



ELSEVIER

Available online at www.sciencedirect.com



Personality and Individual Differences 43 (2007) 1025–1035

PERSONALITY AND
INDIVIDUAL DIFFERENCES

www.elsevier.com/locate/paid

Creativity and conservatism

Stephen J. Dollinger *

Department of Psychology, Southern Illinois University, Mail Code 6502, Carbondale, IL 62901, United States

Received 30 October 2006; received in revised form 7 February 2007; accepted 16 February 2007

Available online 11 April 2007

Abstract

Across a range of disciplines it is assumed that conservatism and creativity are polar opposites. Although conservatism correlates negatively with appreciation of certain art forms, are conservatives in fact less creative? Four hundred and twenty-two undergraduates completed a Creative Behavior Inventory and creative products judged by the consensual assessment technique. Compared to more liberal college students, those endorsing more conservative positions on a brief version of the Conservatism scale had fewer creative accomplishments and devised photo essays and drawings judged as less creative. Results for accomplishments and drawing products held true when controlling for verbal ability and openness.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Creativity; Conservatism; Consensual assessment

1. Introduction

Are conservatives less creative than liberals? The opposition of conservatism and creativity is presumed in a number of disciplines – clothing design, crime and corrections, elementary education, data analysis, information technology, and management (Cooper, 2000; Cummings, 1965; Howell, 2004; McShane, 1989; Sanger, 1994; Stacey, Eckert, & Wiley, 2002; Sundgren, Selart,

* Tel.: +1 618 453 3565.

E-mail address: dollngr@siu.edu

Ingelgård, & Bengtson, 2005; Westen, 1978). From the perspective of socio-political history, Seitz (2003) observed that the 17th century rise of liberalism “foster(ed) creative production by encouraging individual creative expression” (p. 388). Although not a central focus of his study, Csikszentmihalyi (1996) reported that a number of his 91 eminently creative interviewees engaged in political action in support of liberal causes (e.g., environmental concerns, anti-war and anti-nuclear activism). Of course, anecdotal evidence of creative conservatives also can be found (Gunter, 1981; Gutterman, 1964; Kopff, 2005; Teachout, 1998). Nevertheless, studies at this level of recognition are quite selective and do not take into account everyday creativity. This study provides evidence on this question.

Before considering how these constructs are linked, we should note that there are many varieties of conservatism (Muller, 2001) and also that creativity has been defined in many ways. Most definitions of creativity include the elements of originality and usefulness (Mayer, 1999). That is, to be creative an idea or product must be novel and functional. In devising her consensual assessment technique, Amabile (1996) argued that appropriate judges do not need definitional consensus in order to achieve agreement on creative products – in effect they “know it when they see it.” Creativity has been variously measured as divergent thinking (e.g., unconventional uses of a chair, e.g. Rubinstein, 2003), a personality trait (Gough, 1979), or as preference for complexity in abstract designs (e.g., Eisenman, Borod, & Grossman, 1972). Literature reviews suggest that creative accomplishments and judge-rated creative products have greater utility (Hocevar & Batchelor, 1989). Hence, the present research used such measures.

Wilson (1973) identified a conservative syndrome including “religious dogmatism, right-wing political orientation (in Western countries), militarism, ethnocentrism, intolerance of minority groups, authoritarianism, punitiveness, anti-hedonism, conformity, conventionality, superstition, and opposition to scientific progress” (p. 257). Focused on social/political issues more so than economic ones, the psychological construct of conservatism is very similar in concept to right-wing authoritarianism (RWA, Altemeyer, 1988), although identified in less pejorative terms. (Altemeyer (1996, p. 296) likewise noted that “When people are ‘conservatives’ – politically, religiously, economically – the odds are pretty good that they are High RWAs. This is not an opinion, but a scientifically established fact.”) Wilson theorized conservatism as based on a generalized fear of uncertainty. However, it can be viewed more broadly as “motivated social cognition” driven by epistemic, existential, and ideological motivations with two core aspects – fear of change and tolerance of inequality (Jost, Glaser, Kruglanski, & Sulloway, 2003a). Jost et al. suggested that measures like Wilson’s Conservatism (C) and Altemeyer’s RWA scales primarily tap the first of these aspects.

