Short Communication

Right-wing authoritarians aren't very funny: RWA, personality, and creative humor production☆

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ABSTRACT

Right-wing authoritarianism (RWA) has well-known links with humor appreciation, such as enjoying jokes that target deviant groups, but less is known about RWA and creative humor production—coming up with funny ideas oneself. A sample of 186 young adults completed a measure of RWA, the HEXACO-100, and 3 humor production tasks that involved writing funny cartoon captions, creating humorous definitions for quirky concepts, and completing joke stems with punchlines. The humor responses were scored by 8 raters and analyzed with many-facet Rasch models. Latent variable models found that RWA had a large, significant effect on humor production ($\beta = -0.47$ [-0.65, -0.30], $p < .001$): responses created by people high in RWA were rated as much less funny. RWA's negative effect on humor was smaller but still significant ($\beta = -0.25$ [-0.49, -0.01], $p = .044$) after controlling for Openness to Experience ($\beta = 0.39$ [0.20, 0.59], $p < .001$) and Conscientiousness ($\beta = -0.21$ [-0.41, -0.02], $p = .029$). Taken together, the findings suggest that people high in RWA just aren't very funny.

1. Introduction

Right-wing authoritarianism (RWA)—a combination of submission to authority, aggression against deviant and marginal groups, and adherence to traditional social norms (Altemeyer, 1996)—has many links to humor. For example, studies of humor appreciation—what people find funny—show that people high and low in RWA vary in how funny they find jokes that express hostility to authority figures (e.g., Elbert, 1961; La Gaipa, 1968) or that disparage low-status groups (e.g., racist jokes; Middleton, 1959).

But what about producing humor? Ruch and Heintz (2019) distinguish between humor *creation*—coming up with funny ideas on one's own—versus humor *reproduction* (e.g., repeating a joke stored in memory). Not much is known about RWA and creative humor production. In studies with the classic *F* scale, one study found that people low in RWA wrote funnier captions to cartoons (Cleland, 1957), but another study found a near-zero correlation between RWA and the wittiness of the captions and slogans people generated (Clabby, 1980).

The assessment of both RWA and humor production have improved since those early studies, so this issue should be revisited. Furthermore, evaluating the role of RWA in humor production requires controlling for two key personality traits. Openness to Experience and

Conscientiousness are prominent correlates of RWA (Nicol & De France, 2016) as well as humor and creativity. Openness to Experience has substantial and consistent effects on creative thought, including humor (Nusbaum & Silvia, 2017). Conscientiousness's effects are smaller and less consistent, but many studies find that conscientious people perform worse on creativity and humor tasks (Nusbaum, 2015). In the present research, young adults completed several humor production tasks along with measures of RWA and personality. Structural equation models evaluated the unique effect, if any, of RWA on humor production.

2. Method

2.1. Participants

A total of 210 adults at the University of North Carolina at Greensboro took part and received credit toward a voluntary research option. The sampling plan was intended to achieve at least 80% power to detect significant correlations of $r = 0.20$. The final sample was 186 people after exclusions for non-native English fluency and for inattentive and careless responding (Maniaci & Rogge, 2014). This sample was young ($M = 19.07$ years, $SD = 3.41$, range = 18 to 53), predominantly female ($n = 144$, 77%), and diverse (37% African-

Table 1
Descriptive statistics.

Outcome	*M*	*SD*	1	2	3	4	5	6
1. Cartoons	0.00	0.80	1					
2. Definitions	0.00	0.84	0.41 [0.29, 0.53]	1				
3. Jokes	0.00	0.89	0.31 [0.17, 0.43]	0.46 [0.34, 0.57]	1			
4. RWA	3.71	0.85	−0.22 [−0.36, −0.08]	−0.28 [−0.41, −0.14]	−0.33 [−0.46, −0.19]	1		
5. Openness to Experience	3.08	0.58	0.28 [0.14, 41]	0.29 [0.15, 0.42]	0.27 [0.13, 0.40]	−0.35 [−0.47, −0.22]	1	
6. Conscientiousness	3.43	0.55	−0.15 [−0.28, 0.00]	−0.17 [−0.30, −0.02]	−0.15 [−0.29, −0.01]	0.27 [0.13, 0.40]	0.03 [−0.11, 0.18]	1

Note. These are means, standard deviations, Pearson *r* correlations, and 95% confidence intervals around *r* for the observed variables. The Rasch analysis scales the humor tasks to have an EAP mean of zero. The RWA, Openness to Experience, and Conscientiousness variables are observed scale averages. The raw data can be downloaded at OSF (https://osf.io/edaqk/).

American, 59% European-American, 8% Hispanic/Latinx; people could select several categories).

2.2. Procedure

The research was approved by our Institutional Review Board, and all participants provided informed consent. The sessions were conducted in groups of 1 to 8 people. People completed the humor tasks followed by measures of personality and RWA.

