

Political leanings vary with facial expression processing and psychosocial functioning

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Abstract

Conservative, Republican sympathizers show heightened threat reactivity, but greater felt happiness than liberal, Democrat sympathizers. Recent evolutionary models interpret these findings in the context of broader perceptual and expressive proclivities for advertising cues of *competency* (Republicans) and *trustworthiness* (Democrats) to others, and in ways that facilitate the formation of distinct social networks, in coordination with individuals' life histories. Consistent with this perspective, I found that Republican sympathizers were more likely to report larger social networks and interpret ambiguous facial stimuli as expressing more threatening emotions as compared to Democrat sympathizers, who also reported greater emotional distress, relationship dissatisfaction, and experiential hardships. The findings are discussed in the context of proximate and ultimate explanations of social cognition, relationship formation, and societal cohesion.

Keywords

evolution, group identity, neuroscience, political psychology, social cognition

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Political ideologies are generally believed to encompass people's thoughts or values as they apply to public policies, judicial philosophy, and governmental strategies for mediating domestic and international conflicts. Some scientists have begun to address ideology formation from an ultimate or evolutionary level of analysis, such as interpreting political orientation within the context of broader behavioral dispositions that are functional for interacting with other people (e.g., Hastings & Shaffer, 2008; Thornhill & Fincher, 2007; Thornhill, Fincher, & Aran, 2009). The vast majority of studies, however, focus on proximate correlates of political orientation, including moods, values, and

cognitive rationalization processes (see Caprara & Zimbardo, 2004; Jost, Glaser, Kruglanski, & Sulloway, 2003). In this study I investigate political orientation at a more basic level of analysis, in relation to individual differences in trait perceptions and expression of affective behaviors. I examine

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the evolutionary hypothesis that political leanings reflect broad social behavioral dispositions that are associated with variation in facial expression processing of threat impressions and dominance-status, as well as variation in background experiences (e.g., history of adversity) that may be related to certain mood behaviors and social relationship styles.

Psychological correlates of political orientation

Recent empirical studies have uncovered fundamental group differences in the psychological dispositions of individuals oriented towards conservative versus liberal ideals. Conservatives respond to threatening situations (e.g., out-groups and norm-violators) with more aggression than do liberals (Jost et al., 2003). This pattern has been demonstrated through stronger correlations between homicide and capital punishment rates in red (i.e., Republican-leaning) versus blue (i.e., Democrat-leaning) states (McCann, 2008), as well as through greater verbal and nonverbal (e.g., facial) displays of contempt for criminals among individuals who score high on authoritarian (i.e., conservative) personality scales (e.g., Fodor, Wick, Hartsen, & Preve, 2008). Liberals are also more accepting of ambiguity, whereas conservatives tend to engage in less flexible/more structured problem-solving strategies (Jost et al., 2003; see also Amodio, Jost, Master, & Yee, 2007). Interestingly, other researchers have found that, after statistically controlling for demographic factors, conservatives tend to report greater happiness than do liberals (Napier & Jost, 2008; see also Kossowska, Bukowski, & Hiel, 2008). These distinctions appear to exist despite no clear group differences in general cognitive ability (Kemmelmeyer, 2008).

The above noted findings have been traditionally interpreted from a cognitive, motivational perspective which highlights potential asymmetries in the rationalization processes of conservatives and liberals. According to this perspective, conservatives have a characteristic fear of uncertainty and are motivated to rationalize societal inequalities and to engage in “dogmatic” and “intolerant” behaviors that stigmatize others to protect one’s self-concept (Jost et al., 2003; Jost, Nosek, &

Gosling, 2008; Napier & Jost, 2008). A related hypothesis is that conservative ideology is rooted in a general “avoidance” or separation of emotional awareness (Leone & Chirumbolo, 2008). Still, the above findings are not necessarily incompatible with alternative, less subjective (i.e., morally loaded) levels of explanation, such as more basic (i.e., lower-cognitive) expressive and perceptual processes.

