

## THE DISTINCTION BETWEEN AUTHORITARIANISM AND FUNDAMENTALISM IN THREE CULTURES: FACTOR ANALYSIS AND PERSONALITY CORRELATES

Stephen W. Krauss, Heinz Streib, Barbara Keller &

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### ABSTRACT

The goals of the study were to examine whether fundamentalism and authoritarianism could be distinguished by the Big Five factors of personality in American, Romanian and German samples, and to determine whether fundamentalism and authoritarianism could be distinguished by factor analysis in any of the three cultures. The results in all three cultures indicate that fundamentalism and authoritarianism have virtually identical personality correlates. In all three cultures, the two constructs were indistinguishable via exploratory factor analysis and could only be distinguished via confirmatory factor analysis, although direction-of-wording effects dwarfed the differences between fundamentalism and authoritarianism. The findings suggest that researchers should view fundamentalism as religious authoritarianism, and should therefore be cautious when making inferences about religiosity from research on fundamentalism.

Research on individual difference in religion has grown remarkably in the last ten years (Emmons & Paloutzian, 2003). Special issues focusing on religion have appeared in such major personality journals as the *Journal of Personality* and *Personality and Social Psychological Review*. In addition, numerous articles dealing with religion have appeared in top journals (e.g., Burris & Tarpley, 1998; Hart, McAdams, Hirsh & Bauer, 2001; Saucier, 2000). Several issues of general interest to personality researchers remain unanswered. Specifically, it is unclear whether many of the religious constructs, such as fundamentalism, are empirically separable across cultures from general individual difference variables, such as authoritarianism. As such, the current article will explore the distinction between authoritarianism and fundamentalism in three cultures through factor analysis and their relationships to the Big Five personality factors.

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Hunsberger and Altemeyer's (1992) Fundamentalism scale has recently been attracting a great deal of attention. The Fundamentalism scale sprang from Altemeyer's work on authoritarianism and was designed to measure:

the belief that there is one set of religious teaching that clearly contains the fundamental, basic, intrinsic, essential, inerrant truth about humanity and deity; that is this essential truth is fundamentally opposed by forces of evil which must be vigorously fought; that this truth must be followed today according to the fundamental, unchangeable practices of the past; and that those who believe and follow these fundamental teachings have a special relationship with the deity (Hunsberger & Altemeyer, 1992; p. 118).

Further clarifying the meaning of fundamentalism, Altemeyer (1996) stated that "*fundamentalism can usually be viewed as a religious manifestation of right-wing authoritarianism . . . It is the way authoritarians react to the religious impulse*" (p. 161, emphasis in the original). In other words, the fundamentalism scale was designed to measure religious authoritarianism, which is a mixture of authoritarianism and religious orthodoxy (Altemeyer, 1996; Laythe, Finkel, Bringle & Kirkpatrick, 2002). Measures of authoritarianism, such as Altemeyer's (1988, 1996) Right-Wing Authoritarianism scale, are conceived as measuring a more general type of authoritarianism that is a mixture of aggression against sanctioned targets, submission to authority, and conventionality (Altemeyer, 1996; Hunsberger, 1995).

As one might expect, the Fundamentalism scale has consistently shown strong correlations with authoritarianism, with correlations between the two measures tending to be about .70 (Altemeyer, 1996; Hunsberger, 1995). Though correlations of this magnitude are very high, they are expected given that the Fundamentalism scale is designed to be a measure of religious authoritarianism (Altemeyer, 1996) and therefore uses conceptually overlapping items.

The distinction between authoritarianism and fundamentalism has received some attention in regards to their relationships to prejudice religion (e.g., Hunsberger & Altemeyer, 1992; Hunsberger, Alisat, Pancer, & Pratt, 1996), and complexity of thought (Hunsberger, Pratt, & Pancer, 1994). However, virtually all of these studies examined key differences that conceptually distinguish the constructs. Namely, that fundamentalists are more religious and authoritarians are more prejudiced. Yet, very little research (though see Hunsberger et al., 1994) has examined the discriminant validity of the Right-Wing

Authoritarianism (RWA) and Fundamentalism scales by general individual difference variables, such as the Big Five personality factors. In addition, previous research has not examined whether fundamentalism and RWA are distinct from one another using factor analysis. Understanding the degree of conceptual overlap between fundamentalism and RWA is important because otherwise researchers may draw incorrect or biased conclusions about extreme religious commitment and religious conservatism (cf., Smedslund, 2002).

Another limitation of the past research is that it has almost exclusively used North American, student samples. Thus, it is unclear whether fundamentalism can be distinguished from authoritarianism outside of North America.

