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Five-Factor Model personality dimensions and right-wing attitudes: Psychological bases of
punitive attitudes?

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Abstract

The present study investigates in an adult sample ($N = 220$) whether the relationships between the Five-Factor Model personality dimensions and punitive attitudes (i.e., deterrence, desert, moral balance, incapacitation, and rehabilitation) are mediated by right-wing attitudes (i.e., Right-Wing Authoritarianism and Social Dominance Orientation). Three important results were obtained. First, the specific punitive attitudes referred to three higher order dimensions: Harsh Punishment, Social-Constructive treatment and Moral balance. Second, Harsh Punishment was largely driven by right-wing attitudes and broadband personality traits. Furthermore, RWA fully mediated the effect of Neuroticism, while the effects of Openness to Experience and Extraversion were only partially mediated. Third, Social-Constructiveness and Moral balance were only poorly related to broadband personality and right-wing attitudes. Strengths and limitations are discussed, as well as implications for punitive policies.

Keywords: Five-Factor Model; social attitudes; punitive attitudes; Harsh Punishment; Social-Constructive treatment

Five-Factor Model personality dimensions and right-wing attitudes: Psychological bases of punitive attitudes?

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Introduction

Punishment is a widely accepted way of dealing with criminals. However, there is some disagreement on why, when, and how punishment should be delivered. One can, in fact, distinguish between two prevailing approaches: utilitarianism and retribution (Carlsmith & Darley, 2008; Carroll, Perkowitz, Lurigio & Weaver, 1987; de Keijser, van der Leeden & Jackson, 2002). The main distinction between both perspectives lies in their justification of punishment. Utilitarianism frames punishment in terms of its future benefits, namely preventing and reducing crime. For a utilitarianist, detection rate of a crime and visibility of the punishment serve as criteria to determine the weight of the punishment. The motives to punish are: discourage re-offending through individual deterrence, discourage future offenders through general deterrence, prevent re-offending through incapacitation, and rehabilitate and re-socialize offenders. Secondly, punishment from a retributive perspective is justified by the harm caused by the offender. In this view, it is just desert to punish an offender, because he/she deserves suffering for the crime he/she committed. Punishment is determined by taking into account the severity of the offense, the offender's culpability, as well as any mitigating factors. Furthermore, punishment is considered morally good because it is supposed to restore the moral balance in society, which has been disrupted by the criminal act.

Another perspective - restorative justice - focuses on repairing the damage caused by the crime instead of punishing the offender. The central idea here is to repair and restore relationships between the concerned parties: victims, offenders, and community. The

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emphasis here lays on empowerment, dialogue, negotiation, and agreement (Ashworth, 2002; Ward & Langlands, 2008).

The different perspectives on punishment of crime were integrated into a single theoretical model of punitive attitudes (de Keijser et al., 2002). These authors have shown that the above-mentioned perspectives can be measured with this integrated approach. More specifically, judges seem to have a pragmatic approach to legal punishment which surpasses the distinctions and incompatibilities of the theoretical punitive approaches. Through factor analysis, these showed that the separate theoretical attitudes merged into two underlying punitive dimensions. The Harsh Punishment dimension groups incapacitation, desert, deterrence and moral balance, while rehabilitation and restoration form the Social-Constructive approach to punishment. Furthermore, de Keijser (2001) has shown that the general public has a preference for Harsh Punishment of offenders.

The present study aims at delineating the personality basis of punitive attitudes. Although previous studies (cfr. *infra*) have already examined the relationships between dispositional variables and the determination of punishment, these studies have primarily concentrated on the relation between severity of punishment and social attitudes (e.g., authoritarianism and social dominance orientation). As such, neither the exact reason underlying the preference for certain punishments nor its relation with broadband personality have extensively been studied before. Such relation with personality should certainly be expected, given the strong personality basis of attitudes such as authoritarianism and social dominance orientation.