Socio-relational explanation of political orientation

One possibility, for example, is that self-presented political ideals (e.g., promotion of pacifism vs. threat resistance) reflect broader expressive proclivities, which may operate in coordination with, or as an alternative to, cognitive rationalization processes. According to a recent “socio-relational” framework of affective behaviors and broader expressive behaviors (Vigil, 2009a), humans evolved the proclivity to advertise their *reciprocity potential*, or value as a social partner, vis-à-vis behavioral cues that signal *competencies* and *trustworthiness* to others (see also Vigil, 2007). The basic reasoning is that these two social properties (i.e., capacity and trust) are fundamental components of reciprocity potential because low levels of either of these constructs (having a lot to offer but being unwilling to do so, or being willing but having little to offer) result in little impact on others (Vigil, 2007).

According to Vigil (2007, 2008, 2009a), humans are predicted to heuristically display or advertise their reciprocity potential in ways that facilitate the affiliation and aversion of individual relationships. That is, some emotions such as joy and sadness may primarily operate to induce interpersonal bonding, whereas other emotions such as fear and anger may operate to avert distrusted interactants (Todorov, 2008; Vigil, 2008, 2009a; see also Buck, 1999; Davidson, Jackson, & Kalin, 2000). Moreover, people are predicted to advertise capacity and trust cues, selectively, vis-à-vis respective displays of *dominant* (e.g., joy and anger) and *submissive* (e.g., sadness and fear) gestures, which have been described as encompassing both felt and reported mood, as well as

personal and presented thoughts or values (Vigil, 2009a, 2009b). According to the socio-relational perspective, dominant and submissive behaviors are predicted to manifest in coordination with stochastic (i.e., randomly occurring) positive and negative life experiences, and operate at the interpersonal expressive level, to strengthen different types of relationships (e.g., future vs. current; Vigil, 2009a).

For example, when individuals experience events, such as wealth accumulation, that increase their capacity, they are hypothesized to exaggerate the display of dominant behaviors (e.g., expressed joy) that advertise this added capacity (Vigil, 2009a). Likewise, research on peer relationships and mate preferences shows that people appraise each other's capacity cues (e.g., attractiveness) in anticipation of immediate or short-term relationships, and appraise each other's trustworthiness cues (e.g., loyalty, kindness) in anticipation of long-term relationships (Cottrell, Neuberg, & Li, 2007; Li, Bailey, Kenrick, & Linsenmeier, 2002; Vigil, Geary, & Byrd-Craven, 2006). These findings lend to the hypothesis that individuals may heuristically advertise capacity cues and trust cues selectively, in order to attract short-term and long-term relationship partners respectively, and at the social network level, for maintaining relationships with many or fewer relationship partners (Vigil, 2009a).

Vigil (2009a) argues that the size of one's social network is inversely related to the amount of investment that can be interchanged across individual relationships (see also Geary, Byrd-Craven, Hoard, Vigil, & Numtee, 2003). This reasoning is complemented by the observation that capacity displays are more observable (e.g., from a distance) than trust cues and do not require extensive exposure to be accurately assessed by others. In theory, this should make capacity displays more efficient for maintaining larger social networks that require less time spent interacting with individual partners. Larger social networks are more risky than intimate, consolidated networks, because larger social networks consist of a greater proportion of less familiar and less dependable relationship partners. Such conditions would only seem to be advantageous when

individuals can endure the added social risk of probable defection. Based on this reasoning, a basic hypothesis from the socio-relational perspective is that people respond to positive life events with behavioral cues of capacity (e.g., expressed joy and assertiveness), and seek out and form larger social networks, which may covary with heightened sensitivity for detecting threat. Under these conditions, humans may heuristically trade off the risk of forming less familiar and hence less secure relationships for the benefit of obtaining a greater overall number of potential reciprocators (Vigil, 2009a).