2.2.1. Humor production tasks

Humor production was measured with three tasks that involved creative production: people received prompts and were asked to generate a single response for each one (Christensen et al., 2018; Nusbaum et al., 2017). There was no time limit, and both the experimenter and on-screen instructions emphasized that the goal was to be funny, that participants should feel free to express themselves and their sense of humor, and that it's fine to be "weird, silly, dirty, ironic, bizarre, or whatever," so long as the responses are funny. None of the humor tasks involved common targets of authoritarian aggression.

In the *cartoons task*, people generated a funny caption for 3 single-panel cartoons, which depicted an astronaut on the moon talking into a cell phone, a king laying on a couch by a clinical psychologist, and two businessmen in an office, one with a smoking gun, chatting in front of a body on the floor. The *definitions task* presented people with a novel concept—an unusual noun-noun combination—and asked them to come up with funny definition for it. The three items were *fruit jar*, *cereal bus*, and *yoga bank*. The *joke stems task* set people up with a comical scenario and asked them to complete it with a punchline. For example, one item stated: "Imagine that your friend invites you over and cooks dinner—and the food is totally horrible and disgusting. Later, when describing it to someone else, you say, 'Wow, that food was so bad...' The other two joke stems involved describing their most boring college class and giving feedback on a friend's terrible singing.

A pool of 8 raters independently scored the responses using a 3-point scale (0 = *not funny at all*, 1 = *somewhat funny*, 2 = *funny*). The raters were unaware of the participants' responses to other items as well as all other data. To obtain more raters without greatly expanding the total rater burden, we used a connected incomplete rating design (Eckes, 2011, chap. 9). Three raters scored all 9 responses (all 3 items for all 3 tasks) for all participants, and 5 additional raters scored two items—one of the joke stems (the terrible singing item) and one randomly selected item—for all participants.

We used many-facet Rasch models (MFRM; Linacre, 1994) to estimate the participants' level of humor ability. Because some raters will invariably be more lenient or more severe when scoring creative products, a MFRM can scale each participant's underlying humor ability while correcting for how "tough" the raters and tasks were (Primi et al.,

2019). The MFRM approach also easily handles missing data due to rating designs like ours (Robitzsch & Steinfeld, 2018). The models were run in the R (R Core Team, 2020) package TAM (Robitzsch et al., 2020) with marginal maximum likelihood estimation. Reliability (EAP) was good for each humor task (cartoons = 0.69, definitions = 0.72, joke stems = 0.74) and very good (0.83) for the full items × tasks × raters design.

2.2.2. RWA

RWA was measured with Zakrisson's (2005) scale, which assesses authoritarian beliefs without referring to specific social groups. People respond to 15 items (e.g., "The 'old-fashioned ways' and 'old-fashioned values' still show the best way to live") using a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Higher scores reflect greater endorsement of RWA (Cronbach's α = 0.83).

2.2.3. Personality traits

Personality traits were measured with the HEXACO-100 (Lee & Ashton, 2018), which measures each HEXACO trait with 16 items that cover 4 facets. We focused on Openness to Experience and Conscientiousness, which relate in opposing ways to humor production and the RWA. The HEXACO Openness to Experience (α = 0.81) scale consists of Aesthetic Appreciation (α = 0.66), Inquisitiveness (α = 0.59), Creativity (α = 0.73), and Unconventionality (α = 0.49) facets. The HEXACO Conscientiousness (α = 0.83) trait consists of Diligence (α = 0.69), Organization (α = 0.75), Perfectionism (α = 0.66), and Prudence (α = 0.63) facets.

3. Results and discussion

3.1. Analysis approach

Table 1 displays the descriptive statistics. The analyses were conducted in Mplus 8.1 using maximum likelihood with robust standard errors. The regression coefficients reported in the text are fully standardized with 95% confidence intervals.

