies that aligned with their self-identified party affiliation (including Independent identification). Differences in support for increased health care by party affiliation were significantly accounted for by political ideology whereas understanding of the bill had no apparent effect. Our hypotheses regarding the roles of thinking styles and executive function were also supported: specifically, rational engagement and maintained executive function were significantly related to political ideology and party affiliation such that increased engagement of a rational thinking style and maintained executive function were related to liberalism and Democrat party affiliation. Moreover, rational engagement and executive function were uniquely related to increased support for universal health care even after accounting for party affiliation.

Taken together, these findings bolster Jost's (2006) claim that we need to abandon the "end of ideology" hypothesis. Participant's responses to a diverse number of political issues showed a coherent and stable pattern that aligned with the liberal-conservative ideological distinction (Table 2). Political ideology appeared to be particularly important with regard to support for increased health care. We found that participants' support for partially increased health care before the bill significantly predicted level of support after the bill's passage in addition to accounting for differences in support by party affiliation. The importance of ideology is further supported by our finding party differences in support and feeling towards the new health care reform bill despite finding no differences in level of understanding of the bill (see Table 1). Surprisingly, we found that older adults' overall understanding of the bill was trending towards a minimal understanding, which suggests that older adults' differential support for increased health both before and after the bill was already predetermined to align with their ideological disposition. In this way, political ideology must be differentiated from political

sophistication. Indeed, as much as ideology serves to organize our beliefs, it has also been found to play a biasing and simplifying role – empirical evidence has found political ideology to be implicated in selective processing of information, guiding attention, and selective memory recall (e.g., Ditto and Lopez, 1992; Lord, Ross, & Lepper, 2008).

Given our conception of political ideology as possessing cognitive, affective, and motivational components, we explored whether the preference and capacity for a rational thinking style underlie individual differences in liberal/conservative ideology within the context of CEST. CEST (Epstein, 2003) is a global theory of personality that posits two independent conceptual systems which guide behavior: the experiential system and the rational system. Crucially, the theory posits that our preference to rely on one system over the other is an important personality variable. As hypothesized we found that a rational thinking style, as measured by the theoretically CEST-derived REI, was associated with liberal ideology, while we found no relationship between political ideology and experientiality (see Table 3). This result supports those of Epstein and Pacini (1999) who found negative correlations between rational processing and conservatism. Specifically, we found that the relationship between a rational thinking style and political ideology was accounted for by the significant correlation between rational engagement and the political belief score, whereas rational ability was unrelated to political ideology (see Table 3). More research is needed to further unpack how ability and engagement of a rational thinking style interact to influence our beliefs. Creating ability and engagement subscales for the REI was justified because they each make independent contributions to predicting a variety of other personality variables (Pacini & Epstein, 1999). It is worth noting that Pacini and Epstein (1999) found that only rational engagement predicted the

personality variable openness to experience directly, the Big Five personality trait most implicated in holding liberal beliefs (Cornelis, Hiel, Roets & Kossowska, 2009, Jost, 2006).

Furthermore, we hypothesized that maintained executive function would also positively correlate with liberal ideology. We hypothesized within a CEST framework that if rational thinking style was associated with liberalism, then executive function may also play an important role in enabling the capacity for deliberative thought in older age, given EF's relationship to fluid intelligence and performance on decision making tasks (Unsworth, et al., 2009; Toplak, Sorge, Benoit, West, & Stanovich, 2010). Our results suggest that this theoretical link may be a viable possibility: EF was significantly correlated to both liberal ideology and a rational thinking style.

As hypothesized, we also found that the engagement of a rational thinking style and maintained executive function in older adults were both uniquely correlated with increased support for universal healthcare after controlling for party affiliation in separate partial correlations. This is an important result in that understanding the psychological determinates of political belief may hold the potential to predict support for specific politically polarizing policy issues in the future. Nevertheless, this result must be interpreted within its social and historical context. Many have noted that human belief systems are socially constructed (e.g, Berger & Luckmann, 1966; Jost & Kruglanski, 2002) and have both core and peripheral attributes (Abric, 2001). It is most likely that psychological variables are associated with the stable and core components of political ideology- namely, attitudes concerning equality and social change- while peripheral issues, such as support for universal health care are accounted for by social and historical realities. Although this finding may be temporally and culturally bound, support for universal health care does encapsulate the core ideals of liberalism, i.e. to support universal

health care in the United States implies a support for increasing equality brought about by social change manifested in public policy.