The relationships between the Five-Factor Model personality dimensions and punitive attitudes

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Studies that have investigated the relationships between punitive attitudes and the Five-Factor Model (FFM) of personality (Costa & McCrae, 1992), which comprises the broad bandwidth dimensions Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, are surprisingly limited. Robbers (2006) showed that Neuroticism and Extraversion predict pro-death penalty attitudes among both men and women. Furthermore, Openness was shown to predict anti-death penalty attitudes in men, whereas in women Conscientiousness was related to pro-death penalty attitudes and Agreeableness to anti-death penalty attitudes. Clark, Boccaccini, Caillouet and Chaplin (2007) reported that Extraversion is associated with non-guilty verdicts. Other studies only included Neuroticism and Extraversion. McKelvie and Daoussis (1982) and McKelvie (1983) reported Extraversion to predict pro-death penalty attitudes, while Lester and Maggioncalda-Aretz (1997) found Neuroticism and Extraversion not to be associated with death penalty attitudes and Zaleski, Eysenck & Eysenck (1995) found a negative relationship of Neuroticism and Extraversion with punishment. In sum, studies investigating the relationship of punishment with broadband personality have yielded inconsistent results.

The relationship between right-wing ideology and punitive attitudes

Unlike the scarce research on the relationship of punishment with broadband personality, there has been some scholarly attention to its relation with right-wing ideology. However, there is a growing consensus that right-wing ideology is composed of two broad underlying social attitudes (see Duckitt, 2001). The first dimension is reflected by cultural or social conservatism and traditionalism at one pole and openness, autonomy, liberalism, or personal freedom at the other pole. According to Duckitt, Right-Wing Authoritarianism (RWA) is a typical indicator of this pattern of broad social beliefs, which consists of three attitudinal clusters referring to adherence to conventional norms, submission to authorities,

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and aggression toward out-groups that deviate from society's norms. The second dimension refers to the economic-hierarchical perspective, with economic conservatism and adherence to capitalist ideology, private initiative, and unrestricted competition among individuals at one pole and egalitarianism, humanitarianism, social welfare, or concern at the other pole. Social Dominance Orientation (SDO) is considered a typical indicator of this broad social belief dimension, which is defined by Pratto, Sidanius, Stallworth and Malle (1994: 742) as 'a general attitudinal orientation toward intergroup relations, reflecting whether one generally prefers such relations to be equal, versus hierarchical'.

Previous studies on the relationship between right-wing ideology and punitive attitudes have mainly focused on the social-cultural dimension, generally revealing a positive relationship between authoritarianism and Harsh Punishment. In particular, positive relationships emerged for support for capital punishment (Feather & Souter, 2002; McKelvie, 2007; McKee & Feather, 2008), corporal punishment (Benjamin, 2006), punitive responses in fictional transgressions (Lerner, Goldberg & Tetlock, 1998), longer sentences for criminals (Altemeyer, 1981), Harsh Punishment goals (Tam, Leung & Chiu, 2008; Carroll et al., 1987), retribution (Feather & Souter, 2002; McKee & Feather, 2008), deterrence and protection of society (Feather & Souter, 2002), and incapacitation (McKee & Feather, 2008). Moreover, high authoritarians have been found to reach a guilty verdict more frequently (Narby, Cutler & Moran, 1993). In contrast, previous studies yielded inconsistent results regarding the relationship between RWA and rehabilitation. On the one hand, Tam et al. (2008) found both variables not to be significantly related. On the other hand, Feather and Souter (2002) reported a significant negative relation between RWA and rehabilitation, while McKee and Feather (2008) obtained a significant relationship for only some RWA facet scales.

Some of these studies also tried to establish a relationship between economic-hierarchical beliefs and punitive attitudes, revealing a positive relationship between SDO and

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support for punishment in general (Tam et al., 2008), and support for more specific forms of punishment such as incapacitation and capital punishment (McKee & Feather, 2008).

Furthermore, a negative relationship has been reported between SDO and rehabilitation (Tam et al., 2008; McKee & Feather, 2008).

Toward an integrative model of dispositional variables and punitive attitudes

This study aims to explore the relationships between broad personality factors, ideology and punitive attitudes as defined by de Keijser and colleagues (2002). Therefore, we propose a multi-layered model. The top level of the model harbors the broad, core personality traits as described in the FFM (Costa & McCrae, 1992). These broad personality factors, then, affect the broad social attitudes RWA and SDO, which are located at the intermediate level, through which they impact upon the specific penal attitudes at the bottom level. There is firm evidence for the relationships between the broad bandwidth dimensions of Openness and Conscientiousness and RWA, and of Openness and Agreeableness with SDO (Sibley & Duckitt, 2008). In integrative models including broadband personality and social attitudes to explain other target variables like racism (see, for example, Ekehammar, Akrami, Gylje & Zakrisson, 2004; Van Hiel, Cornelis & Roets, 2007), broadband personality has been typically considered to be a strong basis of social attitudes, which were conceptualized as mediator variables. Zaleski et al. (1995) previously found evidence that personality traits predispose social attitudes to a certain extent.