Humor, RWA, Openness to Experience, and Conscientiousness were modeled as latent variables. Humor had 3 indicators (the MFRM-derived ability scores for the cartoons, definitions, and joke stems tasks); RWA had 3 indicators formed via parceling (items 1–5, 6–10, 11–15); and the HEXACO O and C factors each their 4 facets as indictors. All indicators were grand-mean centered, and the first indicator was fixed to 1. A CFA of a measurement model with only humor and RWA showed good model fit: $\chi^2(8) = 13.50$ ($p = .0957$), CFI = 0.985, RMSEA = 0.061 [90% CI: 0.000, 0.115], SRMR = 0.031. A CFA of the measurement model with humor, RWA, O, and C showed good model fit as well: $\chi^2(71) = 99.01$ ($p = .0157$), CFI = 0.960, RMSEA = 0.046 [90% CI: 0.021, 0.066], SRMR = 0.061.
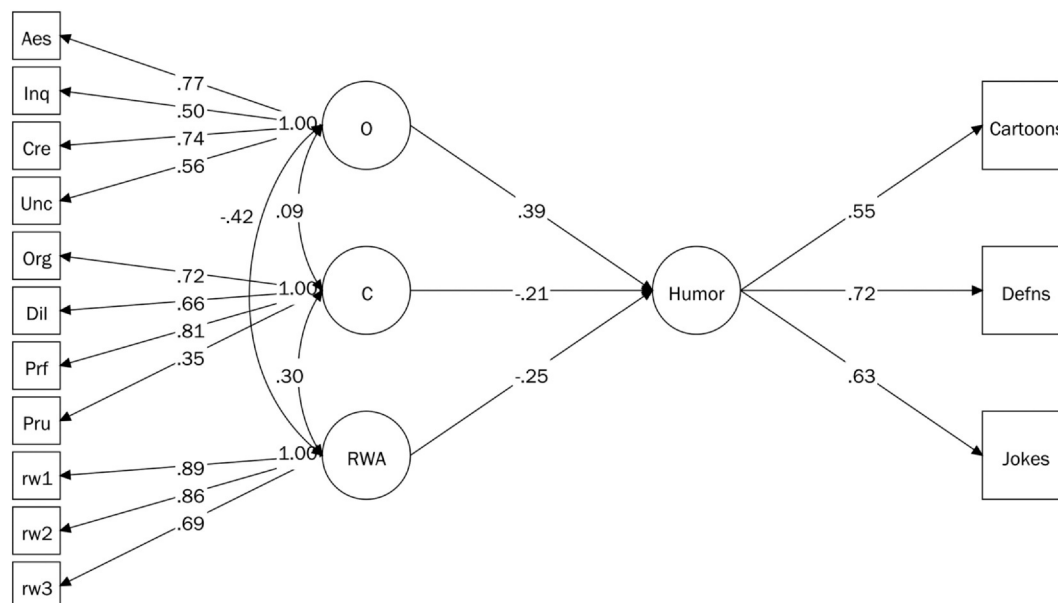
Fig. 1. RWA, Openness to Experience, Conscientiousness, and Humor Production.

3.2. RWA and humor

How did RWA predict humor production? Our first model estimated the effect of RWA on humor. As expected, RWA had a significant negative relationship with humor, $\beta = -0.47 \ [-0.65, -0.30]$, $p < .001$, that was large in effect size terms. People high in RWA generated responses that were rated as much less funny.

Was the effect of RWA on humor simply due to RWA's overlap with personality? Our second model included RWA, Openness to Experience, and Conscientiousness as predictors of humor (see Fig. 1). The latent predictors covaried with others as expected. RWA correlated negatively with Openness to Experience ($\beta = -0.42 \ [-0.61, -0.24], p < .001$) and positively with Conscientiousness ($\beta = 0.30 \ [0.13, 0.48]$, $p = .001$). Openness to Experience and Conscientiousness correlated weakly ($\beta = 0.09 \ [-0.09, 0.27], p = .335$).

When personality was included in the model, RWA's effect on humor was smaller ($\beta = -0.25 \ [-0.49, -0.01], p = .044$) but still significant. In addition, both Openness to Experience ($\beta = 0.39 \ [0.20, 0.59], p < .001$) and Conscientiousness ($\beta = -0.21 \ [-0.41, -0.02]$, $p = .029$) had significant effects on humor, but in different directions. Finally, a model that included latent interactions for RWA $\times$ O and RWA $\times$ C found essentially the same effect of RWA on humor ($\beta = -0.27 \ [-0.50, -0.04], p = .024$).

The findings thus strongly suggest that people high in RWA are less funny, defined as the ability to create humorous ideas, even when global personality traits with established ties to RWA, humor, and creativity are controlled for. These findings, of course, should be viewed in the context of the sample, which was young, enrolled in a university, and predominantly female. One important goal for future research is to illuminate the components of RWA that impair humor creation. Research on the related constructs of conservatism and dogmatism, for example, hint at some general factors (e.g., cognitive rigidity and seriousness vs. flexibility and playfulness; Chafe, 2007; Dagnes, 2012) and humor-specific factors (e.g., sensitivity to irony; Young et al., 2019). In addition, RWA might predict the kinds of humor produced. As a parallel, conservatism predicts liking humor that resolves incongruity and provides cognitive closure (Hehl & Ruch, 1990; Wilson, 1990), and such preferences could extend to the jokes people create. It would be interesting to examine and code the produced jokes to explore possible effects of RWA on underlying humor generation strategies. Finally, future work should consider the intriguing possibility that some conditions favor high RWA, perhaps when the topic, audience, and context favor aggressive humor at the expense of a marginal or threatening target.

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Paul J. Silvia: Conceptualization, Formal analysis, Methodology, Writing - original draft. **Alexander P. Christensen:** Conceptualization, Investigation, Methodology, Writing - review & editing. **Katherine N. Cotter:** Conceptualization, Investigation, Methodology, Writing - review & editing.

Declaration of competing interest

None.

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