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Personality Predicts Obedience in a Milgram Paradigm

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Abstract

This study investigates how obedience in a Milgram-like experiment is predicted by interindividual differences. Participants were 35 males and 31 females aged 26–54 from the general population who were contacted by phone 8 months after their participation in a study transposing Milgram's obedience paradigm to the context of a fake television game show. Interviews were presented as opinion polls with no stated ties to the earlier experiment. Personality was assessed by the Big Five Mini-Markers questionnaire (Saucier, 1994). Political orientation and social activism were also measured. Results confirmed hypotheses that Conscientiousness and Agreeableness would be associated with willingness to administer higher-intensity electric shocks to a victim. Political orientation and social activism were also related to obedience. Our results provide empirical evidence suggesting that individual differences in personality and political variables matter in the explanation of obedience to authority.

Stanley Milgram carried out the "Eichmann experiment" to determine whether Nazi war criminals such as Adolf Eichmann, whose trial had begun a couple of months earlier in Jerusalem, could have committed the heinous acts of the Holocaust merely because of a misplaced obedience to authority (Milgram, 1974). The German philosopher Hanna Arendt, a reporter during the trial of Eichmann, coined the phrase "the banality of evil" to describe him, seeing behind the architect of the Holocaust a thoroughly normal person. Going further, Arendt also mentioned that Eichmann's attitude toward his family and friends was "not only normal but most desirable" (Arendt, 1977, p. 25). Whatever the accuracy and truth of such an analysis (see Cesarani, 2007, for an alternative view of Eichmann), the issue of individual dispositions related to obedience was also included in Milgram's thinking as he wrote, "I am certain that there is a complex personality basis to obedience and disobedience, but I know we have not found it" (Milgram, 1974, p. 205). Somewhat paradoxically, the social psychologist consensually credited for having accelerated the shift away from internal explanations of behavior toward environmental and situational factors considered personality as a relevant source of variation in obedient behavior (Benjamin & Simpson, 2009).

In the present study, we shed a new light on how personality factors predicted obedience and rebellion in a Milgram-like study recently carried out in the context of a television game show (Beauvois, Courbet, & Oberlé, 2012). We hypothesized

that personality traits that are consensually desirable in interpersonal relationships, such as Agreeableness and Conscientiousness, could contribute to destructive obedience given the right context. These are two traits that some observers, including Arendt herself, attributed to Adolf Eichmann. Because these fundamental traits pertaining to the Five-Factor Model of personality (McCrae & Costa, 1987) express behavioral receptivity to normative expectations (Johnson & Ostendorf, 1993; McCrae, Costa, & Piedmont, 1993), we expected that they would facilitate submissive behavior toward authority. The second aim of the present study was to investigate how sociopolitical position is related to obedience to authority in an experimental setting.

Obedience studies remain a core topic in social psychology (Burger, 2009; Elms, 2009; Packer, 2008; Zimbardo, 2007). The study of individual and situational influences on obedience is important because obedience plays an integral role in socialization processes, which can facilitate social order (Hogan, Curphy, & Hogan, 1994) or, conversely, lead to tragic social ills (Kelman & Hamilton, 1989; Staub, 1989). There are many recent exciting developments in the study of obedience,

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including new theoretical perspectives (e.g., discourse analysis; Burger, Girgis, & Manning, 2011; Gibson, 2013), innovative research procedures (e.g., virtual reality; Dambrun & Vatiné, 2010; Slater et al., 2006), and cutting-edge technologies (e.g., fMRI; Cheetham, Pedroni, Antley, Slater, & Jänke, 2009). Yet there is still a fundamental debate on the social significance of the Milgram experiments (e.g., Benjamin & Simpson, 2009; Blass, 2000; Miller, 2004; Reicher, Haslam, & Smith, 2012; Werhane, Pincus Hartman, Archer, Englehardt, & Pritchard, 2013). Milgram's obedience studies are mostly known for their illustration of the strength of situational influence on human behavior (Berkowitz, 1999; Blass, 1991), but the issue of personality factors is still topical in behavioral (Berkowitz, 1999; Blass, 1991; Burger, 2009; Elms, 2009; Russell, 2011) as well as in neuroscientific research (Cheetham et al., 2009).