For the lower level, previous studies revealed a two-dimensional solution of the punitive attitudes, with Harsh Punishment loading on one factor, while Social-Constructiveness loaded on the other factor (see, Carroll et al., 1987; de Keijser et al., 2002). Since, previous studies found mixed results (Robbers, 2006; Clark et al., 2007; McKelvie & Daoussis, 1982; McKelvie, 1983; Lester & Maggioncalda-Aretz, 1997), we aim to explore all direct and indirect

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relationships between broad bandwidth personality factors, social attitudes and punitive attitudes. However, we expect Neuroticism, Extraversion and Openness to experience to be related with Harsh Punishment. Based on previous research, we also expect both RWA and SDO to be related positively to adherence to Harsh Punishment. Furthermore, the relationship of Openness to Experience and Agreeableness with both anti-death penalty attitudes (Robbers, 2006) and social attitudes, leads us to expect that RWA and SDO are negatively correlated with Social-Constructiveness.

Method

Participants

The sample was recruited by undergraduate students asking their adult neighbours to participate in order to obtain a heterogeneous sample. A total of 320 questionnaires were distributed of which 220 were returned. The sample consisted of 50% males and 50% females. The mean age was 50.0 years ($SD = 14.8$).

Measures

Five-point rating scale items anchored by *certainly disagree* and *certainly agree* were used for all measures.

NEO-FFI. The authorized Dutch version (Hoekstra, Ormel & De Fruyt, 1996) of the NEO-FFI Inventory (Costa & McCrae, 1992) was used to assess the personality dimensions Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, each measured by 12 items. The Cronbach's α 's for the domain scales in the sample were as follows: Neuroticism, .81 (a sample item is 'Too often when things go wrong, I get discouraged and feel like giving up', $M = 2.73$, $SD = .65$); Extraversion .74 (a sample item is 'I am a cheerful, high-spirited person', $M = 3.47$, $SD = .53$); Openness to Experience, .75 (a

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sample item is ‘Sometimes when I am reading poetry or looking at works of art, I feel a chill or wave of excitement’, $M = 3.21$, $SD = .59$); Agreeableness, .70 (a sample item is ‘I would rather co-operate with others than compete with them’, $M = 3.61$, $SD = .49$); and Conscientiousness, .82 (a sample item is ‘I work hard to accomplish my goals’, $M = 3.77$, $SD = .57$). These reliabilities are comparable to those reported by Costa and McCrae (1992, p. 44).

RWA. Participants completed an 11-item RWA scale (Altemeyer, 1981; translated by Melen, 1991, $\alpha = .87$, $M = 2.92$, $SD = .84$). A sample item of this scale is: ‘Obedience and respect for authority are the most important virtues children should learn’.

SDO. A 14-item SDO scale (Pratto et al., 1994; translated by Duriez & Van Hiel, 2002), yielded satisfactory internal consistency, $\alpha = .87$ ($M = 2.22$, $SD = .68$). A sample item is ‘Inferior groups should stay in their place’.

Punitive Attitudes. A 53-item Punitive attitudes scale (de Keijser, 2001; de Keijser et al., 2002) was used to assess the punitive attitude dimensions: Deterrence (9 items, a sample item is ‘Fear of punishment is a useful instrument in crime prevention’, $\alpha = .91$, $M = 3.24$, $SD = .86$), Desert (10 items, a sample item is ‘Punishment is deserved suffering’, $\alpha = .84$, $M = 2.75$, $SD = .77$), Incapacitation (6 items, a sample item is ‘For a great many offenders, it is safer for society to have them locked up rather than walking around freely’, $\alpha = .87$, $M = 3.75$, $SD = .78$), Moral Balance (6 items, a sample item is ‘Punishment restores the legal order in society disrupted by a crime’, $\alpha = .79$, $M = 3.11$, $SD = .71$), Rehabilitation (8 items, a sample item is ‘Delinquency is a problem of education and development’, $\alpha = .63$, $M = 3.44$, $SD = .57$) and Restoration (14 items, a sample item is ‘The criminal justice process should accommodate the process of negotiation between offender and victim’, $\alpha = .71$, $M = 3.01$, $SD = .49$). These reliabilities are comparable to those reported by de Keijser (2001, p.66 and p. 97).