In contrast, when individuals experience events such as social and material losses that decrease their capacity resources, they are less able to display capacity. Thus, they should instead be motivated to exaggerate the presentation of submissive behaviors and hence trust cues through pro-social displays and expressed vulnerability (e.g., sadness and fear; see Marsh, Adams, & Kleck, 2005; Montepare & Dobish, 2003). In contrast to demonstrations of capacity, trustworthiness cues (e.g., kindness, loyalty, honesty) require repeated interactions to be accurately assessed by others, making these behaviors more efficient for maintaining smaller and more intimate social networks that enable individuals to invest more time in individual relationships. By consolidating social networks, individuals can limit exposure to unfamiliar interactants, which may simultaneously enable strengthening of investment in established relationships. This reasoning leads to the prediction that, in response to experiential adversity, individuals may be motivated to reap the benefits of having fewer, yet more dependable relationship partners, under conditions when reliable social support is most needed (Vigil, 2009a; see also Geary et al., 2003; Vigil, 2007). From this perspective, self-reported liberal and conservative values are examples of the types of expressive behaviors that are *predicted* to covary with certain life experiences and affective behaviors, such as felt sadness and elation, which may similarly and heuristically operate to project submissive and dominant trait impressions respectively, to others (e.g., Marsh et al., 2005).

For example, conservative sympathizers may report greater felt happiness and may respond to threatening situations with greater assertiveness, not only as a result of the cognitive rationalization mechanisms described earlier, but simply because they have developed an expressive bias for displaying dominance, along with a lower threshold for processing threat. From a socio-relational perspective (Vigil, 2009a, 2009b), traditional Republican ideals (e.g., economic competition and international assertiveness) reflect the types of social dispositions that result from benign life experiences and access to social (e.g., emotional security) and material (e.g., economic security) resources. These life histories are predicted to precipitate the behavioral disposition to display capacity cues, which should also covary with the motivation to maintain larger social networks. Larger social networks consist of a greater proportion of less familiar and hence dangerous individuals, which would require more refined perceptual sensitivities for detecting threatening stimuli, in general, and risky relationships in particular.

Recent experimental studies provide preliminary support for this hypothesis and show that conservatives produce greater physiological arousal (e.g., skin conductance) than liberals from aversive stimuli such as loud noises and disturbing images (Oxley et al., 2008). Conservatives have also been found to produce greater corrugated brow (i.e., frown) muscle movement when evaluating dangerous criminals (Fodor et al., 2008), and to produce less brain activity when prompted to rely on flexible problem-solving strategies (Amodio et al., 2007), which may manifest at the behavioral level as pro-social/appeasing societal values (e.g., promotion of government-provided health care). Collectively, these findings suggest that individual differences in the adoption of some stereotypical conservative and liberal values (e.g., international assertiveness vs. diplomacy; economic competition vs. equality; criminal intolerance vs. compassion) may be rooted in perceptual sensitivities to process threatening stimuli and behavioral biases to advertise high capacity versus high trustworthiness cues to others.

Current study

In the current study, I examined the hypothesis that political leanings reflect broader behavioral dispositions that are associated with individual differences in facial expression processing, self-reported affective sensations, and psychosocial experiences. Democrat sympathizers were predicted to report more adverse life experiences, such as child and adult victimization, that precipitate submissive behaviors, as well as higher rates of affective behaviors (e.g., emotional distress) and social perceptions (e.g., lower perceived trust of others) that are similarly associated with submissive trait impressions and exposure to violence (Bennell, Alison, Stein, Alison, & Canter, 2001; Vigil, Brophy, Garrett, & McMurry, in press). Based on the socio-relational hypothesis that people adjust the composition of their social network in coordination with benign and adverse life experiences (Vigil, 2009a), Democrat sympathizers were predicted to report fewer peer relationships than Republican sympathizers. In terms of facial processing, previous studies show that humans are particularly sensitive to evaluate social objects along trustworthiness and competency dimensions, which may be necessary and sufficient for detecting the reciprocity potential and interpersonal threat levels of others (Engell, Haxby, & Todorov, 2007; Todorov, Mandisodza, Goren, & Hall, 2005; Vigil, 2009a). I therefore predicted that individuals who are oriented towards the political party that typically promotes more dominant (i.e., capacity advertising) responses to domestic and international conflicts, and the party affiliation that is expected to covary with the formation of larger social networks, the Republican Party, would be more likely to interpret ambiguous facial stimuli as signaling more threatening and more dominant emotions (e.g., anger vs. sadness) when compared to sympathizers of the Democrat Party. Therefore, while Democrat sympathizers were predicted to report greater distrust of peers as a result of experiential adversity (e.g., victimization), Republican sympathizers were expected to show an implicit bias to detect threat in coordination with the formation

of larger social networks. The assessments were conducted among a large, representative sample of young Americans in the immediate months leading up to the 2008 primary and general presidential elections.