Personality Factors and Obedience to **Authority**

Social psychologists generally consider that malevolent actions such as harmful obedience are the consequence of complex social forces arising from situational influences. As underlined by Berkowitz (1999, p. 248), most reports of the obedience experiments in social psychology have played down the importance of individual differences in the results of Milgram's experiments. In many cases, Milgram's paradigm was considered the experimental prototype of a strong situation, as his stated aim was to study behavior in a strong situation of deep consequence for the participants. Undoubtedly, the conception of the personality-dampening effect of strong situations has significantly influenced social psychology for decades (Cooper & Withey, 2009). It should still be acknowledged that while the situation is commonly considered as strong in Milgram's experiments, the participants' responses were not uniformly compliant, and behavioral variance remained high (Packer, 2008; see also Krueger and Funder, 2004, regarding the limitation of the standard interpretation of situational power). In Milgram's classical studies, the size of the effect of the situational variables on behaviors, translated to the metric of the correlation coefficient, was between r = .30 and r = .40(Funder, Guillaume, Kumagai, Kawamoto, & Sato, 2012). Moreover, some scholars have suggested individual differences are still important in strong situations (Caspi & Moffit, 1993).

There are a small number of studies indicating that personality factors predict disobedient patterns even in very constraining settings. In a seminal study, Elms and Milgram (1966) pooled a subsample of participants from the first four Milgram experiments and found that the fully obedient participants scored higher on the California F-scale (Hathaway & Mckinley, 1940) and on a nonstandard Minnesota Multiphasic Personality Inventory (MMPI) scale (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950) measuring social responsibility. Other scattered studies based on Milgram para-

digms found links between obedience and right-wing authoritarianism (Altemeyer, 1981), trustfulness (Miller, 1975), hostility (Haas, 1966), involuntary subordination (Sturman, 2011), social intelligence (Burley & McGuiness, 1977), empathic concern, and desire for control (Burger, 2009). These studies provide possible explanations for behavioral differences in Milgram's experiment. However, some of these studies did not reach minimal methodological and psychometric standards. In many other studies, personality factors did not appear to be significant predictors of disobedient behavior. For example, in a recent experimental setting (not based on Milgram's methodology, but allowing participants to deal with an unethical request by disobeying and reporting the unethical request), none of the standard assessments of individual differences in personality appeared to have any predictive utility in distinguishing between obedient and disobedient participants (Bocchiaro, Zimbardo, & Van Lange, 2012).

More fundamentally, the study of interindividual factors involved in obedience still needs a comprehensive and integrated conceptualization based on a general model of personality and on the function of obedience in our society. Regarding the first issue, we believe that the use of current models of personality such as the Five-Factor Model (Costa & McCrae, 1989) may represent a significant step forward in understanding the individual contribution of obedience to authority.

The Five-Factor Model and Obedience

The Five-Factor Model is a structural model of personality factors accounting for phenotypic personality variation between people (Costa & McCrae, 1989). It encompasses most of the variance in personality description through five dimensions: Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness. Based on previous conceptual developments and empirical studies, we expected that the traits of Agreeableness and Conscientiousness would be related to obedience. In Costa and McRae's (1992) model, compliance is defined as an intrinsic facet of Agreeableness. Agreeableness is also related to the motivational goal of conformity values. People with agreeable dispositions avoid violating norms or upsetting others, and they easily comply with social expectations. In one study, a significant correlation of r = .20 was observed between Agreeableness and conformity (Roccas, Sagiv, Schwartz, & Knafo, 2002). Another study indicated that when considered as part of a higher-order factor of the Big Five, Agreeableness was positively related to conformity (DeYoung, Peterson, & Higgins, 2002). Agreeableness also predicts susceptibility to being influenced by others. In a study of persuasive communication, persons high in Agreeableness were more influenced than their peers low in Agreeableness, regardless of the quality of argument (Habashi & Wegener, 2008). Interestingly, the covariation between Agreeableness and conformity is not limited to humans. In a study evaluating dimensions of horse personality based on 84 owners, trainers, Personality and Obedience 3

and stable managers and applied to 100 horses, a factor very close to the human Agreeableness factor included a cluster of items reflecting obedience (McGrogan, Hutchison, & King, 2007).

The other factor that we hypothesized as related to obedience is Conscientiousness, defined as a tendency to show self-discipline, sense of duty, and aim for achievement and organization. Referring to conformity and socially prescribed impulse control (Hogan & Ones, 1997), Conscientiousness predicts obedience to others' demands (Mashiko, 2008). It is also related to order preference (Piedmont, McCrae, & Costa, 1992) and achievement via conformance and norm favoring, in addition to being negatively correlated with flexibility (McCrae et al., 1993). The lack of flexibility that describes highly conscientious individuals echoes investigations on dogmatism (Duckitt, 2009; Rokeach, 1960). Moreover, these dimensions fit adequately with the Arendtian descriptions of Adolf Eichmann, whose trial, as previously mentioned, provided the initial impetus for Milgram's research.

