

Relationship of Personality Traits to Social Aggression in College Females

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Introduction

Social aggression involves utilizing behaviors to harm the friendships and social status of others (Underwood, 2003a). While research supports that both males and females use socially aggressive tactics (e.g., Kupersmidt, Bryant, & Willoughby, 2000), females tend to engage in social aggression at a higher rate than their male peers do, with gender being the strongest predictor of whether someone will aggress socially or physically (Park, Essex, Zahn-Waxler, Armstrong, Klein, et al., 2005). In addition to gender differences, social aggression is also associated with psychosocial maladjustment in both children (Crick and Grotpeter, 1995) and adults (Storch, Werner, & Storch, 2003). One area often investigated for psychosocial maladjustment is personality assessment. However, the literature on personality and social aggression is virtually nonexistent, with a literature review revealing only one study on personality and relational aggression (i.e. Burton, Hafetz, Henninger, 2007). Even so, the primary focus of that particular study was not personality, but rather establishing gender differences in relational and physical aggression. Therefore, investigating the relationship between personality and social aggression is long overdue, as this relationship currently remains unsettled. Therefore, the current study seeks to understand the relationship between social aggression and the Five-Factor model of personality.

Method

Procedure

Prior to study onset, the Arkansas Tech University institutional review with participants being given extra credit in their psychology course for their participation. Measurement administration was counterbalanced with approximately 50% of families being administered the YGTSS before completing child- and parent-report measures. A trained research assistant provided instructions for each measure and was available for assistance. Masters or doctoral level clinical psychology trainees, trained in administration by the first author, administered the YGTSS to both the child and parent jointly in a private clinical office. YGTSS training consisted of an instructional meeting about the YGTSS, four practice interviews, and four directly observed interviews.

Measures

Participants completed a series of questionnaires that included a demographic questionnaire, an aggression questionnaire of both social and physically aggressive behaviors (Loudin, Loukas, & Robinson, 2003), and the NEO-FFI (Costa & McCrae, 1992).

Participants

Participants in this study were females, selected from a small, state university, who were currently enrolled in an undergraduate psychology course. Participation was voluntary, with participants obtaining extra credit as an incentive. The sample included 127 female participants that successfully completed the entire survey. The majority of participants were in the 18-19 year age range (67.7%), followed by those in the 20-21 year age range (13.4%) and those 24 years of age or older (13.4%). The sample was also mostly Caucasian (89.7%), with African-American and Hispanic/Latino each making up 4.8% of the sample population. Furthermore, the majority of participants were freshmen (47.6%) or sophomores (30.2%), followed by juniors at 15.9% and seniors at 6.3%. Most participants indicated either a "B" (47.6%) or an "A" (39.7%) grade point average.

Results

The NEO-FFI

The professional manual for the NEO-FFI (Costa & McCrae, 1992) list the means and standard deviations for college-age females as 25.83 and 7.59 for Neuroticism, Extraversion has a mean of 31.27 and a *SD* of 5.64, Openness has a mean of 27.94 and a *SD* of 5.72, Agreeableness has a mean of 31.00 and a *SD* of 5.33, and Conscientiousness has a mean of 31.02 and a *SD* of 6.53. The descriptive statistics for the current research participants on the NEO-FFI are similar to those found in the professional manual. In general, scores were distributed evenly for Neuroticism ($M = 22.62$, $SD = 6.79$), Extraversion ($M = 29.32$, $SD = 5.56$), Openness to Experience ($M = 29.32$, $SD = 5.56$), Agreeableness ($M = 28.41$, $SD = 4.42$), and Conscientiousness ($M = 31.35$, $SD = 5.80$) (see Table 1).

Aggression questionnaire

Social aggression had a mean of 5.77 ($SD = 3.49$), while physical aggression had a mean of 3.80 ($SD = 2.19$). Loudin, Loukas, and Robinson (2003) reported their social aggression mean for females as 5.82 ($SD = 3.14$) and the mean for physical aggression as 4.33 ($SD = 2.05$). For the current sample, both social aggression and physical aggression had a slight positive skew, with Kurtosis listed as -.658 ($SEK = .427$) for social aggression and 1.30 ($SEK = .427$) for physical aggression (Table 2). This was expected considering participant characteristics and the assessment of aggression, as aggression in general tends to decrease as students transition from high school to college (Fromme, Corbin, & Kruse, 2008), and self-report measures of aggression are highly subject to underreporting and response bias (Hilton, Harris, & Rice, 2003).