Method

Eight hundred and thirty-eight college students from several undergraduate psychology courses at a major university in Florida participated in this study. To help avoid selection biases, entire classrooms of students were recruited to participate (90% of the subjects completed the study during the class period). Subjects were included in the following analyses if they were United States citizens and were between the ages of 18 and 40 years. Seven hundred and one subjects met this criteria (mean age = 21.7 years, 70% female). Politics were not discussed in any of the classes from which the subjects were recruited, nor were the subjects familiar with the facial discrimination task. The subjects reported their political affiliation (56% Democrat) confidentially with a single forced-choice survey item that asked which political party they tend to lean (*Democrat* or *Republican*). Subjects then completed the remainder of the survey which was comprised of the facial discrimination task and items designed to measure basic social dynamics (e.g., number of friends, trust perceptions), background experiences, and psychological functioning. The entire survey took between 30 to 50 minutes to complete.

Materials

Facial expression processing The facial expression discrimination task was designed to measure threat interpretation and dominance impressions from ambiguous facial stimuli. One male and one female actor each portrayed five ambiguous (i.e., not expressing a discrete emotion) facial expressions. This was conducted by asking actors to “display facial expressions that do not feel natural and may even feel unusual.” Photographs of the actors were taken under natural light and converted to digital sketches using

commercially available image rendering software (Adobe Photoshop 7 and Corel Painter 9). The 10 sketches were enhanced to be difficult to distinguish using digital exposure and blur effects. The sketches were printed on two pages of a questionnaire, following the psychological items. Under each sketch, subjects were asked to identify the face as expressing sadness, joy, disgust, surprise, fear, or anger. The responses were coded as signaling either non-threat (joy, sadness, or surprise; coded 1) versus threat (anger, fear, or disgust; coded 2) and as conveying submissiveness (sadness, fear, or surprise; coded 1) versus dominance (joy, anger, or disgust; coded 2), due to the associations between these emotions and the corresponding trait impressions (e.g., Marsh et al., 2005; Montepare & Dobish, 2003). Because threat perceptions are naturally associated with dominance perceptions (Vigil, 2009a) these two trait impressions should be interpreted as complementary rather than independent.

Social dynamics Number of friendships was measured with two open-response items asking the total number of *good friends* and *best friends*, respectively, the subjects considered having. Perceived reliability of social support was measured with six items (two items from each of the family, friends, and significant other subscales) from the Multidimensional Scale of Perceived Social Support (e.g., *my friends/family really try to help me*; Zimet, Dahlem, Zimet, & Farley, 1988) and scored on a five-point scale (overall $\alpha = .79$). Perceived trustworthiness of peers was measured by six items (two items from each of the predictability, dependability, and faith subscales) from the trust scale (e.g., *my peers can be trusted*; Rempel, Holmes, & Zanna, 1985), which is designed to measure the perceived dependability of peers’ trustworthiness and the faith that they will provide help. The items were scored on a five-point scale ($\alpha = .80$). Perceived trustworthiness of intimate relationships was measured with three items that asked subjects to rate the level of trustworthiness of their relationships with their mothers, fathers, and first romantic partners. For example, subjects were asked to

assess the accuracy of the statement: *My mother and I generally have (had) a trusting relationship*. Possible responses were scored on a five-point scale ranging from *extremely true* to *extremely untrue*, and averaged to create an overall intimate trust perception score.

Victimization history Childhood maltreatment was assessed with three respective items asking subjects if they had experienced *unwanted sexual contact or exposure*, *severe physical abuse*, and *severe emotional abuse prior to age 14* (yes or no responses). For some of the statistical analyses childhood maltreatment was coded dichotomously, depending on whether (coded 1) or not (coded 0) subjects reported any of these experiences. Three similar items were used to assess the history of adult victimization; specifically, sexual assault, physical assault, or nonsexual/physical assault (e.g., being *robbed*, *vandalized*, *harassed*, and *rejected by peers/family*) after age 14 (yes or no responses). Adult victimization was also coded dichotomously, depending on whether or not subjects reported any of these experiences.