One would not expect a personality measure that has only a tenuous theoretical relationship to obedience to be an effective predictor of a given behavior (Blass, 1991). Therefore, factors such as Extraversion, Neuroticism, and Openness may not be good predictors of obedient behavior. In fact, in another European experiment closely modeled on Milgram's procedure, the dimension of introversion-extraversion was not related to obedience (Miranda, Caballero, Gomez, & Zamorano, 1981). Correlational studies have provided similar results (Mashiko, 2008; Mehta, 1983; see, however, Rim, 1984). Such is also the case of the Openness factor of the Five-Factor Model, which measures imaginativeness, broad-mindedness, and artistic sensibility (Mashiko, 2008). Neuroticism, which is the tendency to experience negative emotions, such as anger, anxiety, or depression, also appears to be irrelevant in predicting obedience (Mashiko, 2008; Rim, 1984; see, however, Zeigler-Hill, Southard, Archer, & Donohoe, 2013).

Political Positioning, Rebellion, and Disobedience

Several studies have shown that right-wing authoritarianism predicts obedience (Elms & Milgram, 1966; Meeus & Raaijmakers, 1995), although there are some exceptions as well (see Doris, 2002, for a review). Because left-wing political attitudes are negatively related to conformity values (Schwartz, Caprara, & Vecchione, 2010), we expected an inverse relationship between a left-right ideological dimension and obedience. We also investigated a predictor never previously studied in the obedience literature: behavioral commitment to, or preference for, disobedient actions (e.g., participation in strikes and political activism). We expected that people reporting past rebellious and unruly behavior, or a readiness to perform such behaviors, would be more disobedient to authority in a Milgram paradigm.

METHOD

Participants

Participants were contestants in a Milgram obedience study that was portrayed as a TV game show (see Beauvois et al., 2012, for a full, detailed presentation, as well as ethical issues). Participants were 80 adults from the general population of Paris and surrounding communities. An independent company that conducts opinion polls and market studies selected them from a consumer database. They each received 40 euros (equivalent to approximately US\$53) for their participation. Of these, four participants were excluded because they were already familiar with Milgram's research. The remaining 76 participants consisted of 40 males and 36 females, with ages ranging between 25 and 55 years old (M = 39.7 years, SD = 8.51). Participants who had already participated in a game show were not eligible, nor were those with health conditions or those taking any kind of medication.

Procedure

The experiment took place in a television studio, and the authority of the television world was represented by a host. An original game show was set up onstage with the help of technical devices (i.e., cameras, lighting, giant screen, control room) and human resources. When participants arrived at the television studio, an alleged producer greeted each participant, along with another person who was in fact a male accomplice of the experimenter. The producer told them that they would be filmed as they participated together as players on a TV game show. Because the filming was said to be for a pilot show aimed at testing the game "under real conditions" and improving it if need be, they were informed that they would not win any money, unlike the future game contestants, who would try together to win one million euros. For one of the players ("the questioner"), the task consisted of asking questions; for the other ("the contestant"), the task was to answer correctly. They were told that the penalty for each incorrect answer would be an electric shock delivered by the "questioner" to the "contestant." The alleged producer then had the players draw straws to determine which person would play which role. The drawing was rigged so that the participant was always the questioner and the accomplice was always the contestant. The two players were then led onstage, where they were awaited by the game host (a female weather forecaster for a French national TV station). Then, in front of the camera, the host explained the game as follows. The contestant would be given a limited amount of time to memorize a list of 27 pairs of related words (e.g., cloudy-sky, tame-animal). Then the questioner would say the first word in each pair and the contestant would have to select the related word among the four words. If the contestant made a mistake, the questioner was to deliver an electric shock, increasing the shock's intensity each time. The team of players would win if they were able to get through all 27 questions (whether the answers were correct or incorrect).

Once these rules were stated, the contestant was taken into a chamber where he would not be seen by the questioner or the audience. However, in front of everyone, before the door of the chamber was closed, the contestant was strapped to the chair in which he would receive the shocks and was shown the buttons to press to choose the right answer. The questioner was seated at a desk in the center of the stage, under the projectors and cameras, with his or her back to the audience and facing a giant screen where the questions would be displayed in succession. The questioner was shown the handles to be used to deliver the (fake) electric shocks to the contestant, with an increase of 20 volts for each new wrong answer. The shocks ranged from 20 volts to 460 volts and were grouped together in sets labeled as follows: "slight shocks" (20, 40, 60); "moderate shocks" (80, 100, 120); "strong shocks" (140, 160, 180); "very strong shocks" (200, 220, 240); "intense shocks" (260, 280, 300); "extremely intense shocks" (320, 340, 360); "danger: severe shocks" (380, 400, 420); and "XXX" (440, 460). According to a predetermined schedule, the contestant responded incorrectly 24 times out of 27. If the questioner began to hesitate or refused to go on, the host intervened by giving at most five prods to urge the players to continue. The first four prods were worded in a Milgram-like fashion ("go on with the questions"; "go on, don't let yourself get upset"; "the rules say you must go on"; "go on, we are taking all responsibility for this"). Only the fifth prod, "you can't make him lose; what will the audience think?" was specific to the television situation. As in Milgram's paradigm, starting from when the shock reached 80 volts, the contestant's prerecorded reactions were heard: grunts at first, then loud cries of pain accompanied by refusal to continue, then screams and pleas to stop the game. After 380 volts, the contestant refused to answer. After 420 volts, nothing more could be heard. The game ended either when the questioner had asked all 27 questions (which involved two shocks of 460 volts) or when, in spite of the host's five prods, the questioner decided to stop.