Given Wilson’s theory, there are at least three reasons to expect less creativity among conservatives. First, individuals who are threatened by uncertainty may be disposed to focus on lower-order needs to increase their safety and security (e.g., Bar-Tal, 2001; Maslow, 1987). This focus is inconsistent with the motivations that prompt creativity. Second, conformity to what is conventionally accepted focuses the individual on traditions (what is old), whereas all definitions of creativity include a focus on what is new (Mayer, 1999). As Runco (2004) noted, creativity not only responds to current problems or challenges but is “one of the engines of cultural evolution” (p. 658). This association with societal change may provoke anxiety in conservatives. Third, the authoritarian and anti-hedonistic elements of the construct would lead conservatives to devalue imagination [cf. Feather (1979)].

Direct evidence bearing on our research question is limited. Wilson, Ausman, and Mathews (1973) found that, relative to low scorers on conservatism, high scorers dislike complex representational and complex abstract art; instead they prefer simple representational paintings. Gillies and Campbell (1985) replicated these findings with traditional poetry. Relatedly, conservatism correlated with a preference for *familiar* music (Glasgow & Cartier, 1985). Most creativity researchers would not regard particular art or music preferences as examples of creativity but would consider such variables relevant to the domain of creativity.

Supportive evidence for the present thesis comes from studies reporting negative correlations between authoritarianism (or dogmatism) and creativity-relevant processes like divergent thinking, and complexity- or cultural leisure-preferences (e.g., Bayard-de-Volo & Fiebert, 1977; Eisenman et al., 1972; Faschingbauer & Eglevsky, 1977; Peterson & Pang, 2006; Rouff, 1975). An example of this line of research is Rubinstein's (2003) impressive finding of correlations ranging from $-.46$ to $-.76$ between Altemeyer's RWA scale and divergent thinking measures. Further indirect evidence comes from a study of conservative values outside the tradition of Wilson's construct and measure. Schwartz's (1992) theory organizes 10 values domains into a circular space defined by two axes. One axis is self-enhancement vs. self-transcendence and the second is openness to change vs. conservatism. Dollinger, Burke, and Gump (In press) showed that college students with more creative accomplishments endorsed values higher on the openness axis (thus lower on conservatism) than those with few accomplishments. These findings were replicated with three creative product measures, as rated by expert judges.

This study was designed to extend recent work testing whether conservatives indeed have fewer creative accomplishments and devise products judged as less creative. Measures of verbal ability and openness to experience were included as possible "third-variables" contributing to the relationship, particularly since both have been found to relate to conservatism and creativity.

2. Method

2.1. Participants

Undergraduates completed the questionnaire measures and creative products as two extra credit projects in a Psychology course; $N = 422$ (256 female, 166 male). The sample, obtained in two consecutive years, ranged in age from 18 to 53 years of age, $M = 21.9$ years, $SD = 4.0$; 91% were single – never married. Questionnaire measures and the creative drawing were completed by nearly all students in the class during an in-class exercise early in the semester; about 60% of the students chose to complete photo essays later in the semester.

2.2. Questionnaire measures

C-scale. Henningham's (1996) 12-item balanced version of the Wilson and Patterson (1968) scale uses contemporary language and focuses on core social/political aspects of the construct. Respondents indicate whether they favor, oppose or hold a neutral view on each catchphrase (e.g., *Legalized Abortion*, *Gay Rights*). Conservative choices receive 2 points, liberal choices 0, and neutral/undecided 1 point. The item *Asian Immigration* was changed to *Immigration of*

Foreigners to be more general. Henningham reported a reliability of .74 and significant correlations with related constructs. In the present sample, $\alpha = .72$.

Creative Behavior Inventory (CBI). Hocevar's (1979) CBI has been the basis for a number of short forms in the literature. The original 90-item inventory asks participants to rate their engagement in various creative activities (e.g., "wrote poems") on a scale from 0 (never did this) to 3 (did this more than five times). The first wave of data collection included a 28-item form with items from the visual arts, literary arts, performance, and crafts domains ($\alpha = .89$; see Dollinger, 2003). In the second wave, Hocevar's original visual and literary arts subscales were used as a short form (22 items, $\alpha = .87$). The two short forms have 10 overlapping items. Based on unpublished data using the 90-item CBI ($N = 304$), these short forms correlate .81. Scores were standardized within year ($M = 50$, $SD = 10$).