Although the relationship between thinking style and political ideology was interpreted within a CEST framework, these results also demonstrate that political ideology cannot be completely accounted for by a dual-process theory of behavior. Although rational engagement significantly predicts liberal ideology in a simple linear regression ($\beta = -.61, p < .01$), the model only accounts for less than 10% of the variance in older adult's political ideology ($R^2 = .09$). This result suggests that although CEST cannot fully account for differences in political ideology, the REI provides a unique psychological determinate of ideology that in the future can help researchers build a more complete model of the psychological underpinnings of political belief. In addition, more research is needed to elucidate the relationship between EF, thinking styles, and political belief. Despite our theoretical link between EF and thinking styles (articulated above), research has found inconsistent links between cognitive ability, and thinking dispositions (Macpherson & Stanovich, 2007). Moreover, we found that EF was uniquely associated with political ideology after controlling for engagement of a rational thinking style (subscale of REI), suggesting that the link between EF and political belief cannot be completely accounted for in a CEST model. Interestingly, the link between thinking style and executive function may be unique to older adults; previous research in our laboratory has found that verbal fluency was only associated with a rational thinking style in older adults, while verbal fluency was unrelated to thinking styles in young adults (Chue, 2010). Thus, to make more generalizable claims about the relationship between EF, thinking styles and ideology, future studies should include both young and older adults to identify both similarities and differences in the psychological correlates of political belief across the lifespan.

The findings of this study also bolster more general sociological account of political belief. Liberalism has been consistently linked with education as well as academic professorship (Bobo & Licari, 1989; Lipset, 1982). Lipset (1982) suggests that the intellectual creativity of professors is associated with more critical social views. Jost, Nosek, and Gosling (2008) provide a psychological explanation of the link between education and liberalism: education makes uncertainty less aversive thereby increasing one's support for egalitarian ideals. Our findings add another potential explanation to be explored in further research: education promotes liberalism by promoting a rational thinking style and reducing the effects of cognitive aging later in life (Aarnio & Lindeman, 2005; Wilson et al., 2009).

This study has several limitations. Although it seems reasonable to suggest that a rational thinking style and maintained executive function enable liberal ideology in older adults, no causal links between thinking styles, EF and political beliefs can be empirically validated here given the design of the study. Moreover, stronger claims relating political belief to thinking styles and rationality can be asserted using more implicit measures of rational-experiential processing and reasoning ability such as the ratio-bias phenomenon experimental paradigm (Pacini & Epstein, 1999): an experimental task which pits experiential against rational processing in a meaningful decision for the participant. To gain a deeper understanding of the specific relationship between executive function, thinking style and political belief, future studies should incorporate other aspects of executive function such as inhibition (Stroop test), set-shifting (Wisconsin Card Sorting Test) and working memory (digit span) (Toplak, Sorge, Benoit, West, & Stanovich, 2010). Another limitation of this study was the small sample size of participants. In our study, no party affiliation group had more than 29 participants limiting the statistical power of our analyses and potentially masking the magnitude of reported correlations

of interest. Another limitation is the generalizability of our results given our sample population. Subjects from our study were recruited solely from Tompkins County, NY, which is one of the most liberal counties in New York State (Murtagh, 2011). It is crucial for future studies to sample participants at the national level given that researchers have found “model personality styles” at the state level to influence political beliefs and voting patterns (Rentfrow, Jost, Gosling, & Potter, 2009).

Despite these methodological shortcomings, this report is a unique contribution to the literature on the psychology of political belief. To our knowledge, this is the first study to examine political belief within a CEST framework in older adults. Moreover, this study also investigated the role of psychological factors in addition to situational events (the passage of the health care reform bill) in support for a specific policy issue, namely increased government funded health care. America is an aging society; the percent of Americans over the age of 65 is projected to increase 35% over the next decade (Moody, 2000). Given their importance as a powerful political cohort in this country (Moody, 2000), it will become increasingly important to understand how psychological and cognitive aging interact to influence political beliefs. Indeed, health care is a particularly relevant issue for older adults, and understanding what shapes their beliefs concerning specific policies and more generally, the idea of universal health care, will be of great interest to both academics and politicians alike.

Conclusion

In this study, we investigated the roles of thinking styles and executive function in older adults’ political ideologies and support for universal healthcare over time when the 2010 Patient Protection and Affordable Care Act was passed. We found that older adults’ political beliefs formed coherent political ideologies along a liberal-conservative spectrum. Differences in

political ideology accounted for differences in party support for increased government health care both before and after the bill, whereas understanding of the health care reform bill had no effect on participant support of the bill. Both engagement in a rational thinking style and maintained executive function were related to liberal ideology and a Democrat party affiliation in older adults. This finding has particular relevance for issues regarding health care in that the engagement of a rational thinking style and maintained executive function were uniquely related to increased support for universal health care in addition to party affiliation.