Psychological functioning Trait aggression was assessed by eight items (two items from each of the physical aggression, verbal aggression, hostility, and anger subscales) from the aggression questionnaire (e.g., *I have become so mad that I have broken things*; Buss & Perry, 1992); the items were scored on a five-point scale (overall $\alpha = .68$). Depressive symptoms were assessed by The Center for Epidemiologic Studies Depression Scale (Radloff, 1977); the instrument consists of 20 items (e.g., *I felt down and unhappy*) that target symptoms of depression during the previous week and were scored on a four-point scale (overall $\alpha = .90$). Self-esteem was measured with the Rosenberg Self-esteem Scale (Rosenberg, 1965); the instrument consists of 10 items (e.g., *I certainly feel useless at times*) and scored on a four-point scale (overall $\alpha = .88$). Felt happiness was measured with the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) that consists of five items (e.g., *my life is close to ideal*) and scored on a four-point scale (overall

$\alpha = .85$). Two respective items asked how many positive and negative life events the subjects had experienced relative to their peers. The items were scored on a seven-point scale ranging from *lower than almost everyone* to *higher than almost everyone*. Two additional items asked subjects to indicate the levels of physical and emotional pain they experienced *on the average day*. The items were scored on a six-point scale ranging from *no pain* to *unbearable pain*. Finally, the frequency of felt emotions was measured with six items that asked subjects to indicate, *on the average day*, how often they experienced *sadness*, *anger*, *fear*, and *disgust for others*, how often they *cried*, and how often they *hit/banged/slammed nearby objects*. The items were scored on a four-point scale ranging from *rarely or never* to *almost always*.

Results

Facial expression processing

Independent sample *t*-tests revealed group differences in the averaged threat interpretation scores of the 10 facial stimuli, $t(621) = -3.07, p = .002$. Republican sympathizers were more likely to interpret the faces as signaling a threatening expression ($M = 1.39, SD = .15$) as compared to Democrat sympathizers ($M = 1.36, SD = .15, d = -.20$). Group differences were also found for dominance perceptions, $t(624) = -2.01, p = .045$, whereby Republican sympathizers were more likely to perceive the faces as expressing dominant emotions ($M = 1.46, SD = .15$) than were Democrat sympathizers ($M = 1.43, SD = .14, d = -.21$). Chi-square tests of the individual faces revealed significant ($ps < .05$) group differences in perceptions of threatening (vs. non-threatening) emotions for half of the sketches; group differences in perceptions of dominant (vs. submissive) emotions were found for four sketches. These differences are shown in Figure 1.

A regression analysis was then run using the averaged threat score as the dependent variable and entering subjects' political orientation, gender, age, and employment status (each of the variables, except for age, were dichotomously coded) as independent variables. This analysis revealed