In an effort to address some of these issues, the current study was conducted. The current study had three goals. The first goal was to examine the distinction between RWA and fundamentalism in regards to their correlations with the Big Five personality factors. The second goal was to examine whether RWA and fundamentalism can be distinguished via exploratory and confirmatory factor analysis. The third goal was to examine the distinction between RWA and fundamentalism in North American and non-North American samples, and this goal was met by using samples drawn from the U.S., Germany, and Romania.

### *Method*

#### *Participants and Procedure*

The 297 (100 male and 195 female) U.S. participants completed the questionnaire in return for partial course credit in an introductory psychology course at a middle-sized, state university in the southeastern United States. The U.S. participants were 20 years old on average, and 66 percent of these participants reported that they were white.

The 200 (90 male and 110 female) German participants were University students and completed the questionnaire as volunteers. The German participants were 24 years old on average, and 94 percent of these participants reported that they were white.

The 235 (126 male and 108 female) Romanian participants were residents of student housing in Bucharest that had agreed to voluntarily fill out the questionnaire when approached by a student administrator. The Romanian participants were 22 years old on average, and

98 percent of these participants reported that they were ethnically Romanian.

### *Measures*

To measure authoritarianism, all participants completed Altemeyer and Hunsberger's (1992) 1990 Right-Wing Authoritarianism Scale on a five-point format (1 = strongly disagree, 5 = strongly agree). To measure religious fundamentalism, all participants completed Altemeyer and Hunsberger's (1992) Religious Fundamentalism Scale on a five-point format (1 = strongly disagree, 5 = strongly agree). To measure personality, all participants completed Goldberg's (1999) 100-item Big-Five Factor Markers from his International Personality Item Pool. This measure was used because it has been shown to be at least as valid as the more established measures in the U.S. (Goldberg, in press) and no established measures of the Romanian Big-Five exist.

The Romanian and German participants completed native language versions of each scale that were made using the process of backtranslation. No translation difficulties were encountered. All participants completed all the items in an identical order.

### *Results*

Table 1 reports the descriptive statistics of the measures completed by all three samples. As can be seen, all of the measures consistently showed good reliability.

Table 2 shows the personality correlates of fundamentalism and authoritarianism (RWA). As can be seen, fundamentalism and RWA were strongly correlated in all three cultures, with  $r$ 's ranging from .73 to .76. Fundamentalism and RWA also had virtually identical personality correlates. Fundamentalism and RWA both tended to be positively related to conscientiousness and slightly negatively related to intellect. In addition, neither scale was related to emotional stability. However, fundamentalism and RWA's correlates with extraversion and agreeableness appeared to be culturally dependent. In Germany, but not in the U.S. or Romania, both measures were negatively related to extraversion. In the U.S. and Romania, but not in Germany, both measures tended to be positively related with agreeableness.

Table 1 Descriptive Statistics

	<i>U.S.</i>			<i>German</i>			<i>Romanian</i>		
	Alpha	Mean	SD	Alpha	Mean	SD	Alpha	Mean	SD
Fundamentalism	.88	3.09	.73	.92	2.19	.71	.88	3.36	.57
Authoritarianism	.88	3.06	.57	.92	2.28	.59	.85	3.27	.50
Extraversion	.88	3.26	.67	.87	3.46	.54	.85	3.23	.58
Agreeableness	.90	3.82	.61	.84	3.85	.48	.83	3.60	.50
Conscientiousness	.89	3.43	.62	.87	3.41	.61	.86	3.51	.58
Emotional Stability	.86	3.08	.68	.87	3.15	.52	.87	2.93	.61
Intellect	.89	3.53	.55	.88	3.55	.49	.82	3.51	.48

Table 2 The Personality Correlates of Fundamentalism and Authoritarianism

	<i>Fundamentalism</i>			<i>Authoritarianism</i>		
	U.S.	Germany	Romania	U.S.	Germany	Romania
Authoritarianism	.74**	.76**	.73**			
Extraversion	.06	-.23**	.02	-.01	-.21**	-.03
Agreeableness	.14*	-.01	.17**	.11	-.04	.19**
Conscientiousness	.19**	.20**	.12	.19**	.26**	.21**
Emotional Stability	.07	.02	.01	.03	.07	.02
Intellect	-.11	-.16*	-.14*	-.19**	-.19**	-.09

\* p < .05. \*\* p < .01.