Verbal ability. As a marker of verbal ability, the study included a 25-item vocabulary test from the California Short Form Test of Academic Aptitude (Sullivan, Clark, & Tiegs, 1970). Cronbach's α was .77. In unpublished data from an earlier sample of the same population ($N = 356$), this measure correlated .65 (corrected for attenuation) with the American College Testing-composite score. This test also correlated significantly with all four ACT subscales: English, Mathematics, Reading, and Scientific Reasoning (disattenuated r s = .62, .40, .64, and .48, respectively).

Openness. The Big Five Inventory was included to provide a measure of openness to experience (BFI, Benet-Martínez & John, 1998). Items begin with the stem, "I see myself as someone who. . ." followed by 44 sentence completions. Openness includes 10 items (e.g., "likes to reflect, play with ideas"). The BFI has good reliabilities (usually above .75) and excellent validity. So that the scale had less overlap with creativity, the seven openness items that do not explicitly refer to aesthetic or artistic qualities were averaged ($\alpha = .75$). Unlike some openness scales, none of the items involved conservative values.

2.3. Creative products

Drawing product. The test of creative thinking–drawing production stimulus (Jellen & Urban, 1986; Urban & Jellen, 1996) was presented and participants were asked to complete the incomplete figure, ostensibly started by an artist, in any way that they liked. This test was designed as a brief culturally-fair measure of creativity in children, can be used with all age and ability groups, and is used extensively in Europe. Because this was used as a creative product rather than a giftedness test, drawings were scored in accord with Amabile's (1996) Consensual Assessment Technique (CAT). Judges were three graduate MFA students (four in sample 2) who themselves had numerous art showings and awards to their credit. Judges rated the quality of detail of each drawing as well as the overall creative impression. These two ratings always correlated highly; they were averaged within-judges before averaging across judges. Combining across judges, Cronbach's α was .90 (median interjudge $r = .74$) and .85 (median $r = .65$) for years 1 and 2, respectively. Dollinger, Urban, and James (2004) showed that CAT ratings correlated $r = .88$ (corrected for attenuation) with Urban's scoring system.

Photo essay. Based on the autophotographic method of Ziller (1990/2000), participants were asked to take 20 photos answering the question "who are you?" Photos were to be compiled with written commentary on how the photo essay "does and does not capture who you are." Photo

essays were rated by psychology judges for the degree of individuality (“self-applied creativity”) on a 1–5 scale where 1 = superficial or one-dimensional self-portrayal and 5 = self-reflective, abstract, aesthetically sensitive, metaphoric, and well-integrated (Dollinger, Preston, O’Brien, & DiLalla, 1996). Studies have shown that these ratings predict various creativity measures both concurrently and seven years later (Dollinger, 2003, 2006; Dollinger et al., 2004). In the two years of data collection, Cronbach alphas were .89 (3 judges) and .78 (2 judges). Median interjudge *rs*, respectively, were .73 and .65.

3. Results

3.1. Preliminary analyses

Gender, age, and year of data collection did not correlate significantly with predictor or criterion variables (*rs* ranging from $-.11$ to $+.10$, all $p > .05$). Descriptive statistics and correlations for the measures are shown in Table 1. Conservatism correlated negatively with openness and vocabulary, respective *rs* = $-.27$ and $-.31$ (all reported *rs* and *βs* had an associated $p < .001$ unless otherwise noted). Among the creativity measures, the drawing product and CBI showed a moderately strong correspondence, $r = .34$ ($N = 408$). The photo essay rating correlated with the rated creativity of drawings, $r = .25$ ($N = 248$), but only marginally with the CBI, $r = .12$, $p < .07$ ($N = 249$).

3.2. Main analyses

Conservatism correlated negatively with creative accomplishments and rated creativity of the products, *rs* ranging from $-.22$ to $-.27$ (see Table 1). Because the pattern of correlations suggests that other variables may account for this relationship, partial correlations were examined. With

Table 1
Descriptive statistics and correlations

Variable	1	2	3	4	5	6
Mean	50.0	3.3	2.5	18.6	50.0	10.2
SD	10.0	1.2	1.0	3.6	10.1	4.7
(1) CBI	1.00					
(2) Drawing	.34**	1.00				
(3) Photo essay	.12	.25**	1.00			
(4) Vocabulary	.24**	.26**	.30**	1.00		
(5) Openness	.37**	.13*	.16*	.14*	1.00	
(6) Conservatism	-.27**	-.22**	-.22**	-.31**	-.27**	1.00

Note. CBI, Creative Behavior Inventory. Drawing and photo essay were judge-rated creative products. $N = 408$ –422 for all variables except photo essay where $N = 256$.