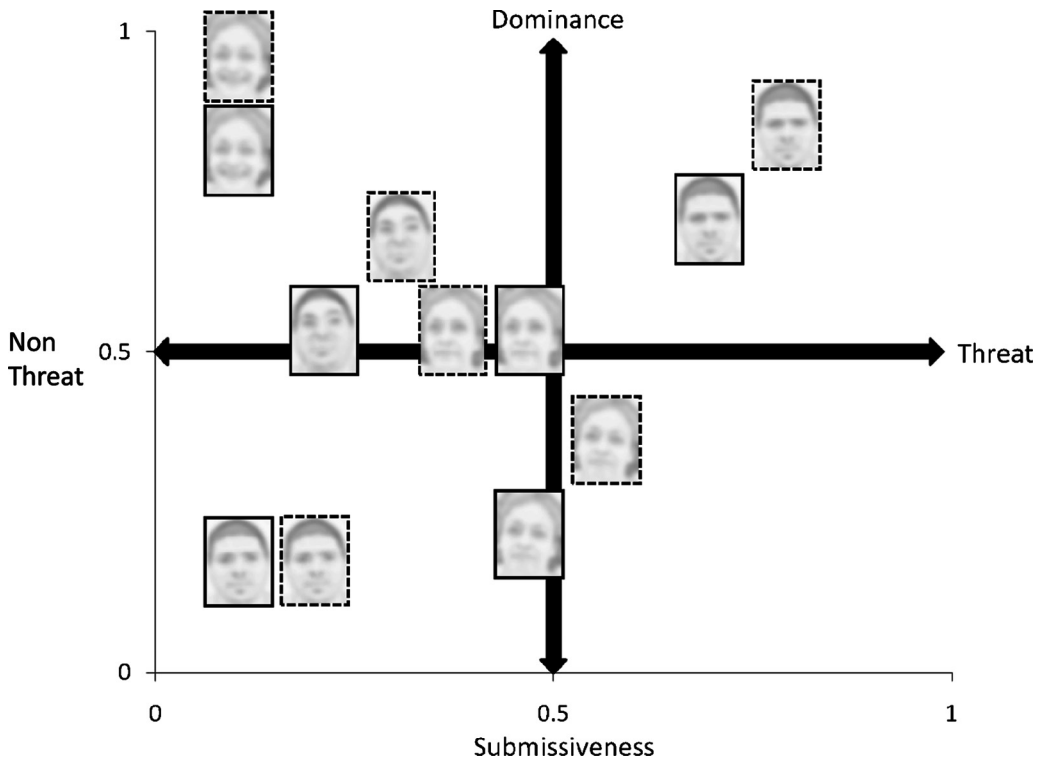


Figure 1. Social processing of threat and dominance impressions.

Note: The x and y axes represent the percentage of people that identified each sketch as expressing threatening (vs. nonthreatening) and dominant (vs. submissive) emotions, respectively. Solid borders indicate scores of Democrat sympathizers and dashed borders indicate the scores of Republican sympathizers. Non-overlapping pairs of sketches indicate significant group differences ($p < .01$).

that political affiliation was independently related to perceptions of threatening facial expressions ($\beta = .12, p = .003$) over and above the demographic variables. Gender, age, and employment status were not significantly related to the threat score after controlling for political orientation ($p > .10$). A similar analysis, instead entering the averaged dominance score as the dependent variable, revealed a trend for a significant relation between political orientation and perceptions of dominance ($p = .07$). The only demographic variable that was significantly related to the dominance score was gender ($\beta = -.11, p = .007$).

Psychosocial functioning

A multivariate analysis of variance (MANOVA) was first run using the political-leaning category as

the independent variable and each of the psychological, social, and life history items as the dependent variables, Wilks' lambda = .91, $p < .001$. Follow-up tests revealed group differences in social dynamics, psychological functioning, and victimization history; significant group differences ($p < .01$) are shown in Table 1. Collectively, when compared to Republican sympathizers, Democrat sympathizers showed greater psychological distress, more frequent histories of adverse life events such as interpersonal victimization experiences, fewer and less satisfying relationships, and lower perceptions of the trustworthiness of peers and intimate affiliates. With regard to the emotion variables, Democrat sympathizers also reported greater frequency of crying behaviors. Group differences were not found ($p > .01$) for number of best friends, self-reported positive life experiences,

Table 1. Social and psychological correlates of political orientation

Variable	Democrat sympathizers	Republican sympathizers	<i>t</i>	<i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		
Number of good friends	9.46(11.33)	12.91(18.69)	-2.85	-.22 ^b
Perceived reliability of social support	24.83(4.38)	25.94(3.98)	-3.46	-.27 ^c
Perceived trust of peers	3.51(.70)	3.62(.64)	-2.22	-.16 ^a
Perceived trust of close affiliates	3.62(.87)	3.89(.84)	-3.95	-.32 ^c
Life satisfaction	13.77(3.70)	14.64(3.38)	-3.18	-.25 ^c
Aggression	24.93(5.17)	23.21(5.26)	4.32	.33 ^c
Emotional pain	2.16(.99)	2.00(.87)	2.33	.17 ^a
Crying behavior	1.57(.79)	1.44(.71)	2.15	.17 ^a
Negative life experiences	4.03(1.56)	3.72(1.50)	2.60	.20 ^b
*Incidence of child maltreatment	33.6%	21.0%	12.64	.52 ^c
*Incidence of adult victimization	39.2%	29.8%	6.04	.66 ^b

Note. *The second through fifth columns for these variables are the occurrences of the experiences for Democrat and Republican sympathizers, chi-square difference tests, and the odds ratio of group frequency differences, respectively. Negative values indicate higher values among Republicans.