Participants were assigned to one of four conditions. In the standard condition (n = 32), which was similar to Milgram's "voice-feedback" condition (Milgram, 1974, Experiment 2), a "questioner" (the participant) had to ask 27 questions to a "contestant" (an accomplice of the experimenter) who could be heard but not seen. Every time the contestant gave an incorrect answer (according to a predetermined schedule of 24 incorrect answers out of 27), the questioner was to punish him by delivering an (alleged) electric shock. The shocks ranged between 20 and 460 volts and were to be increased by 20 volts with each new mistake. The *social-support condition* (n = 19)differed in one aspect from the standard condition: When the voltage reached 120, the production assistant (an accomplice) rushed out onstage and asked that the game be stopped because it was too immoral. The assistant was brushed aside by the host, who went on with the game. The TV-broadcast condition (n = 18) was similar to the standard condition, except that upon arrival, the questioner and alleged contestant were informed that the TV station would broadcast the pilot show. The players

would be on TV but would still not win any money. Finally, in the *host-withdrawal condition* (n = 7), the situation was similar to Milgram's condition in which the researcher leaves the experiment ("experimenter absence"; Milgram, 1974, Experiment 7). Upon reaching 80 volts, the host explained that from now on, the players would continue on their own. Then the host went offstage and did not come back until the game was over. There were then no more prods after the host left the stage.

Results showed that in the standard condition, there was 81% obedience, whereas in the host-withdrawal condition, there was 28% obedience. Those conditions were not significantly different from Milgram's homologous conditions. There was 74% obedience in the social-support condition and 72% in the TV-broadcast condition. Only the standard condition and the host-withdrawal condition differed significantly (see Beauvois et al. 2012).

As in the Elms and Milgram study (1966), and after ensuring that there was no significant difference between the results of different conditions, we pooled subjects from three conditions and contacted them after the experiment. The only condition that was not pooled was the *host-withdrawal condition* ("experimenter absence"), considered to be less relevant because no authority was present. The 69 remaining participants were contacted about 8 months after their participation and asked if they would participate in a survey in exchange for 20 euros. Participants were unaware of the link between the survey and the obedience experiment. The response rate was 89%, leaving a total sample of 35 males and 31 females aged 26-54 years (M = 39.66, SD = 8.51). Participants did not differ on obedience when compared to the whole sample.

Due to time constraints, the Five-Factor Model of personality was measured using the Big Five Mini-Markers questionnaire (Saucier, 1994). This 40-item adjective checklist provides an abbreviated version of 100 trait-descriptive adjectives of the Big Five personality domains (Goldberg, 1992) and is considered a reliable and valid description of the Five-Factor Model (Mullins-Sweatt, Jamerson, Samuel, Olson, & Widiger, 2006). The internal reliability of the scales in our sample was as follows: Openness (Cronbach's α = .76), Neuroticism (Cronbach's α = .75), Conscientiousness (Cronbach's α = .70), Agreeableness (Cronbach's α = .68), and Extraversion (Cronbach's α = .58).

Political ideology was measured with standard items from the World Value Survey Questionnaire (Inglehart & Welzel, 2005). Political orientation was based on the following singleitem measure: "In political matters, people talk of 'the left' and 'the right.' How would you place your views on this scale, generally speaking? ($1 = extreme\ left$, $10 = extreme\ right$)." The Political Activism Scale (PAS) was composed of four behaviors, and for each behavior, participants had to select between "have done" (coded 3), "might do" (coded 2), or "would never do" (coded 1). The PAS included the following behaviors: signing a petition, attending lawful demonstration, joining unofficial strikes, and occupying buildings or factories (Cronbach's $\alpha = .73$).

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The measure of obedience was the intensity of shocks delivered by individuals. Intensity of shocks ranged from 100 to 460 volts and exhibited a significant negative skew similar to Milgram's original studies. Therefore, we utilized nonparametric (i.e., Spearman's rank correlation coefficients) statistics when evaluating the bivariate associations between obedience and other variables of interest. Multiple regression analyses were conducted using negative binomial regression, which is appropriate for positively skewed outcomes. Because shock intensity was negatively skewed, it was necessary for us to use disobedience (calculated by subtracting each participant's maximum volts administered from the total volts possible) as the primary outcome in the regression analyses instead of obedience in order to reverse the direction of the skew.