References

- Aarnio, K., & Lindeman, M. (2005). Paranormal beliefs, education, and thinking styles. *Personality and Individual Differences*, 39, 1227-1236.
doi:10.1016/j.paid.2005.04.009
- Abric, J. C. (2001). A structural approach to social representations. In K. Deaux & G. Philogene (Eds.), *Representations of the social* (pp. 42-47). Oxford: Blackwell
- Ardila, A. (2008). On the evolutionary origins of executive functions. *Brain and Cognition*, 68, 92-99. doi:10.1016/j.bandc.2008.03.003
- Benton, A. L. and Hamsher, K. deS, (1976). *Multilingual Aphasia Examination: Manual of instruction*, University of Iowa, Iowa City.
- Berger, L., & Luckman, T. (1967). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor, New York.
- Bobo, L., & Licari, F. (1989). Education and political tolerance: Testing the effects of cognitive sophistication and target group affect. *Public Opinion Quarterly*, 53, 285-308/
- Brand, M., Labudda, K., Kalbe, E., Hilker, R., Emmans, D., Fuchs, G., & Markowitsch, H. J. (2004). Decision-making impairments in patients with Parkinson's disease. *Behavioural Neurology*, 15, 77-85.
- Brand, M., Recknor, E. C., Grabenhorst, F., & Bechara, A. (2007). Decisions under ambiguity and decisions under risk: Correlations with executive functions and comparisons of two different gambling tasks with implicit and explicit rules. *Journal of Clinical and Experimental Neuropsychology*, 29(1), 86-99.
doi:10.1080/13803390500507196
- Burke, E. (1790). *Reflections on the Revolution in France*. J. Dodsley, London.

- Bellamy, R.P. (2001). Libearlism: Impact on the Social Sciences. In N.J. Smelser & P.B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 8797-8801). Amsterdam: Elsevier.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, 42, 116-131.
- Carstensen, L., & Mikels, J. (2005). At the Intersection of Emotion and Cognition: Aging and the Positivity Effect. *Current Directions in Psychological Science*, 14, 117-121.
doi:10.1111/j.0963-7214.2005.00348.x.
- Carstensen, L., Mikels, J., & Mather, M. (2006). Aging and the Intersection of Cognition, Motivation, and Emotion. *Handbook of the psychology of aging (6th ed.)* (pp. 343-362). Amsterdam Netherlands: Elsevier.
- Chue, A. (2010). *Loneliness and Wellbeing in Young and Older Adulthood*.
Unpublished manuscript, Department of Human Development, Cornell University, Ithaca, NY.
- Converse, P. E. (1964). The nature of belief systems in mass publics. In D. Apter (Ed.), *Ideology and discontent*. New York: Free Press.
- Cornelis, I., Van Hiel, A., Roets, A., & Kossowska, M. (2009). Age differences in conservatism: Evidence on the mediating effects of personality and cognitive style. *Journal of Personality*, 77, 51-88. doi:10.1111/j.1467-6494.2008.00538.x.
- Craik, F.I.M, & Salthouse, T.A. (Eds.) (2000). *The handbook of again and cognition*. (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Crowson, H. (2009). Are all conservatives alike? A study of the psychological correlates

- of cultural and economic conservatism. *Journal of Psychology: Interdisciplinary and Applied*, 143, 449-463. doi:10.3200/JRL.143.5.449-463
- Davis, K., Schoen, C., & Stremikis, K. (2010). Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally, 2010 Update, The Common Wealth Fund. Retrieved from, <http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2010/Jun/Mirror-Mirror-Update.aspx?page=3#citation>
- Dixit, J. (2007, January 1). The ideological animal. *Psychology Today*. Retrieved from: <http://www.psychologytoday.com/articles/200612/the-ideological-animal>
- Epstein, S. (1994). An integration of the cognitive and psychodynamic unconscious. *American Psychologist*, 49, 709-724.
- Epstein, S. (2003). Cognitive-experiential self-theory of personality. *Handbook of psychology: Personality and social psychology, Vol. 5* (pp. 159-184). Hoboken, NJ US: John Wiley & Sons Inc.
- Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive–experiential and analytical–rational thinking styles. *Journal of Personality and Social Psychology*, 71, 390-405. doi:10.1037/0022-3514.71.2.390.
- Erickson, R. S., Luttbeg, N. R., & Tedin, K. L. (1988). *American public opinion*. (3rd ed.). New York: Macmillan.
- Fibert, Z., & Ressler, W. H. (1998). Intolerance of ambiguity and political orientation among Israeli university students. *Journal of Social Psychology*, 138, 33-40.
- Finucane, M. L., & Gullion, C. M. (2010). Developing a tool for measuring the decision