Table 1

Descriptive statistics for NEO-FFI results

NEO-FFI Domain	Mean	Median	Mode	Std. Deviation
Neuroticism	22.62	23.00	20.00	6.78
Extraversion	29.32	29.00	29.00	5.55
Openness	22.06	22.00	18.00	5.14
Agreeableness	28.40	29.00	29.00	4.42
Conscientiousness	31.35	32.00	34.00	5.80



Table 2

Descriptive statistics for self-report aggression

	Mean	Median	Mode	SD	Kurtosis	SEK	N
Social Aggression	5.77	5.00	4.00	3.49	-.658	.427	127
Physical Aggression	3.80	4.00	2.00	2.19	1.30	.427	127

Results (cont.)

Regression Analyses

To test the hypothesis that social aggression is associated with high Neuroticism, low Agreeableness, and low Conscientiousness, a series of analyses were undertaken. First, a series of correlational analyses were conducted to determine if there was a relationship between the personality domains and social aggression. The Pearson Product Moment correlations reveal a significant relationship between social aggression and the personality variables of Neuroticism ($r = .257$, $p = .004$) and Conscientiousness ($r = -.275$, $p = .002$), as well as reported level of physical aggression ($r = .371$, $p = .000$), Table 3.

Next, stepwise multiple regression analyses were used to examine the best predictors of social aggression, as measured by the social aggression questions on the aggression questionnaire. By using all of the five personality factors assessed by the NEO-FFI and the physical aggression section of the aggression questionnaire, all possible models were considered. As such, physical aggression was the largest predictor of a participant reporting that she engages in social aggression and accounted for 13.3% of the variance in social aggression. Next, Conscientiousness was entered into the second step and accounted for an additional 5.3% of the variance in social aggression for a total $R^2 = .199$ for the model. High Neuroticism and low Agreeableness did not add significantly to the predictive ability of the equation. Therefore, the combination of physical aggression and low Conscientiousness was found to be the best predictor of social aggression (see Table 4).

Table 3

Pearson product moment correlations for personality domains and aggression

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Age	1										
(2) Race	.176	1									
(3) Year	.663*	.447**	1								
(4) GPA	.373**	.139	.132	1							
(5) NeuroN	.166	-.181*	-.061	.166	1						
(6) NeuroE	.1	-.129*	.149	-.129*	.171	1					
(7) NeuroO	.1	-.152	.085	-.175	-.304**	.257**	1				
(8) NeoA	.1	.055	-.058	.110	.060	.019	-.084	1			
(9) NeoC	.1	.1	.084	-.053	-.001	.139	.204*	-.124	1		
(10) sSA	.1	.1	.1	.1	.1	.1	.1	.1	.1	1	
(11) aPA	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	1

Note: Year = Year in college, GPA = Grade point average, NeuroN = Neuroticism (NEO-FFI), NeuroE = Extraversion (NEO-FFI), NeuroO = Openness to Experience (NEO-FFI), NeoA = Agreeableness (NEO-FFI), NeoC = Conscientiousness (NEO-FFI), sSA = Social aggression, aPA = Physical aggression.

* $p < .05$, ** $p < .001$



Table 4

Summary of Stepwise Regression Analyses for Physical Aggression and Conscientiousness Predicting Frequency of Social Aggression

Variable	R	R ²	Adjusted R ²	F	Significance of F
Step 1 SaPA	.374	.140	.133	20.200	.000
Step 2 SaPA NeoC	.446	.199	.186	15.236	.000

Note: SaPA = Physical aggression, NeoC = Conscientiousness

Excluded variables for Step 1: Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness, age, race

Excluded variables for Step 2: Neuroticism, Extraversion, Openness, Agreeableness, age, race

Discussion

Previous research has shown that the personality traits of high Neuroticism, low Agreeableness, and low Conscientiousness are major contributors to the exhibition of physical aggression (Anderson, Tapert, Moadab, Crowley, & Brown, 2007). Research on the personality correlates of social aggression, however, is relatively nonexistent. The major hypothesis of the current study was a proposed relationship between the previously mentioned personality factors and the occurrence of social aggression. This specific hypothesis was only partially supported by the data. While high Neuroticism and low Conscientiousness were associated with social aggression, low Agreeableness was not. Statistical analyses examining the prediction of social aggression, meanwhile, showed that, in addition to Neuroticism and Conscientiousness, physical aggression was significantly related to exhibiting social aggression. In particular, the combination of self-reported use of physical aggression and low Conscientiousness traits was the largest predictor of self-reported social aggression.

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