Results

Structure of the punitive attitudes

Given de Keijser et al.'s (2002) claim of two dimensions underlying punitive attitudes (i.e., harsh treatment in general versus Social-Constructiveness), we performed a Principal Component Analysis (PCA) with Varimax rotation on the punitive attitude scales to explore their underlying structure. This resulted in a three-component solution (see Table 1) explaining 79% of the variance. As expected, we found separate 'harsh treatment' and 'Social-Constructiveness' dimensions. However, moral balance loaded on a separate third dimension. This finding is not entirely surprising, since de Keijser et al. (2002: 331) state: 'Moral Balance seems laterally related to these 'punitive' concepts ...'

Insert Table 1 about here

Correlations between personality, social and punitive attitudes

Table 2 reports the correlations between the study's variables. A number of noteworthy results were obtained. Neuroticism was positively related to Harsh Punishment and social constructive treatment. Furthermore we obtained a strong negative relationship between openness for experience and Harsh Punishment. Conscientiousness showed a positive relationship with Harsh Punishment. Extraversion and agreeableness were not significantly related to any of the punitive attitudes. The results regarding Harsh Punishment corroborate earlier findings by Robbers (2006) regarding death penalty support. Finally, both RWA and SDO were strongly related to punitive attitudes, although only to Harsh Punishment. For Harsh Punishment, these

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results corroborated previous findings (Tam et al., 2008; Feather & Souter, 2002; McKee & Feather, 2008). However, the absence of a relationship of RWA and SDO with Social-Constructive treatment (Tam et al. 2008; McKee & Feather, 2008) does not correspond with previous studies which established a negative relationship of social attitudes with rehabilitation (Feather & Souter, 2002; McKee & Feather, 2008).

Insert Table 2 about here

The mediating role of RWA and SDO

Structural models

Structural equation modeling with latent variables was performed using Lisrel 8.72 (Jöreskog & Sörbom, 1996). In order to maintain an adequate ratio of cases to parameters and to increase the reliability of our indicators, three parcels of items were created in a random fashion for each latent factor and these parcels were used as indicators instead of separate items. For punitive attitudes, based on the principal component analysis reported above, we used the scale scores for Deterrence, Desert and Incapacitation as indicators for the latent variable Harsh Punishment, the scale score of Rehabilitation and two parcels for Restoration as indicators for Social Constructive punishment and three parcels of Moral balance items as indicators for Moral Balance. Because initial data screening indicated non-normality of the data, we reported the Satorra-Bentler Chi-Squared (SBS χ^2 ; Satorra & Bentler, 1994) instead of standard Chi-Squared. Goodness of fit of the different models is evaluated by examining the Root Mean Squared Error of Approximation (RMSEA), Standardized Root Mean Squared Residual (SRMR) and comparative fit index (CFI). Suggested cut-off values for model evaluation are .06 for RMSEA, .08 for SRMR, and a CFI value larger .95 (Hu & Bentler,

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1999). Differences between competing nested models are evaluated using differences in chi-square relative to difference in degrees of freedom.

We first examined the fit of a measurement model. This model demonstrated an acceptable fit in the sample ($\chi^2 = 616.31$, $df = 360$, $RMSEA = 0.056$; $SRMR = 0.079$; $CFI = .95$). Next, we tested the fit of a model (Model A) that allows all paths between personality and ideological variables, between ideological variables and punitive attitudes and all direct paths between personality and punitive attitudes. The fit of this model was acceptable ($\chi^2 = 624.61$, $df = 363$, $RMSEA = 0.057$; $SRMR = 0.080$; $CFI = .95$). As can be seen in Fig 1, there were several paths that were not significant. Parameter estimates for the paths between the personality factors and social attitudes indicated that Openness to Experience –and surprisingly- Neuroticism and Extraversion were related to RWA. In line with expectation, the personality factors Openness to Experience and Agreeableness were related to SDO. The relationship between Neuroticism and Harsh Punishment was fully mediated by social attitudes (indirect effect = .10, $p < 0.05$, direct effect = .09, n.s.). However, the relationship of Openness to Experience (indirect effect = -.41, $p < 0.001$, direct effect = -.28, $p < 0.01$) and Extraversion (indirect effect = .14, $p < 0.01$, direct effect = .20, $p < 0.01$) with Harsh Punishment was only partially mediated by social attitudes. As can be seen, was the effect of Neuroticism on social constructiveness not mediated by the social attitudes (indirect effect = .03, n.s., direct effect = .37, $p < 0.01$). Furthermore, there were no significant direct or indirect between the personality factors and Moral Balance. However, we did obtain a significant effect of RWA on this punitive dimension.