- making competence of older adults. *Psychology and Aging*, 25, 271-288.
doi:10.1037/a0019106
- Garcia-Barrera, M. A., Kamphaus, R. W., & Bandalos, D. (2011). Theoretical and statistical derivation of a screener for the behavioral assessment of executive functions in children. *Psychological Assessment*, 23(1), 64-79. doi:10.1037/a0021097
- Gerring, J. (1997). Ideology: A definitional analysis. *Political Research Quarterly*, 50, 957-994.
- Golec, A. (2001, July). *Need for cognitive closure and political conservatism: Studies of the nature of the relationship*. Paper presented at the annual meeting of the International Society for Political Psychology, Cuernavaca Mexico.
- Harvard School of Public Health/Harris Interactive (2008). Poll Finds Americans Split by Political Party Over Whether Socialized Medicine Better or Worse Than Current System. *Debating Health: Election 2008*. Retrieved from <http://www.hsph.harvard.edu/news/press-releases/2008-releases/poll-americans-split-by-political-party-over-socialized-medicine.html>
- Hess, T. M. (2001). Ageing-related influences on personal need for structure. *International Journal of Behavioral Development*, 25, 482-490.
doi:10.1080/01650250042000429
- Independents Take Center Stage in Obama Era. (2009, May). *Pew Research Center*.
Retrieved from <http://people-press.org/2009/05/21/independents-take-center-stage-in-obama-era/>
- Inbar, Y., Pizarro, D., & Bloom, P. (2009). Conservatives are more easily disgusted than liberals. *Cognition and Emotion*, 23, 714-725. doi:10.1080/02699930802110007.

- Jost, J. (2006). The end of the end of ideology. *American Psychologist*, 61, 651-670.
doi:10.1037/0003-066X.61.7.651.
- Jost, J., Glaser, J., Kruglanski, A., & Sulloway, F. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129, 339-375. doi:10.1037/0033-2909.129.3.339.
- Jost, J. T., & Kruglanski, A. W. (2002). The estrangement of social constructionism and experimental social psychology: History of the rift and prospects for reconciliation. *Personality and Social Psychology Review*, 6, 168-187.
doi:10.1207/S15327957PSPR0603_1
- Jost, J., Nosek, B., & Gosling, S. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science*, 3, 126-136.
doi:10.1111/j.1745-6916.2008.00070.x.
- Kemmelmeier, M. (2010). Authoritarianism and its relationship with intuitive-experiential cognitive style and heuristic processing. *Personality and Individual Differences*, 48, 44-48. doi:10.1016/j.paid.2009.08.012.
- Kennedy, E. (1979). "Ideology" from Destutt De Tracy to Marx. *Journal of the History of Ideas*, 40, 353- 368.
- Kemper, S., & McDowd, J. M. (2008). Dimensions of cognitive aging: Executive function and verbal fluency. In S. M. Hofer, D. F. Alwin, S. M. Hofer, D. F. Alwin (Eds.) , *Handbook of cognitive aging: Interdisciplinary perspectives* (pp. 181-192). Thousand Oaks, CA US: Sage Publications, Inc.
- Layman, G. C., Carsey, T. M., & Horowitz, J. M. (2006). Party polarization in American politics: Characteristics, causes, and consequences. *Annu. Rev. Polit. Sci.*, 9, 89-100.

- Lipset, S.M. (1982). The academic mind at the top: The political behavior and values of faculty elites. *Public Opinion Quarterly*, 46, 143-168.
- Lord, C. G., Ross, L., & Lepper, M. R. (2008). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. In R. H. Fazio, R. E. Petty, R. H. Fazio, R. E. Petty (Eds.) , *Attitudes: Their structure, function, and consequences* (pp. 333-345). New York, NY US: Psychology Press.
- Macpherson, R., & Stanovich, K. E. (2007). Cognitive ability, thinking dispositions, and instructional set as predictors of critical thinking. *Learning and Individual Differences*, 17, 115-127. doi:10.1016/j.lindif.2007.05.003
- Marx, K., & Engels, F. (1970). *The German ideology*. (C. J. Arthur, Ed.). New York: International Publishers. (Original work published in 1946)
- Meinzer, M., Flaisch, T., Wilser, L., Eulitz, C., Rockstroh, B., Conway, T., & Crosson, B. (2009). Neural signatures of semantic and phonemic fluency in young and old adults. *Journal of Cognitive Neuroscience*, 21, 2007-2018. doi:10.1162/jocn.2009.21219
- Mikels, J. A., Reed, A. E., & Simon, K. I. (2009). Older adults place lower value on choice relative to young adults. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 64B(4), 443-446. doi:10.1093/geronb/gbp021
- Muller, J.Z. (2001). Conservatism: Historical aspects. In N.J. Smelser & P.B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 2624-2628). Amsterdam: Elsevier.
- Murtagh, J. (2011, April). Ithaca Is Politics: Landscape showcases a diverse and

crowded political field. *Ithaca Times and Finger Lake Community Newspapers*.