* $p < .05$.

** $p < .001$.

openness and vocabulary partialled, conservatism still correlated with the CBI ($r_p = -.19$ and $-.21$, respectively), drawing ($r_p = -.21$ and $-.15$, $p < .05$), and photo essay (both $r_p = -.15$, $p < .05$). As a more stringent test, regressions predicted criterion measures from all three predictors simultaneously; conservatism continued to explain significant amounts of variance in the CBI and creative drawing product (see Table 2).^{1,2}

3.3. Qualitative results

A subset of high- and low-C participants had completed a photo essay for which rater notes were available (these optional notes were not scored but allowed raters to track interesting detail for reference as they “finalized” their ratings). This select group consisted of 15 participants, six of whom were highly conservative. It is interesting to note that, among conservatives, religiosity was a common theme. Religiosity was expressed in photos and comments about preparing for the ministry, inspirational quotes, photos of the Bible, a photo of participant and her young daughter dressed for church, and references to family values. One individual in this group was a former soldier who was “proud to serve.” Another participant depicted herself in the college Color Guard (a different kind of disciplined and uniformed activity). Just one conservative participant made reference to creativity (i.e., poetry). In general, these photo essays could be characterized as religious, wholesome, and depicting satisfaction with family life.

The nine low-C participants presented a clear contrast. Four made reference to boundary-crossing (a quality valued by many kinds of artists, cf. Hartmann, 1991), including two who depicted use of illegal drugs, one woman showing herself dating a man of a different race, and another student with his car “parking over the line,” taken to portray his disdain for rules. One of the substance-users included commentary about his cultural openness and his art. A female student depicted her art work delving into negative emotions associated with family, including the search for her birth mother. A male student included photos depicting his creative energy in writing and recording music as well as noting his addictions. Another male student included comments on his fascination with sexually explicit videos. In general, then, the conservative students’ photo essays depicted religious and family values and satisfaction with their lives. The liberal students’ photo

¹ Two other measures were used in the first year. A “creativity dossier” asked participants to list their five most creative accomplishments for a fictive undergraduate creativity award. The lists were rated on 1–7 scales by six raters; Cronbach’s alpha was .91. Conservatism correlated $r = -.27$, $p < .001$ with this measure. Second, a “photo titles” task was created by projecting 7 art photos of humans and dogs; participants had one min. to devise titles, judged on 1–7 scales by three raters; reliability was .64. This measure correlated $r = -.22$, $p = .001$, with conservatism. When tested in simultaneous regressions, conservatism still accounted for significant variance in both measures, for the Dossier, $\beta = -.23$, $p < .01$; for Photo Titles, $\beta = -.19$, $p < .05$.

² Because the relationship of conservatism and the photo essay individuality was less clear, a possible curvilinear relationship was considered in an exploratory analysis based on a previous study, where we viewed the autophotographic individuality scale as involving qualitative rather than linear steps, using five categories of individuality in Dollinger, Cook, and Robinson (1999). Participants were grouped into these levels, defining the independent variable in an ANOVA on residualized conservatism, removing vocabulary; this ANOVA yielded $F(4, 243) = 2.70$, $p < .05$. A curvilinear trend emerged with those giving level 2 (“typical” richness) showing the greatest conservatism, those at levels 4 and 5 significantly lower; those rated at level 1 and transition from 1 to 2 were non-significantly less conservative than those at level 2. This curvilinear trend deserves further study.

Table 2
Simultaneous regressions predicting three creativity measures

	Creativity measure		
	CBI	Drawing	Photo essay
β for Conservatism	-.13*	-.15*	-.08
β for Openness	.32**	.07	.11
β for Vocabulary	.17**	.20*	.25*
R^2	.20	.10	.11
F	32.26**	14.04**	9.43**

Note. CBI, Creative Behavior Inventory.

* $p < .05$.

** $p < .001$.

essays conveyed boundary-crossing behaviors, creative endeavors, and exercise of their civil liberties in unconventional ways.