Insert Figure 1 about here

Next, we compared the fit of this Model A which allowed both direct and indirect effects of personality on punitive attitudes, to the fit of a model that only allowed indirect effects through RWA and SDO (Model B). The fit parameters for this model did not fall in the range specified above to indicate acceptable fit ($\chi^2 = 764.65$, $df = 378$, $RMSEA = 0.068$; $SRMR = 0.085$; $CFI = .92$) and the fit of Model B was significantly worse than the initial model ($\Delta\chi^2 = 35.95$, $\Delta df = 15$, $p < .01$), suggesting that there are substantial direct effects as well as those mediated through RWA. We also estimated total, direct and indirect effects from model A, and the results can be found in Table 3.

Insert Table 3 about here

Discussion

The present study's goal was to integrate the broad bandwidth personality dimensions of the Five-Factor Model and social attitudes (RWA and SDO) to predict punitive attitudes. This study made use of an instrument integrating the punitive attitudes pertaining to the grand theories of utilitarianism, retribution, and restorative justice (de Keijser et al., 2002). Only scarce evidence is yet available on the relationship between the broad bandwidth personality traits and punitive attitudes. The few studies that did investigate this issue mainly focused on capital punishment (Robbers, 2006; Lester & Maggioncalda-Aretz, 1997; McKelvie & Daoussis, 1982; McKelvie, 1983; but for an exception, see Clark et al., 2007). No previous studies have combined broadband personality and social attitudes in a multi-layer model explaining punitive attitudes.

Several noteworthy results were obtained. First and largely in line with de Keijser and colleagues (2002), our results revealed that the specific punitive attitudes referred to a limited number of uncorrelated higher order factors. Items pertaining to deterrence, desert, and

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incapacitation loaded on a Harsh Punishment dimension, whereas the items of the rehabilitation and restoration scales loaded on a Social-Constructive treatment dimension. Finally, items of the moral balance scale loaded on a separate dimension.

Second, the broadband personality factors Openness, Extraversion and Neuroticism were significantly related to Harsh Punishment. These results corroborate Robbers (2006) who reported such relationships with regard to capital punishment. The significant relationship between Extraversion and Harsh Punishment is in line with Robbers (2006), McKelvie (1983), and McKelvie and Daoussis (1982), but opposing Clark et al. (2007), Lester and Maggioncalda-Aretz (1997) and Zaleski et al. (1995). With respect to the Social-Constructive treatment dimension, only one significant personality correlate was obtained, namely Neuroticism, which is in line with the findings by Clark et al. (2007). However, a high score on Neuroticism appears to be indicative for support of both Harsh Punishment, as well as Social-Constructive treatment. This finding seems somewhat contradictory and adds further to the mixed results from earlier studies. It may be considered, though, that people high on Neuroticism weigh all aspects of a crime and depending on the circumstances choose the treatment they considered most appropriate. This could be further explored in a study that includes case-specific information to see its effect on the relationship between broadband personality and punitive attitudes.

Third, the substantial contribution of social attitudes to the variance in Harsh Punishment is in line with previous research on authoritarianism (e.g., Altemeyer, 1981; Carroll et al., 1987; Feather & Souter, 2002). However, our data do not corroborate the previously found relationship between SDO and Harsh Punishment (e.g., McKee & Feather, 2008; Tam et al., 2008). Given the high correlation between RWA and SDO, the possible effect of SDO may largely have been explained through RWA. Furthermore, Moral Balance was predicted by RWA, which may be expected since this punitive dimension is generally

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seen as belonging to harsher forms of punishment (de Keijser et al., 2002). The expected correlation of social attitudes with Social-Constructive treatment was not found.