Retrieved from http://www.ithaca.com/visit_ithaca/article_678eec62-5c90-11e0-a46e-001cc4c002e0.html

Oakeshott, Michael. *On being Conservative* In: Rationalism is Politics and Other Essays 1962

Pacini, R., & Epstein, S. (1999). The relation of rational and experiential information processing styles to personality, basic beliefs, and the ratio-bias phenomenon. *Journal of Personality and Social Psychology*, 76, 972-987. doi:10.1037/0022-3514.76.6.972.

Park, D., Lautenschlager, G., Hedden, T., Davidson, N., Smith, A., & Smith, P. (2002). Models of visuospatial and verbal memory across the adult life span. *Psychology and Aging*, 17, 299-320. doi:10.1037/0882-7974.17.2.299.

Rentfrow, P. J., Jost, J. T., Gosling, S. D., & Potter, J. (2009). Statewide differences in personality predict voting patterns in 1996-2004 U.S. Presidential elections. In J. T. Jost, A. C. Kay, H. Thorisdottir, J. T. Jost, A. C. Kay, H. Thorisdottir (Eds.), *Social and psychological bases of ideology and system justification* (pp. 314-347). New York, NY US: Oxford University Press. doi:10.1093/acprof:oso/9780195320916.003.013

Riggle, R., & Johnson, M. (1996). Age difference in political decision making: Strategies for evaluating political candidates. *Political Behavior*, 18, 99-118.

Salthouse, T.A. (1991). *Theoretical perspectives on cognitive aging*. Hillsdale, NJ: Lawrence Erlbaum.

Salthouse, T.A. (1996). The Processing-speed theory of adult age differences in cognition. *Psychological Review*, 103, 403-428.

Sidanius, (1978). Intolerance of ambiguity and socio-political ideology: A multidimensional analysis. *European Journal of Social Psychology*, 8, 215-235.

- Stanovich, K. E., & West, R. F. (1998). Individual differences in rational thought. *Journal of Experimental Psychology: General*, 127, 161-188. doi:10.1037/0096-3445.127.2.161
- Toplak, M. E., Sorge, G. B., Benoit, A., West, R. F., & Stanovich, K. E. (2010). Decision-making and cognitive abilities: A review of associations between Iowa Gambling Task performance, executive functions, and intelligence. *Clinical Psychology Review*, 30, 562-581. doi:10.1016/j.cpr.2010.04.002
- Thorisdottir, H., Jost, J.T., Liviatan, I., & ShROUT, P. (2007). Psychological needs and values underlying left-right political orientation: Cross-national evidence from Eastern and Western Europe. *Public Opinion Quarterly*, 71, 175-203.
- Understanding the Affordable Care Act. (2011). *HealthCare.gov U.S. Department of Health & Human Services*. Retrieved from <http://www.healthcare.gov/law/about/index.html#>
- Unsworth, N., Miller, J. D., Lakey, C. E., Young, D. L., Meeks, J., Campbell, W., & Goodie, A. S. (2009). Exploring the relations among executive functions, fluid intelligence, and personality. *Journal of Individual Differences*, 30, 194-200. doi:10.1027/1614-0001.30.4.194
- Webster, D. M., & Kruglanski, A. W. (1996). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67, 1049 -1062.
- West, R. F., Toplak, M. E., & Stanovich, K. E. (2008). Heuristics and biases as measures of critical thinking: Associations with cognitive ability and thinking dispositions. *Journal of Educational Psychology*, 100, 930-941. doi:10.1037/a0012842
- Wilson, R. S., Hebert, L. E., Scherr, P. A., Barnes, L. L., Mendes de Leon, C. F., & Evans, D. A. (2009). Educational attainment and cognitive decline in old age. *Neurology*, 72, 460-465. doi:10.1212/01.wnl.0000341782.71418.6c

Table 1

Means and standard deviations for participant characteristics and individual difference measures and tests of significant differences among party affiliation