4. Discussion

The present study showed that conservatism has a small but consistent relationship with lowered creativity among college students. As such, the findings extend the literature on conservatism beyond aesthetic appreciation to actual creative products and accomplishments. The results also support the presumption from a number of disciplines that conservatism and creativity are in some opposition. Of course, the magnitude of these correlations generally accounted for no more than 5% of the variance, and less when verbal ability or openness to experience was partialled out. When informed of these findings (months after completing their ratings), several artist-judges from year 2 commented that they were not surprised because nearly all of the artists they know are quite liberal. One judge suggested that art is often a vehicle of change but that conservatives “tend to realize the value of an artwork only when it has already fulfilled its active duty in contemporary society, and become a part of history.”³

As noted earlier, conservatives could be less creative than liberals because of greater threat-induced anxiety (e.g., finding the ambiguity of creative tasks threatening), their greater inclination to follow convention, and/or their devaluing of imagination. Although designed to establish the finding rather than test alternative pathways, the present study has heuristic value for future research testing theoretical “mechanisms.” First, conservatism correlated negatively with openness, particularly with the CBI, supporting the “imagination” and conventionalism pathways. Second, it could be that less verbal intelligence predisposes some individuals toward less complex views of the world and that this shows up in the present findings. Third, given the theoretical importance of anxiety to conservatism, another step would be to evaluate the immediate affective response of high- and low-conservative students as they encounter tasks inviting them to be creative such as Urban’s TCT stimulus. Additionally, future research should consider verbal intelligence as a mediator of the conservatism–creativity relation.

³ I thank Ilona Niemi for this suggestion.

Qualitative photo impressions imply that conservatives embrace and are satisfied with parental authority; trauma or family conflict in childhood could be one source of motivation for creativity (Simonton, 1999; Terr, 1987) and this could be missing for conservatives. Acceptance of a parent-modeled conservative world view might lead to a focus on conventional non-creative pursuits (cf. Dewing & Taft, 1973). In regard to the photo essay impressions, note too that the most conservative participants were quite religious. An additional influence, then, could be a belief (shared by individuals in a number of religious traditions) that might be stated as “man does not create; only God creates.” Given that the negative creativity–conservatism correlation is far from perfect, this further suggests that creative conservatives may find inspiration for their creativity in their religion.

The present study had several strengths. The large sample from 2 years of participants afforded a more powerful test of the hypothesis. Creativity was operationalized with both accomplishments and products (rather than divergent thinking responses), and products involved judges’ ratings. The autophotographic essay is a particularly rich source of information about participants’ lives as well as an indication of their individuality. Moreover, photo essays were obtained at a different time, minimizing a source of common method variance.

One limitation is that the participants were American college students recruited from a Psychology course and participating for class credit. Many college students, particularly those yet to vote, may not have well-formulated ideas of where they stand politically; and some may not yet have devoted time to creative pursuits. This logic would suggest that older students would provide a better test of the hypothesis and, indeed, this proved to be the case for the CBI. For participants age 18–24 ($N = 354$), the Conservatism by CBI correlation was $-.25$; for those aged 25–53 ($N = 48$), the correlation was $-.48$. Although the older sample was considerably smaller and these results need replication, the within-age correlations were statistically different, $z = 1.70$, $p < .05$, one-tailed. Thus, one direction for future study is the relation of conservatism and creativity among older non-student populations. It is also unfortunate that a measure of RWA was not included for a direct comparison in the full sample.⁴ An additional limitation is the use of just two visual creative products and of CBI short forms (although photo essays are visual and verbal). One must also wonder if there are not some forms of creativity at which conservatives excel. A future study might clarify whether the present findings extend to other creative products and to accomplishments in other areas.

The motivated social cognition view that conservatism may be a situational reaction to events (Jost et al., 2003a, Jost, Glaser, Kruglanski, & Sulloway, 2003b) suggests that the context of assessing creativity and conservatism is important. Although college is generally seen as a liberal and creative environment (Jost et al., 2003a), conceivably the fact that the creative products were chosen for extra credit could have resulted in less creativity. However, the recruitment from a Psychology course may have resulted in a less conservative sample than might otherwise be the case.

⁴ In sample 2, I included a brief RWA scale among the questionnaires – Altemeyer’s (1996) “continuing 12” consisting of the items appearing in all versions of the RWA scale. With an alpha reliability of .72, this measure correlated highly with the C-scale, $r = .69$, $p < .001$, $r = .92$ if corrected for attenuation on both scales. RWA was a significant predictor of the CBI and drawing measures, respective $r_s = -.28$ and $-.19$ ($p < .05$), but not the photo essay, $r = -.13$, *ns*. Future research should consider the role of C vs. RWA in predicting creativity.