^a $p < .05$; ^b $p < .01$; ^c $p < .001$.

self-esteem, depression, physical pain, felt anger, sadness, fear, disgust, or hitting behaviors.

Correlations were then used to examine potential relationships between the psychological variables and the facial expression discrimination scores. The only psychological variable that was significantly related to greater facial threat impression scores was negative life experiences ($r = .09$, $p = .02$). Follow-up regressions showed that the relation between the negative-life-experiences score and the facial-threat score was reduced to nonsignificance ($p > .10$), once political orientation was simultaneously entered as an independent variable ($\beta = .12$, $p = .004$). For the dominance perception score, the only variables that were related to more dominant facial impressions were lower frequencies of felt sadness and crying behaviors ($r_s = -.09$, $p_s = .02$ and $.03$, respectively). Once political orientation was simultaneously entered as an independent variable along with the sadness score, both independent variables became nonsignificant ($p_s = .06$). Once political affiliation was entered along with the crying score, political affiliation became nonsignificant ($p = .08$), while the crying variable

remained a significant predictor of dominance impressions ($\beta = -.08$, $p = .04$).

Discussion

Neuropsychological studies provide multilevel information for understanding political values (Cacioppo & Visser, 2003) as well as the potential social-behavioral dispositions that such values may be based on (e.g., Vigil, 2009b). In the current study, I show that individuals who sympathize with the Republican Party have a lower threshold for processing threatening stimuli from ambiguous social information as compared to sympathizers of the Democrat Party. A complementary pattern is greater perceptions of dominant (vs. submissive) emotions among Republican-leaning respondents. These findings extend earlier research on potential cognitive (rationalization) underpinnings of political ideology (Jost et al., 2008) by showing that Republican orientation is associated with more basic (lower cognitive) perceptual biases for detecting threat. A similar interpretation is that Democrat orientation is associated with perceptual biases for detecting non-threat. These findings suggest that

self-reported social values that are associated with Democrat and Republican platforms' impressions may be partly rooted in how people process social stimuli (e.g., Oxley et al., 2008), which may implicitly alter cognitive rationalization outcomes. The findings do not, however, elucidate whether differential thresholds for detecting threat may best represent perceptual processes at the algorithmic (recognizing evolutionarily primed stimuli), computational (processing goals of perceptions), or implementation (responses to perceptions) levels of analyses (see Cacioppo & Visser, 2003).

Democrat sympathizers also showed greater emotional distress, including higher rates of crying behaviors, trait aggression, emotional pain, and lower life satisfaction. These findings are consistent with cross-cultural research showing greater happiness among conservatives (Napier & Jost, 2008), but the findings are inconsistent with studies showing lower aggression among liberals (Jost et al., 2008). One possibility is that the mood-related findings are associated with differential exposure to negative life events and hence Democrat sympathizers may experience greater emotional distress than Republican sympathizers as a result of higher rates of conditional hardships. Consistent with this hypothesis, people that are oriented toward the Democrat Party were more likely to report 'negative' background histories that included child maltreatment and adult victimization. Democrat sympathizers also reported more dissatisfaction with their social support and lower perceived trustworthiness of their relationships. Group differences in trust perceptions were expected, due to the established link between exposure to interpersonal violence and lower perceived trustworthiness of others (e.g., Bennell et al., 2001; Vigil et al., in press). The findings are also consistent with previous studies showing that conservatives report more favorable impressions of their families and childhood backgrounds than do Democrats (Jost et al., 2008). Collectively, these results do not support the popular view that the authoritarian (conservative) personality "syndrome" arises from a discontent with parental relationships and long-lasting resentment towards others (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950; Altemeyer, 1981, 1988).