	Total		Democrat		Independent		Republican		Significance Test
	N = 86		N = 26		N = 23		N = 29		
	M	SD	M	SD	M	SD	M	SD	
Age	72.5	7.7	70.2	7.0	74.5	8.6	72.9	7.3	$F(2, 75) = 2.10, p = .13$
Sex	51 F, 35 M		16 F, 10 M		16 F, 13 M		13 F, 10 M		$\chi^2 = 0.25, p = .88$
WTP-1**	130.6	109.6	182.0	96.7	142.0	112.8	64.3	83.1	$F(2, 71) = 8.11, p < .01$
WTP-2**	102.8	97.5	142.7	104.5	93.1	87.9	56.7	71.4	$F(2, 75) = 5.72, p < .01$
WTP-U***	123.9	101.4	179.8	94.3	120.7	94.5	66.5	81.9	$F(2, 75) = 9.51, p < .001$
Feeling about bill***	0.2	2.1	1.7	1.3	0.2	2.0	-1.0	1.6	$F(2, 73) = 14.80, p < .001$
Support for bill***	0.3	2.3	1.8	1.5	0.1	2.2	-0.8	1.9	$F(2, 73) = 12.20, p < .001$
Understanding of bill	3.2	1.8	3.3	1.7	2.9	1.6	3.0	1.8	$F(2, 74) = 0.43, p = .65$
Party Affiliation***	3.8	2.1	1.4	0.5	3.8	0.8	6.5	0.5	$F(2, 75) = 362.97, p < .001$
Political Belief Score***	3.3	1.4	2.4	1.1	3.2	1.1	4.4	1.2	$F(2, 75) = 20.63, p < .001$
Rational Score (REI)*	3.8	0.6	3.9	0.4	3.9	0.5	3.5	0.7	$F(2, 71) = 4.62, p < .05$
Rational Engagement*	3.7	0.7	3.9	0.5	3.9	0.6	3.4	0.8	$F(2, 72) = 4.21, p < .05$
Rational Ability*	3.8	0.6	3.9	0.4	3.9	0.5	3.6	0.7	$F(2, 74) = 3.43, p < .05$
Experiential Score (REI)	3.2	0.4	3.3	0.4	3.1	0.5	3.2	0.3	$F(2, 72) = 1.55, p = .22$
Experiential Engagement	3.0	0.5	3.1	0.5	2.9	0.5	3.0	0.4	$F(2, 74) = 1.64, p = .20$
Experiential Ability	3.4	0.5	3.4	0.4	3.3	0.5	3.4	0.4	$F(2, 73) = .98, p = .38$
Verbal Fluency*	50.5	19.2	58.3	20.9	47.5	16.5	43.6	16.0	$F(2, 75) = 4.55, p < .05$
Years Education	15.3	3.5	16.2	5.0	15.6	2.7	14.1	2.0	$F(2, 73) = 2.14, p = .13$
Income Score	4.8	2.2	5.1	2.6	4.7	2.1	4.2	1.8	$F(2, 75) = 1.06, p = .35$

* $p < 0.05$ (2-tailed)

** $p < 0.01$ (2-tailed)

*** $p < 0.001$ (2-tailed)

Table 2

Correlations Between Party Affiliation and Political Belief Items

Political Issue	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Party Affiliation ^a	-										
(2) Abortion	-0.53**	-									
(3) Gay Marriage	-0.45**	0.55**	-								
(4) Affirmative Action	-0.49**	0.40**	0.52*	-							
(5) Iraq	-0.48**	0.32**	0.26*	0.56**	-						
(6) Gun Control	-0.32**	0.11	0.28**	0.25*	0.36**	-					
(7) Welfare	0.43**	-0.29**	-0.45**	-0.29**	-0.43**	-0.37**	-				
(8) Iran	0.39**	-0.26*	0.40**	-0.39**	-0.40**	-0.39**	0.22*	-			
(9) Unions	0.42**	-0.27**	-0.41**	-0.39**	-0.47**	-0.38**	0.39**	0.45**	-		
(10) Death Penalty	0.53**	-0.43**	0.42**	-0.34**	-0.49**	-0.36**	0.53**	0.46**	0.47**	-	
(11) Taxes	0.33**	-0.25*	-0.30**	-0.39**	-0.38**	-0.15	0.37**	0.35**	0.24*	0.36**	-

^aPositive correlation between Party Affiliation and political issue means variable associated with Republican Party Affiliation