RESULTS

The intensity of shocks administered did not significantly differ between male (M = 417, SD = 97.35) and female (M = 384, SD = 111.27) participants, t(64) = 1.28, p = .20, d = 0.32, 95% CI [-.22, .83]. There also was no relationship between obedience and age, $r_s(64) = .14$, 95% CI [-.10, .36], p = .28, nor between obedience and the familiarity of individuals with TV game shows, $r_s(64) = .05$, 95% CI [-.21, .32], p = .65. Descriptive statistics and intercorrelations for the primary variables of interest are reported in Table 1.

Regarding the Five-Factor Model and obedience, as expected, results showed that the highest intensity of shocks participants administered was related to Agreeableness, $r_s = .26$, 95% CI [.03, .47], p = .039, and to Conscientiousness, $r_s = .34$, 95% CI [.11, .54], p = .006. Nonsignificant relationships were found between obedience and the remaining Big Five factors, including Extraversion ($r_s = .03$, 95% CI [-.22, .29], p = .80), Openness ($r_s = -.03$, 95% CI [-.26, .21], p = .84), and Neuroticism, ($r_s = .08$, 95% CI [-.15, .30], p = .55). When all five personality domains were included in a single multiple negative binomial regression, the same pattern of significance emerged with both Agreeableness (b = -0.99, 95% CI [-1.87, -0.11], p = .030) and Conscientiousness (b = -0.93, 95% CI [-1.66, -0.19], p = .016), significantly pre-

dicting decreased disobedience (i.e., increased obedience), whereas Extraversion (b = 0.09, 95% CI [-0.47, 0.65], p = .149), Neuroticism (b = .02, 95% CI [-0.71, 0.76], p = .956), and Openness (b = .57, 95% CI [-0.18, 1.32], p = .142) were not significantly related to obedience.

Regarding political orientation, we observed that the more the participants defined themselves as on the "left" of the political spectrum, the lower the intensity of shocks they agreed to give to the contestant, $r_s(64) = .32, 95\%$ CI [.11, .51], p = .02. The relationship between rebellious political activism and obedience was marginally significant, $r_s(64) = .20, 95\%$ CI [-.06, .46], p = .10. Analysis by gender showed that the relationship was significant for females, $r_s(31) = .38, 95\%$ CI [0.01, 0.69], p = .03, but not for males, $r_s(33) = .01, 95\%$ CI [-.34, .39], p = .95.

DISCUSSION

The present research makes at least three significant contributions to the literature. This is the first study showing that individual obedience in a Milgram-like paradigm can be predicted using the Five-Factor Model of personality. As expected, Conscientiousness and Agreeableness predicted the intensity of electric shocks administered to the victim. Second, we showed that disobedience was influenced by political orientation, with left-wing political ideology being associated with decreased obedience. Third, we showed that women who were willing to participate in rebellious political activities such as going on strike or occupying a factory administered lower shocks.

All these results suggest that situational context, even though a powerful determinate of behavior, does not necessarily overwhelm individual-level behavioral determinants. It is interesting to note that personality traits such as Agreeableness and Conscientiousness, which are widely related to positive outcomes such as better mental health (Kotov, Gamez, Schmidt, & Watson, 2010), longevity (Bogg & Brent, 2013), academic performance (Poropat, 2009), parenting (de Haan, Prinzie, & Dekovic, 2009), reduced aggression (Meier, Robinson, & Wilkowski, 2006), and prosocial behavior

Table I Descriptive Data and Intercorrelations for Primary Variables of Interest

	2	3	4	5	6	7	8	9	М	SD
I. Shock intensity ^a	.192	.032	.256*	.338**	.075	025	.319*	.202	402.24	104.61
2. Male gender	_	.068	.043	.049	.037	286	00 I	.107	_	_
3. Extraversion	_		.304*	175	.115	157	.035	016	3.20	0.84
4. Agreeableness	_		_	.266*	.267*	.263*	.065	.151	4.07	0.51
5. Conscientiousness	_	_	_	_	.113	.059	030	.041	4.25	0.58
6. Neuroticism	_		_	_	_	.108	.184	004	3.67	0.74
7. Openness	_		_	_	_	_	333*	154	3.65	0.63
8. Political orientation	_		_	_	_	_	_	.351*	5.52	1.40
9. Political aActivism	_	_	_	_	_	_	_	_	7.05	1.87

Note. a Spearman's rank correlation coefficients are reported given shock intensity's negative skew. *p < .05. **p < .01.