Instead, the findings are perhaps more consistent with recent evolutionary models which suggest that political dispositions reflect *functional* life-history strategies for regulating social relationships (e.g., Thornhill & Fincher, 2007). From a socio-relational perspective, experiential successes (or the absence of adversities) are predicted to covary with the motivations to increase display of dominant (i.e., capacity) behaviors and increase the size of one's social network, which ultimately results in exposing the individual to a greater proportion of risky to reliable affiliates with whom one interacts on a daily basis (Vigil, 2009a). This prediction is consistent with the current finding of greater numbers of reported friendships among Republican sympathizers than among Democrat sympathizers. In theory, larger social networks are best maintained through the exaggeration of dominant displays, which can be verified over brief interactions, while smaller social networks are better maintained through submissive displays, which require more extensive interactions to be accurately verified (Vigil, 2009a). This thesis appears to account for the finding of increased threat perceptions among Republican sympathizers, which can be interpreted as a heightened sensitivity for discriminating risky relationships. Likewise, the thesis accounts for the findings of increased self-report of confidence and elation among Republican sympathizers and greater emotional distress among Democrat sympathizers, which can be interpreted as the demonstration of capacity and trustworthiness, respectively.

From a socio-relational perspective, self-reported conservative and liberal values operate, in part, at the expressive level, and manifest in coordination with stochastic life experiences that affect the ability to advertise high capacity. When capacity-enhancing opportunities are available, or in the absence of experiential adversity, individuals may be inclined to rely on gestures that advertise capacity, including dominant public policy values. When capacity-enhancing opportunities are unavailable or in response to experiential adversity, individuals may instead rely on the behavioral advertisement of trust cues to attract and maintain their relationships (Vigil, 2009a). This general thesis, that broad

political presentations operate to manipulate *intra-group* relationships, should be considered among traditional rationalization models that hypothesize that conservative and liberal ideals stem from intolerance/tolerance of *inter-group* conflict (e.g., Jost et al., 2003). At the very least, the fact that the content of some self-reported information, such as ideals or values, cannot be easily separated from the social impressions (e.g., dominance and submissiveness) that the information communicates, should cause researchers to consider the possibility that they may be measuring behavioral expressions in addition to, or rather than, products of complex computations.

This is not to suggest that additional proximate and ultimate levels of explanation are unwarranted, as many of these models are complementary and may thus account for additional variance in ideology development. For example, some researchers have suggested that political ideologies can be linked to parasite exposure and disease resistance. Based on this hypothesis, humans are predicted to develop more diverse (e.g., liberal) behaviors under less parasitic ecologies, such as Northern latitudes, where social groups are more likely to amalgamate (Fincher & Thornhill, 2008; Fincher, Thornhill, Murray, & Schaller, 2008; Thornhill et al., 2009). While interesting, it is unclear how this thesis can be incorporated into a broader behavioral framework that can simultaneously account for intra-societal and intra-individual (e.g., across the life span) variation in political orientation.

As it remains, we still know very little about how societal values are formed. The current study highlights one potential neurocognitive basis for some elements of political orientation and, as argued above, broader social behavioral dispositions. The findings suggest that Republican and Democrat political leanings may covary with perceptual sensitivities for detecting threat versus non-threat, which may help explain why these political parties traditionally distinguish themselves along assertive/competitive versus cautious/egalitarian strategies for responding to conflict and dispersing governmental tax dollars. A similar hypothesis is that the natural proclivity to selectively

advertise the capacity and trustworthiness components of reciprocity potential may largely underlie the major tenets of Republican and Democrat presentations (e.g., promotion of private vs. government-provided health care). This reasoning complements findings from other studies, showing inherent parallels between individuals' personality traits and 'values' (interpreted in the current study as behavioral dispositions) and perceptions of conservative versus liberal political leaders (e.g., Caprara & Zimbardo, 2004). Such values, while predominantly measured via self-report and hence behavioral cues, and while associated with specific trait impressions of dominance and submissiveness, have not been traditionally viewed as examples or forms of social expressive gestures in and of themselves.

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