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3

Correlations between main variables

Total Sample	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) WTP-1	-																
(2) WTP-2	0.55**	-															
(3) WTP-U	0.56**	0.77**	-														
(4) Feel	0.50**	0.47**	0.49**	-													
(5) Support	0.47**	0.47**	0.52**	0.91**	-												
(6) Understand	0.11	0.09	0.04	0.02	0.05	-											
(7) Party Affiliation ^a	-0.44**	-0.38**	-0.50**	-0.63**	-0.60**	-0.07	-										
(8) Political Belief Score ^b	-0.50**	-0.61**	-0.60**	-0.65**	-0.65**	-0.01	0.68**	-									
(9) Rational Score	0.21	0.27*	0.28*	0.06	0.08	0.12	-0.26*	-0.25*	-								
(10) Rational Engagement	0.20	0.28*	0.32**	0.18	0.18	0.13	-0.27*	-0.30**	0.95**	-							
(11) Rational Ability	0.19	0.22	0.18	-0.11	-0.07	0.08	-0.19	-0.14	0.92**	0.74**	-						
(12) Experiential Score	0.13	0.10	-0.04	-0.10	-0.10	0.00	-0.06	-0.05	-0.04	-0.12	0.10	-					
(13) Experiential Engagement	0.16	0.17	-0.05	0.07	0.06	0.08	-0.13	-0.15	0.01	-0.04	0.08	0.92**	-				
(14) Experiential Ability	0.09	0.04	-0.04	-0.24*	-0.23*	0.05	0.07	0.08	-0.06	-0.19	0.12	0.91**	0.66**	-			
(15) Verbal Fluency	0.28*	0.40**	0.39**	0.26*	0.29*	0.19	-0.32**	-0.43**	0.46**	0.45**	0.38**	0.04	0.04	0.02	-		
(16) Education	0.36**	0.07	0.07	0.19	0.23*	0.20	-0.24*	-0.29*	0.42**	0.44**	0.30**	-0.69	-0.05	-0.09	0.13	-	
(17) Income	0.36**	0.40**	24*	0.07	0.04	0.19	-0.19	-0.25*	0.27*	0.22*	0.29**	0.16	0.11	0.17	0.24*	0.35**	-

^a Party Affiliation responses range for 1 (Strong Democrat) to 7 (Strong Republican)^b Higher Political Belief Score reflects more conservative response

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

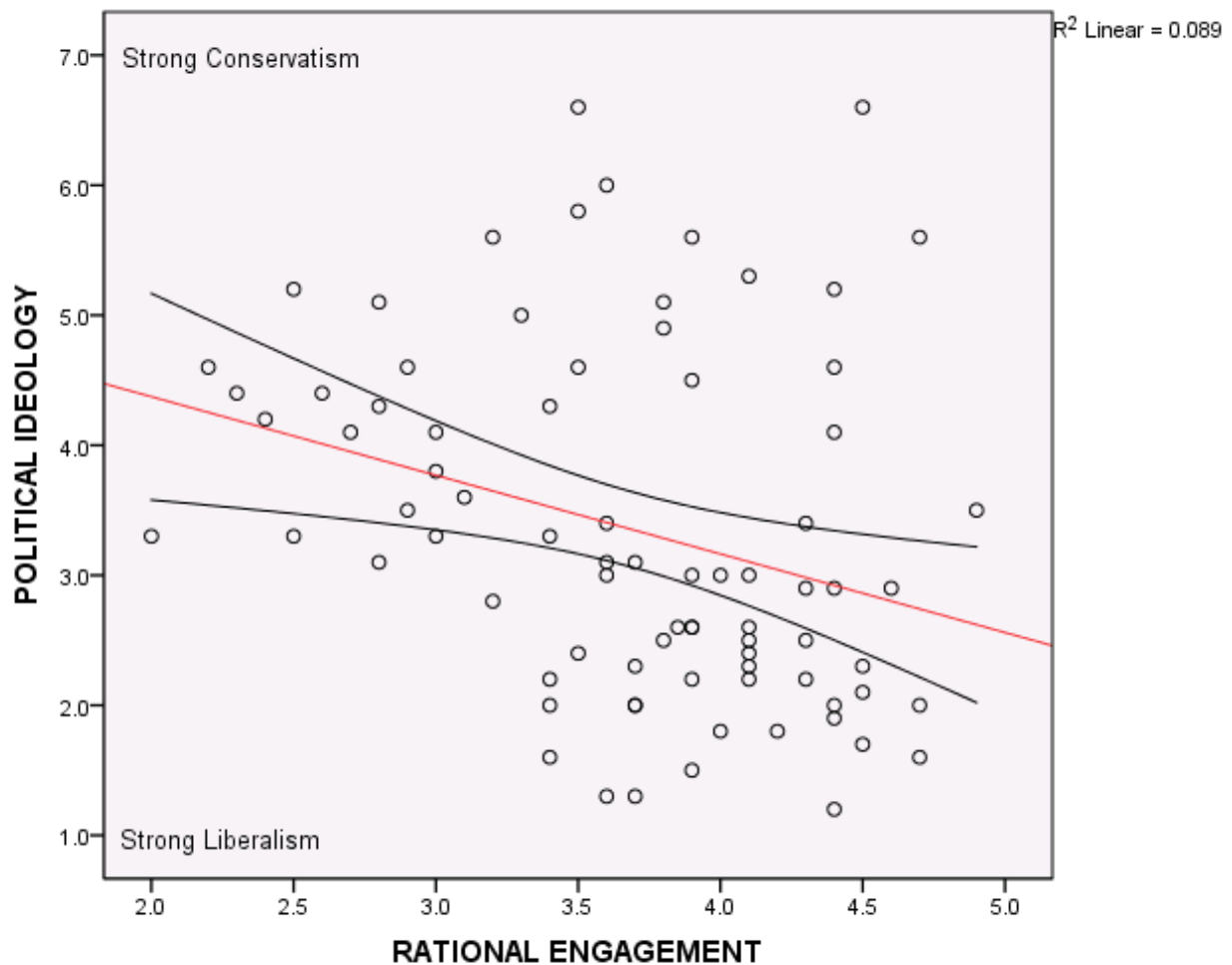


Figure 1. Scatterplot of political ideology (political belief scores) against rational engagement (REI) for all participants. Red line represents fitted linear regression equation. Black lines represent 95% confidence intervals. Higher political belief score represents more conservative response.