(Caprara, Alessandri, & Eisenberg, 2012), may also have darker sides in that they can lead to destructive and immoral obedience. Recently, three overlapping personality variables have come to be known as the "dark triad" of personality. People with high Machiavellianism, narcissism, and subclinical psychopathy show a tendency to be callous, selfish, and malevolent in their social relations (Paulhus & Williams, 2002). It may be that a significant share of human suffering stems from personality dispositions that are not necessarily intrinsically antisocial. On the contrary, some traits that often have negative interpersonal consequences, such as low impulse control (Gottfredson & Hirschi, 1990; Strüber, Luck, & Roth, 2008), may in some extreme circumstances benefit others, such as when someone jumps into a river and risks his life to save a stranger (see DeSteno & Valdesolo, 2011).

This research's primary limitation was that results were based on correlations between participants' behavior in a Milgram-like obedience study and their answers on a phone survey that took place 8 months after their participation in the experiment. We cannot rule out the possibility that their participation in the initial experiment produced variations in individual dispositions. However, given the relative stability of the personality variables we measured (particularly the Big Five; see Bergeman et al., 1993; Costa & McCrae, 1997), it is reasonable to assume that personality traits were not strongly affected by the experiment. In addition, the extended delay between the experiment and the administration of the personality measures is such that any impact on personality would have likely been attenuated with the passage of time. For more than 50 years, social and personality psychology have tried to unravel the role of personality in obedient behavior. Our results provide new empirical evidence showing that individual differences in Agreeableness, Conscientiousness, political orientation, and social activism matter. Not only "evil" behavior such as destructive obedience may indeed be "banal" in the sense of not relying on extraordinary cruelty of ideological hate, but it also may even be facilitated by dispositions that are consensually desirable elsewhere with family and friends, as Hanna Arendt proposed over 50 years ago. Although our results suggest that adaptive traits in the interpersonal domain may be maladaptive in a context involving destructive authority, they also suggest that some behaviors that may disrupt social functioning, such as political activism, may express and even strengthen individual dispositions that are both useful and essential to the whole society, at least in some critical moments.

References

- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). The authoritarian personality. New York: Harper & Row.
- Altemeyer, B. (1981). *Enemies of freedom: Understanding right-wing authoritarianism*. Winnipeg: University of Manitoba Press.

- Arendt, H. (1977). Eichmann in Jerusalem. A report on the banality of evil. Harmondsworth: Penguin.
- Beauvois, J. L., Courbet, D., & Oberlé, D. (2012). The prescriptive power of the television host: A transposition of Milgram's obedience paradigm to the context of TV game show. *European Review of Applied Psychology*, **62**(4), 111–119.
- Benjamin, L. T., & Simpson, J. A. (2009). The power of the situation: The impact of Milgram's obedience studies on personality and social psychology. *American Psychologist*, **64**, 12–19.
- Bergeman, C. S., Chipuer, H. M., Plomin, R., Pedersen, N. L., McClern, G. E., Nesselroade, J. R., et al. (1993). Genetic and environmental effects on openness to experience, agreeableness, and conscientiousness: An adoption/twin study. *Journal of Per-sonality*, 61, 159–179.
- Berkowitz, L. (1999). Evil is more than banal: Situationism and the concept of evil. *Personality and Social Psychology Review*, **3**, 246–253.
- Blass, T. (1991). Understanding behavior in the Milgram obedience experiment: The role of personality, situations, and their interactions. *Journal of Personality and Social Psychology*, 60, 398–413.
- Blass, T. (2000). The Milgram paradigm after 35 years: Some things we now know about obedience to authority. In T. Blass (Ed.), Obedience to authority: Current perspectives on the Milgram paradigm. Mahwah, NJ: Erlbaum.
- Bocchiaro, P., Zimbardo, P. G., & Van Lange, P. A. M. (2012). To defy or not to defy: An experimental study of the dynamics of disobedience and whistle-blowing. *Social Influence*, 7, 35–50.
- Bogg, T., & Brent, R. (2013). The case for conscientiousness: Evidence and implications for a personality trait marker of health and longevity. *Annals of Behavioral Medicine*, **45**, 278–288.
- Burger, J. M. (2009). Replicating Milgram: Would people still obey today? *American Psychologist*, **64**, 1–11.
- Burger, J. M., Girgis, Z. M., & Manning, C. C. (2011). In their own words: Explaining obedience to authority through an examination of participants' comments. *Social Psychological and Personality Science*, 2, 460–466.
- Burley, P. M., & McGuiness, J. (1977). Effects of social intelligence on the Milgram paradigm. *Psychological Reports*, **40**, 767–770.
- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: The contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, 102, 1289–1303.
- Caspi, A., & Moffit, T. E. (1993). When do individual differences matter? A paradoxical theory of personality coherence. *Psychological Inquiry*, 4, 247–271.
- Cesarani, D. (2007). Becoming Eichmann: Rethinking the life, crimes and trial of a "desk murderer." Cambridge, MA: Da Capo Press.
- Cheetham, M., Pedroni, A. F., Antley, A., Slater, M., & Jänke, L. (2009). Virtual Milgram: Empathic concern or personal distress? Evidence from functional MRI and dispositional measures. Frontiers in Human Neuroscience, 3, 29.
- Cooper, W. H., & Withey, M. J. (2009). The strong situation hypothesis. *Personality and Social Psychology Review*, 13, 62–72.
- Costa, P. T., Jr., & McCrae, R. R. (1989). The NEO-PII/NEO-FFI manual supplement. Odessa, FL: Psychological Assessment Resources.