Fourth, several significant indirect relationships were obtained for Harsh Punishment. In line with our expectations, indirect effects of Openness, Extraversion and Neuroticism were mediated by RWA. While Neuroticism was fully mediated by RWA, a significant direct effect of Openness and Extraversion remained. Surprisingly, SDO did not show to be significant mediator of the effects of the broadband personality factors on punishment.

Looking at the results from the perspective of the expectation regarding the general model, it can be concluded that especially the predictions regarding Harsh Punishment have been confirmed, none withstanding the absence of the expected contribution of SDO to Harsh Punishment. Conversely, the Social-Constructiveness part of the model proved to be poorly related to social attitudes and broadband personality. Furthermore, we needed to add Moral Balance as an extra punitive dimension to the proposed model. However, it also showed little evidence for a relationship with the social attitudes as well as with the personality factors. In other words, whereas the Harsh Punishment attitude was largely driven by RWA and broadband personality, Social-Constructiveness and Moral balance was only poorly related to these individual differences.

Even though, the present study is a first exploration, further study may have important practical consequences. Considering, the mean scores for the different punitive attitudes all lay around the scales' theoretical midpoint, it may be argued that people are open to consider the different punitive approaches. The strong relationship between ideology and Harsh Punishment, indicates that a policy maker from a right-wing party who advocates a specific punitive strategy, would be better of promoting Harsh Punishment to get the full support of people supporting his party, while a more lenient policy in terms of punishment might be opposed by them. The tendency to support Social-Constructive measures towards delinquents

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is only weakly related to social attitudes and broadband personality. Thus, these results do not allow to make such predictions for someone who wants to appeal more liberal people.

These results could also have an impact for applied use in jury selection. In a study conducted on a sample of 19 attorneys, Olczak, Kaplan & Penrod (1991) found that open-mindedness (37%), impressibility (21%), and attentiveness (21%) were the characteristics most frequently used in jury selection criteria. Clark et al. (2007) categorized these traits as indicative of Openness, Agreeableness, and Conscientiousness. Did the attorneys studied by Olczak et al. (1991) use the right criteria? In fact, when defending an accused, they choose well regarding Openness, as our results attest to a negative relationship between Openness and the support for Harsh Punishment. However, when pleading against the accused, our results indicate that one should choose jury members scoring high on Extraversion.

This study's aim to explore the relationship between broad bandwidth personality factors and the different motives to punish can be considered a strength, since previous studies primarily focused on capital punishment. Another strength of this study lies in the combination of broadband personality and social attitudes in a multi-layer model explaining punitive attitudes. No previous studies have done this before. Nevertheless, this study also has some limitations. The punitive attitudes scale (de Keijser, 2001; de Keijser et al., 2002) was initially developed for use among judges and law students. The terminology used in some of the items may have been difficult to understand for lay people. For future research, we suggest to adapt the wording of items so that they would become more suitable for use in the general population, including for people with little or no formal schooling. Furthermore, due to the sampling method, we cannot claim to have reached a representative sample of the Belgian population and the sample size also in this study is rather small. However, this study is only a first attempt to explore and explain the relationships between the Five-factor

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personality model and punitive attitudes, and the role of ideology in this relationship.

Nevertheless, we would suggest more representative sampling in the future.

Conclusions

In concluding, we only found support for Harsh Punishment to be related to RWA and broad bandwidth personality. Nevertheless, this study is only a first exploration of the role of social attitudes in the relation between broad bandwidth personality and punitive attitudes. Further study to further clarify these relationships is needed.