Because conservatism itself is a phenomenon that varies over time and national boundaries (Muller, 2001), replication outside of the United States is particularly important.

Acknowledgements

Thanks are extended to the following artists, psychologists, and students who assisted in rating creative products: Diana Baumbach, Patrick Casey, Ryan Cheperka, Steve Cukierski, David Graham, Nathan Gump, Andrew Hairstans, Clare Hairstans, Jamie Huber, Meera Komarraju, Anna Matyja, Ilona Niemi, Yesenia Ortiz, and Shelby Shadwell.

References

- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco: Jossey-Bass.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview.
- Bar-Tal, D. (2001). Why does fear override hope in societies engulfed by intractable conflict, as it does in the Israeli society? *Political Psychology*, 22, 601–627.
- Bayard-de-Volo, C. L., & Fiebert, M. S. (1977). Creativity in the preschool child and its relationship to parental authoritarianism. *Perceptual and Motor Skills*, 45, 170.
- Benet-Martínez, V., & John, O. P. (1998). Los cinco grandes across cultures and ethnic groups: Multitrait multimethod analysis of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729–750.
- Cooper, R. B. (2000). Information technology development creativity: A case study of attempted radical change. *MIS Quarterly*, 24, 245–276.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. NY: HarperCollins.
- Cummings, L. (1965). Organizational climates for creativity. *Academy of Management Journal*, 8, 220–227.
- Dewing, K., & Taft, R. (1973). Some characteristics of the parents of creative twelve-year-olds. *Journal of Personality*, 41, 71–85.
- Dollinger, S. J. (2003). Need for uniqueness, need for cognition, and creativity. *Journal of Creative Behavior*, 37, 99–116.
- Dollinger, S. J. (2006). Autophotographic individuality predicts creativity: A seven-year follow-up. *Journal of Creative Behavior*, 40, 111–124.
- Dollinger, S. J., Burke, P., & Gump, N. (In press). Creativity and values. *Creativity Research Journal*.
- Dollinger, S. J., Cook, C. A., & Robinson, N. M. (1999). Correlates of autophotographic individuality: Therapy experience and loneliness. *Journal of Social and Clinical Psychology*, 18, 325–340.
- Dollinger, S. J., Preston, L. A., O'Brien, S. P., & DiLalla, D. L. (1996). Individuality and relatedness of the self: An autophotographic study. *Journal of Personality and Social Psychology*, 71, 1268–1278.
- Dollinger, S. J., Urban, K. K., & James, T. A. (2004). Creativity and openness: Further validation of two creative product measures. *Creativity Research Journal*, 16, 35–47.
- Eisenman, R., Borod, J., & Grossman, J. C. (1972). Sex differences in interrelationships of authoritarianism, anxiety, creative attitudes, preference for complex polygons, and the Barron-Welsh Art Scale. *Journal of Clinical Psychology*, 28, 549–550.
- Faschingbauer, T. R., & Eglevsky, D. A. (1977). Relation of dogmatism to creativity. *Psychological Reports*, 40, 391–394.
- Feather, N. T. (1979). Value correlates of conservatism. *Journal of Personality and Social Psychology*, 37, 1617–1630.
- Gillies, J., & Campbell, S. (1985). Conservatism and poetry preferences. *British Journal of Social Psychology*, 24, 223–227.
- Glasgow, M. R., & Cartier, A. M. (1985). Conservatism, sensation-seeking, and music preferences. *Personality and Individual Differences*, 6, 395–396.