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Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, **4**, 5–13.

- Costa, P. T., Jr., & McCrae, R. R. (1997). Longitudinal stability of adult personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 269–290). New York: Academic Press.
- Dambrun, M., & Vatiné, E. (2010). Reopening the study of extreme social behaviors: Obedience to authority within an immersive video environment. *European Journal of Social Psychology*, 40, 760–773.
- DeSteno, D., & Valdesolo, P. (2011). *Out of character*. New York: Three River Press.
- DeYoung, C., Peterson, J. B., & Higgins, D. M. (2002). Higher-order factors in the Big Five predict conformity: Are there neuroses of health? *Personality and Individual Differences*, 33, 533– 552.
- Doris, J. M. (2002). Lack of character: Personality and moral behavior. New York: Cambridge University Press.
- Duckitt, J. (2009). Authoritarianism and dogmatism. In M. Leary & R. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 298–317). New York: Guilford Press.
- Elms, A., & Milgram, S. (1966). Personality characteristics associated with obedience and defiance toward authoritative commands. *Journal of Experimental Research in Personality*, **2**, 289–292.
- Elms, A. C. (2009). Obedience lite. *American Psychologist*, **64**, 32–36.
- Funder, D. C., Guillaume, E., Kumagai, S., Kawamoto, S., & Sato, T. (2012). The person-situation debate and the assessment of situations. *Japanese Journal of Personality*, **21**, 1–11.
- Gibson, S. (2013). Milgram's obedience experiments: A rhetorical analysis. *British Journal of Social Psychology*, **52**, 290–309.
- Goldberg, L. (1992). The development of markers for the Big Five factor structure. *Psychological Assessment*, **4**, 26–42.
- Gottfredson, R., & Hirschi, T. (1990). *A general theory of crime*. Chicago: University of Chicago Press.
- de Haan, A. D., Prinzie, P., & Dekovic, M. (2009). Mother's and father's personality and parenting: The mediating role of sense of competence. *Developmental Psychology*, **45**, 1695–1707.
- Haas, K. (1966). Obedience: Submission to destructive orders as related to hostility. *Psychological Reports*, **19**, 32–34.
- Habashi, M. M., & Wegener, D. (2008). Preliminary evidence that agreeableness is more closely related to responsiveness than conformity (Unpublished doctoral dissertation). Purdue University, West Lafayette, IN.
- Hathaway, S. R., & McKinley, J. C. (1940). A multiphasic personality schedule (Minnesota): I. Construction of the schedule. *Journal of Psychology*, 10, 249–254.
- Hogan, R., Curphy, G., & Hogan, J. (1994). What we know about leadership effectiveness and personality. *American Psychologist*, 49, 493–504.
- Hogan, R., & Ones, D. S. (1997). Conscientiousness and integrity at work. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 849–870). New York: Academic Press.