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Running Head: PUNITIVE ATTITUDES

Table 1

Factor loadings of the punitive attitudes

	HP	SC	MB
Deterence	.899	.062	.103
Desert	.875	.110	.108
Incapacitation	.849	.063	.108
Rehabilitation	-.101	.816	.281
Restoration	.307	.801	-.127
Moral balance	.204	.097	.942

Note: HP = Harsh Punishment; SC = Social-Constructive ; MB = Moral Balance

Running Head: PUNITIVE ATTITUDES

Table 2

Correlations between personality, punitive attitudes and social attitudes

	N	E	O	A	C	RWA	SDO
HP	.15*	.10	-.55**	-.08	.21**	.72**	.45**
SC	.15*	.04	-.02	.03	.13	.13	.01
MB	.04	.13	.11	.12	.02	.04	-.12
N	1	-.17*	-.10	-.20**	-.21**	.15*	.07
E		1	.17*	.10	.29**	.04	.01
O			1	.13*	-.12	-.53**	-.34**
A				1	.05	-.13	-.32**
C					1	.23**	.02
RWA						1	.48**
SDO							1

Note: * $p < .05$; ** $p < .01$. HP = Harsh Punishment; SC = Social-Constructive ; MB = Moral Balance; N = Neuroticism; E = Extraversion; O = Openness; A = Agreeableness; C = Conscientiousness; RWA = Right-Wing Authoritarianism; SDO = Social Dominance Orientation

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Table 3

Total, direct and indirect effects of personality on punitive attitudes through social attitudes

	Total	Direct	Indirect total	Indirect via RWA	
				via RWA	Via SDO
Harsh					
N	.19**	.09	.10*	.10	-.01
E	.34**	.20**	.14**	.12	.02
O	-.69***	-.28**	-.41***	-.37***	-.04
A	.06	.11	-.05	-.02	-.04
C	.03	-.01	.04	.05	-.01
Social					
N	.40***	.37**	.03	.04	-.01
E	.04	-.03	.07	.05	.02
O	-.13	.08	-.21*	-.15	-.06
A	.14	.19	-.05	-.01	-.05
C	.15	.14	.01	.02	-.01
Moral Balance					
N	.19*	.12	.07	.07	.01
E	.20*	.14	.06	.07	-.02
O	-.07	.12	-.19*	-.25*	.06
A	.21*	.18	.03	-.01	.05
C	-.03	-.08	.05	.03	.01

* $p < .05$, ** $p < .01$, *** $p < .001$. E = Extraversion; O = Openness; A = Agreeableness; C =

Conscientiousness; RWA = Right-Wing authoritarianism; SDO = Social Dominance

Orientation

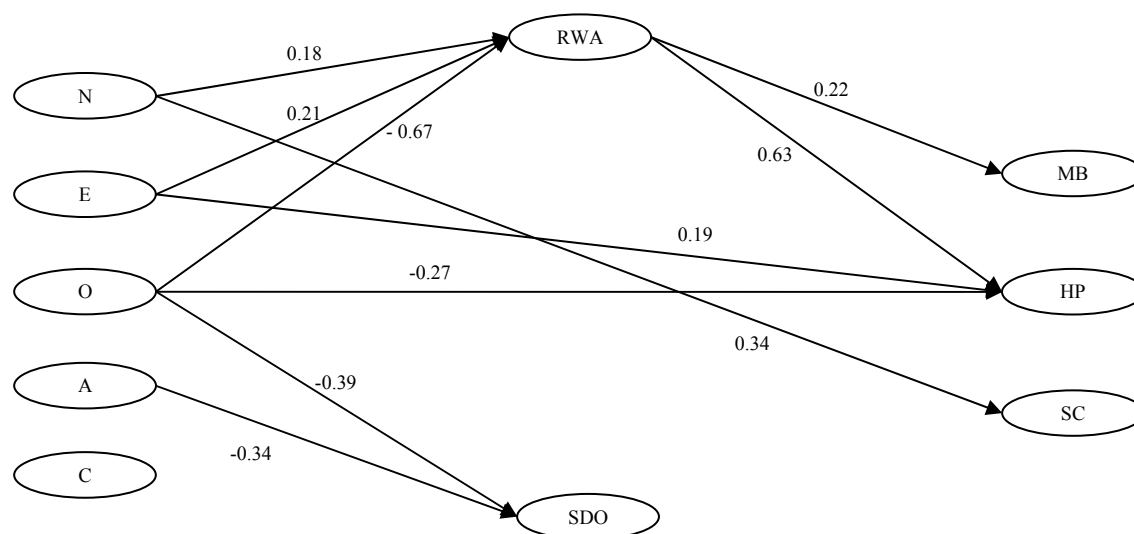


Figure 1. A hypothetical model of the causal relation between personality, social attitudes and punitive attitudes.