- Gough, H. G. (1979). A creative personality scale for the adjective check list. *Journal of Personality and Social Psychology*, 37, 1398–1405.
- Gunther, M. S. (1981). Biographical note on John E. Gedo: A peculiar conservative. *Psychoanalytic Inquiry*, 1, 279–287.
- Gutterman, A. (1964). Washington Irving and the conservative imagination. *American Literature*, 36, 165–173.
- Hartmann, E. (1991). *Boundaries of the mind*. New York: Basic Books.
- Henningham, J. P. (1996). A 12-item scale of social conservatism. *Personality and Individual Differences*, 20, 517–519.
- Hocevar, D. (1979). April. The development of the Creative Behavior Inventory. *Paper presented at the annual meeting of the Rocky Mountain Psychological Association*. (ERIC Document Reproduction Service No. ED 170 350.)
- Hocevar, D., & Batchelor, P. (1989). A taxonomy and critique of measurements used in the study of creativity. In J. A. Glover, R. R. Ronning, & C. R. Reynolds (Eds.), *Handbook of creativity* (pp. 53–75). NY: Plenum.
- Howell, C. (2004). Is there a third way for industrial relations? *British Journal of Industrial Relations*, 42, 1–22.
- Jellen, H. G., & Urban, K. K. (1986). The TCT–DP (test for creative thinking–drawing production): An instrument that can be applied to most age and ability groups. *Creative Child and Adult Quarterly*, 11, 138–155.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003a). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129, 339–375.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003b). Exceptions that prove the rule – using a theory of motivated social cognition to account for ideological incongruities and political anomalies: Reply to Greenberg and Jonas. *Psychological Bulletin*, 129, 383–393.
- Kopff, E. C. (2005). Conservatism and creativity in A.E. Housman. *Modern Age*, 47, 229–239.
- Maslow, A. H. (1987). *Motivation and personality* (3rd ed.). NY: Harper & Row.
- Mayer, R. E. (1999). Fifty years of creativity research. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 449–460). Cambridge: Cambridge University Press.
- McShane, M. D. (1989). Running on empty: Creativity and the correctional agenda. *Crime & Delinquency*, 35, 562–576.
- Muller, J. Z. (2001). Conservatism: Historical aspects. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (Vol. 4, pp. 2624–2628). Amsterdam: Elsevier.
- Peterson, B. E., & Pang, J. S. (2006). Beyond politics: Authoritarianism and the pursuit of leisure. *Journal of Social Psychology*, 146, 443–461.
- Rouff, L. L. (1975). Openness, creativity, and complexity. *Psychological Reports*, 37, 1009–1010.
- Rubinstein, G. (2003). Authoritarianism and its relation to creativity: A comparative study among students of design, behavioral sciences and law. *Personality and Individual Differences*, 34, 695–705.
- Runco, M. (2004). Creativity. *Annual Review of Psychology*, 55, 657–687.
- Sanger, J. (1994). Seven types of creativity: Looking for insights in data analysis. *British Educational Research Journal*, 20, 175–185.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–26). San Diego, CA: Academic Press.
- Seitz, J. A. (2003). The political economy of creativity. *Creativity Research Journal*, 15, 385–392.
- Simonton, D. K. (1999). Creativity from a historiometric perspective. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 116–133). Cambridge: Cambridge University Press.
- Stacey, M., Eckert, C., & Wiley, J. (2002). Expertise and creativity in knitwear design. *International Journal of New Product Development and Innovation Management*, 4, 49–64.
- Sullivan, E. T., Clark, W. W., & Tiegs, E. W. (1970). *Short form test of academic aptitude*. Monterey, CA: CTB/McGraw-Hill.
- Sundgren, M., Selart, M., Ingelgård, A., & Bengtson, C. (2005). Dialogue-based evaluation as a creative climate indicator: Evidence from the pharmaceutical industry. *Creativity and Innovation Management*, 14, 84–98.
- Teachout, T. (1998, November 23). Writing right. *National Review*, pp. 53–54.
- Terr, L. C. (1987). Childhood trauma and the creative product: A look at the early lives and later works of Poe, Wharton, Magritte, Hitchcock, and Bergman. *Psychoanalytic Study of the Child*, 42, 545–572.
- Urban, K. K., & Jellen, H. G. (1996). *Test for creative thinking–drawing production (TCT–DP) manual*. Frankfurt: Swets Test Services.
- Westen, T. A. (1978). Barriers to creativity. *Journal of Communication*, 28, 36–42.

- Wilson, G. D. (1973). *The psychology of conservatism*. London: Academic Press.
- Wilson, G. D., Ausman, J., & Mathews, T. R. (1973). Conservatism and art preferences. *Journal of Personality and Social Psychology*, 25, 286–288.
- Wilson, G. D., & Patterson, J. R. (1968). A new measure of conservatism. *British Journal of Social and Clinical Psychology*, 7, 264–269.
- Ziller, R. (2000). *Photographing the self: Method for observing personal orientations*. Thousand Oaks, CA: Sage (originally published 1990).