- Inglehart, R., & Welzel, C. (2005). Modernization, cultural change and democracy: The human development sequence. Cambridge: Cambridge University Press.
- Johnson, J. A., & Ostendorf, F. (1993). Clarification of the five factor model with abridged Big Five-dimensional circumplex. *Journal of Personality and Social Psychology*, 55, 824–835.
- Kelman, H., & Hamilton, Y. L. (1989). Crimes of obedience: Toward a social psychology of authority and responsibility. New Haven, CT: Yale University Press.
- Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking "Big" personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin*, **136**, 768–821.
- Krueger, J. I., & Funder, D. C. (2004). Towards a balanced social psychology: Causes, consequences, and cures for the problemseeking approach to social behavior and cognition. *Behavioral* and *Brain Sciences*, 27, 313–327.
- Mashiko, H. (2008). The relationship between the tendency of overadaptation and personality traits, fears of abandonment, and approval motivation in adolescence. *Japanese Journal of Counseling Science*, **41**, 151–160.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 53, 81–90.
- McCrae, R. R., Costa, P. T., & Piedmont, R. L. (1993). Folk concepts, natural language, and psychological constructs: The California Psychological Inventory and the five-factor model. *Journal of Personality*, 61, 1–26.
- McGrogan, C., Hutchison, M. D., & King, J. (2007). Dimensions of horse personality based on owner and trainer supplied personality traits. *Applied Animal Behavior Science*, **113**, 206–214.
- Meeus, W. H. J., & Raaijmakers, Q. A. W. (1995). Obedience in modern society: The Utrecht studies. *Journal of Social Issues*, 51, 155–175.
- Mehta, G. S. (1983). Adjustment and personality type among obedient, disobedient students. *Indian Psychological Review*, **24**, 38–41.
- Meier, B. P., Robinson, M. D., & Wilkowski, B. M. (2006). Turning the other cheek: Agreeableness and the regulation of aggressionrelated primes. *Psychological Science*, 17, 136–142.
- Milgram, S. (1974). *Obedience to authority: An experimental view*. New York: Harper & Row.
- Miller, A. G. (2004). What can the Milgram obedience experiments tell us about the Holocaust? In A. G. Miller (Ed.), *The social psychology of good and evil* (pp. 193–239). New York: Guilford Press.
- Miller, F. D. (1975). An experimental study of obedience to authority of varying legitimacy (Unpublished doctoral dissertation). Harvard University, Cambridge, MA.
- Miranda, F. S., Caballero, R. B., Gomez, M. N., & Zamorano, M. A. (1981). Obediencia a la auroridad [Obedience to authority]. *Psiquis*, **2**, 212–221.
- Mullins-Sweatt, S. N., Jamerson, J. E., Samuel, D. B., Olson, D. R., & Widiger, T. A. (2006). Psychometric properties of an abbreviated instrument of the five-factor model. *Assessment*, 13, 119–137.

- Packer, D. J. (2008). Identifying systematic disobedience in Milgram's obedience experiments: A meta-analytic review. *Perspectives on Psychological Science*, 3, 301–304.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36, 556–563.
- Piedmont, R. L., McCrae, R. R., & Costa P. T. (1992). An assessment of the Edwards Personal Preference Schedule from the perspective of the five-factor model. *Journal of Personality Assessment*, **58**, 67–78.
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 135, 322–338.
- Reicher, S., Haslam, A., & Smith, J. (2012). Working toward the experimenter: Reconceptualizing obedience within the Milgram paradigm as identification-based followership. *Perspectives on Psychological Science*, 7, 315–324.
- Rim, Y. (1984). Importance of values according to personality, intelligence, and sex. *Personality and Individual Differences*, **5**, 245–246.
- Roccas, S., Sagiv, L., Schwartz, S., & Knafo, A. (2002). The Big Five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28, 789–801.
- Rokeach, M. (1960). *The open and the closed mind*. New York: Basic Books
- Russell, N. J. C. (2011). Milgram's obedience to authority experiments: Origins and early evolution. *British Journal of Social Psychology*, 50, 140–162.

- Saucier, G. (1994). Mini-Markers: A brief version of Goldberg's unipolar Big-Five markers. *Journal of Personality Assessment*, **63**, 506–516.
- Schwartz, S. H., Caprara, G. V., & Vecchione, M. (2010). Basic personal values, core political values, and voting: A longitudinal study. *Political Psychology*, 31, 421–452.
- Slater, M., Antley, A., Davison, A., Swapp, D., Guger, C., Barker, C., et al. (2006). A virtual reprise of the Stanley Milgram obedience experiments. *Plos One*, 1(1), e39.
- Staub, E. (1989). The roots of evil. Cambridge: Cambridge University Press.
- Sturman, E. D. (2011). Involuntary subordination and its relation to personality, mood, and submissive behavior. *Psychological Assessment*, 23, 262–276.
- Strüber, D., Luck, M., & Roth, G. (2008). Sex, aggression, and impulse control: An integrative account. *Neurocase*, **14**, 93–121.
- Werhane, P., Pincus Hartman, L., Archer, C., Englehardt, E. E., & Pritchard, M. S. (2013). Obstacles to ethical decision-making: Mental models, Milgram and the problem of obedience. Cambridge: Cambridge University Press.
- Zeigler-Hill, V., Southard, A., Archer, L., & Donohoe, P. L. (2013). Neuroticism and negative affect influence the reluctance to engage in destructive obedience in the Milgram paradigm. *Journal of Psychology*, **153**, 161–174.
- Zimbardo, P. (2007). The Lucifer effect: Understanding how good people turn evil. New York: Random House.