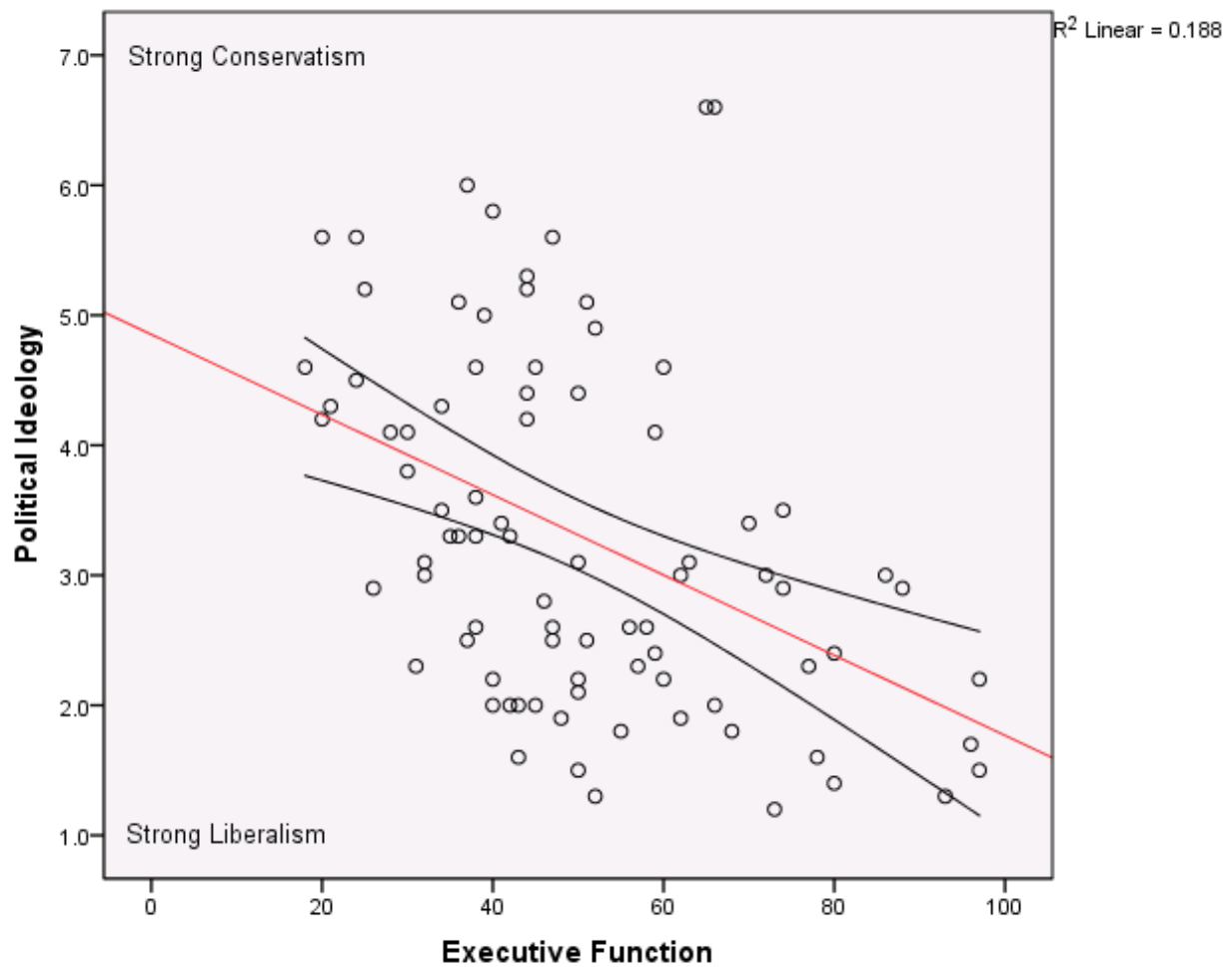


Figure 2. Scatterplot of political belief scores against executive function (verbal fluency scores) for all participants. Red line represents fitted linear regression equation. Black lines represent 95% confidence intervals. Higher political belief score represents more conservative response.