*Factor Analysis*

To examine whether the fundamentalism and RWA scales are distinct, a principle components analysis with orthogonal (varimax) rotation was conducted on all the RWA and Fundamentalism items. The scree plot revealed the clear presence of 2 factors in all three samples. In all three samples, the first factor was composed almost exclusively of the con-trait items of both scales. In all three samples, the second factor was composed exclusively of the pro-trait items of both scales. This suggests that in all three cultures, the fundamentalism scale was not distinguishable from RWA via exploratory factor analysis, but that the pro-trait items were distinguishable from the con-trait items. This interpretation was further explored using confirmatory factor analysis.

Unlike exploratory factor analysis, confirmatory factor analysis can examine whether the two scales are distinguishable after direction

of wording effects are controlled. To determine whether fundamentalism is separable from RWA, five different factor structures were compared separately in each of the three samples. The most basic model, the One-Factor Model, assumes that the fundamentalism scale is not distinguishable from RWA, while the Two-Factor Model assumes that they are distinguishable. In addition, because the exploratory results only showed the presence of two direction of wording factors and no RWA or fundamentalism factors, this Two Direction-of-Wording Factor Model was also examined. Last, the One- and Two-Factor models were also examined once direction-of-wording effects were controlled. These two models will be termed the One- and Two-Factor with Method Effects models.

The goodness-of-fit statistics for each of these models is shown in Table 3. As can be seen, in all three samples, the Two-Factor Model was significantly better than the One-Factor Model, but was significantly worse than the Two Direction-of-Wording Factor Model. However, the One- and Two-Factor with Method Effects models had better fit than all of the previous models in all three samples, with the Two-Factor with Method Effects models having a slightly better fit than the One-Factor with Method Effects model.

Overall, both the exploratory and confirmatory factor analytic results suggests that, in all three cultures, the pro-trait items of each scale were more similar to the pro-trait items of the other scale than they were to the con-trait items of their own scale, and vice versa. However, once these method effects were controlled, the two scales were distinguishable, which is somewhat supportive of the scales' validity. However, controlling for the method effects resulted in excellent fit in all three cultures without assuming the two scales could be distinguished. Thus, controlling for the direction-of-wording effects did the lion's share of the fit improvement, and accounting for the conceptual distinctions between fundamentalism and authoritarianism did relatively little extra.

### *Discussion*

The major goals of the study were to examine whether fundamentalism and RWA could be distinguished using individual difference variables of general importance, namely the Big Five factors of personality, and to determine whether fundamentalism and RWA could

Table 3 Goodness of Fit Statistics for Five Confirmatory Models of Fundamentalism and Authoritarianism

Sample	Goodness of Fit Statistics	Models				
		One-Factor	Two-Factor	Two Direction-of-Wording Factor	One-Factor with Method Effects	Two-Factor with Method Effects
	df	1175	1173	1174	1172	1175
U.S.	Chi-Square	2914	2747	2591	2320	2200
	CFI	.919	.927	.934	.947	.952
	RMSEA	.086	.082	.078	.070	.066
Germany	Chi-Square	2914	2747	2591	2320	2200
	CFI	.951	.953	.958	.968	.97
	RMSEA	.069	.067	.064	.056	.054
Romania	Chi-Square	3573	3495	3028	2875	2792
	CFI	.924	.926	.942	.946	.949
	RMSEA	.093	.092	.082	.079	.077

be distinguished by factor analysis. In general, the personality correlates of authoritarianism and fundamentalism were virtually the same in all three cultures. Thus, it appears that fundamentalism cannot be distinguished from authoritarianism based on their personality correlates. As Saucier (2000) has found, fundamentalism and authoritarianism's correlations with personality are very small, which suggests that they are largely independent of personality.

In contrast fundamentalism's and RWA's personality correlates, the factor analytic results in all three cultures suggest that there is a very subtle distinction between the two constructs. In fact, the distinction between fundamentalism and RWA is so subtle that it is masked by direction-of wording method effects in exploratory factor analysis, and can only be seen by confirmatory factor analysis.

Overall, the results suggest that fundamentalism and authoritarianism are very closely related constructs. Thus, the current results seem to give some support to Altemeyer's (1996) interpretation of fundamentalism as religious authoritarianism. As such, the current results seem to suggest that researchers should view the fundamentalism literature as an outgrowth of the authoritarianism literature, as Altemeyer and Hunsberger (1992) originally did, and not as some-

thing completely separate. Researchers ignoring the high degree of conceptual overlap between fundamentalism and authoritarianism risk designing potentially biased studies and potentially making incorrect conclusions based on their data (Smedslund, 2002). The current study also suggests that distinctions between fundamentalism and authoritarianism are small and differences may only be found in key domains that conceptually distinguish the constructs, such as prejudice and religiosity. Future research should try to find other domains that distinguish fundamentalism from authoritarianism.

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