

Research Reports

Social Dominance Orientation, Right-Wing Authoritarianism, and Willingness to Help Addicted Individuals: The Role of Responsibility Judgments

Torleif Halkjelsvik*^a, Jostein Rise^a

[a] Norwegian Institute for Alcohol and Drug Research, Oslo, Norway.

Abstract

We investigated how Social Dominance Orientation (SDO) and Right Wing Authoritarianism (RWA) were related to motivation to personally help addicted individuals and approval of public spending on addiction treatment. The study employs an attributional analysis based on Weiner's theory of social motivation. SDO was associated with less approval of public spending on treatment and lower motivation to personally help. RWA was associated with less approval of public spending but exerted a direct positive effect on motivation to personally help. However, the latter effect was cancelled out by an indirect negative effect from an attributional process where addicted individuals were perceived as more responsible for their condition. An association between RWA and judgments of responsibility was further indicated in an investigation of positive vs. negative outcomes of addictions. RWA correlated with ratings of personal responsibility across the valence of outcomes, whereas SDO did not. In conclusion, the relation between RWA and (lack of) motivation to help is partly explained by a greater emphasis on personal responsibility, and the relation between SDO and (lack of) motivation to help is independent of responsibility judgments.

Keywords: Social Dominance Orientation, Right-Wing Authoritarianism, attribution, addiction, helping

Europe's Journal of Psychology, 2014, Vol. 10(1), 27–40, doi:10.5964/ejop.v10i1.669

Received: 2013-08-02. Accepted: 2013-11-08. Published (VoR): 2014-02-28.

Handling Editor: Andrew Allen, University College Cork, Cork, Ireland

*Corresponding author at: Torleif Halkjelsvik, SIRUS, PB 565 Sentrum, 0105 Oslo, Norway. E-mail: th@sirus.no



This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The Right-Wing Authoritarianism (RWA) scale originates from Altemeyer's extensive line of research on "The Authoritarian Personality" (see Altemeyer, 1996). This concept was based on earlier works of Adorno and colleagues (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950). Right-Wing Authoritarians are characterized by conventionalism, submission to authorities, and a desire to punish offenders and others that constitute a threat to law and order. We believed that such characteristics could be related to the perception of, and the motivation to help, people who are addicted to substances such as alcohol. Another type of ideological orientation, as measured by the Social Dominance Orientation (SDO) scale, reflects the approval of hierarchical order of groups in the society (Pratto, Sidanius, Stallworth, & Malle, 1994). Those with a high level of SDO accept and even desire that other social groups are inferior and that some groups have less opportunities in life. Since people who are addicted might constitute a subordinate group, we also believed that SDO would be of importance in people's social motivation towards the addicted.

Both SDO and RWA are related to prejudice towards out-groups (e.g. Sibley & Duckitt, 2008), but likely through different motivational routes. Duckitt (2006) found the effect of RWA on prejudice towards a given group to be

mediated through perceived threat from the group, that is, to what extent the group threatened social control, order, cohesion, and stability. SDO, on the other hand, motivated prejudice through the distribution of resources. Those with high SDO scores were reluctant to distribute resources and reluctant to give influence to subordinate groups, which, according to Duckitt (2006), were driven by competitiveness over relative dominance. Two different worldviews might underlie RWA and SDO. A view of the world as a dangerous place to live, with high levels of crime and immoral behavior, leads to a higher level of RWA. A view of the world as a competitive place, with inequality and scarcity of resources, leads to a higher level of SDO (Sibley, Wilson, & Duckitt, 2007).

Thus, SDO and RWA seem to constitute two measures closely linked to prejudice towards subordinate groups, but likely through different mechanisms. In the present study, we were mainly interested in how people's judgments of responsibility for addictions and beliefs regarding help towards the addicted were affected by these two ideological orientations.

Attributions and Helping

To consider the effects of SDO and RWA on judgments of responsibility for addictions and consequences for helping, we will employ Weiner's (2006) general theory of social motivation. Below we describe the theory and related research that may suggest how SDO/RWA can be linked to attributions and helping.

A large body of research, summarized by Weiner (2006), supports an attributional account of social behaviors such as help giving and aggression. The theory posits that judgments of responsibility for a condition or situation are based on internal and external attributions of causes, and whether the internal causes are controllable. In turn, the judgments of responsibility are consequential for the affective reactions of sympathy and anger towards another person, which again predicts behavioral intentions towards the person. According to the theory, if one believes that the causes of an addiction are related to controllable actions of the addict, and to a lesser extent uncontrollable factors like illness or external influences, the person is held responsible for his/her condition. When a person is perceived as responsible for an addiction, this would result in less sympathy and more anger towards the addict. In relation to aggression or punishment, more responsibility should lead to higher levels of aggression/punishment, mediated through the emotional reaction anger. In relation to helping behavior, more responsibility should lead to less willingness to help, mainly mediated through the emotional reaction sympathy, but perhaps also to some extent anger (see Rudolph, Roesch, Greitemeyer, & Weiner, 2004; Weiner, 2006).

Kymalainen and Weisman (2004) found that substance abuse was considered as more internally controllable than disorders like physical- and mental illness. Accordingly, people reported more negative emotions and less positive emotions towards a hypothetical sibling who suffered from substance abuse, and were also less willing to help this sibling. Similarly, Weiner, Perry, and Magnusson (1988) found relatively harsh judgments towards a hypothetical person suffering from substance abuse. In the current paper we investigate judgments of responsibility and helping intentions related to *addictions*, and not drug abuse. We suppose that the former is more ambiguous as to whether the person is responsible or not, since addictions may imply a loss of control. A previous study on perceptions of addicts (Rise, Aarø, Halkjelsvik, & Kovac, 2013) found support for the basic mediating chain of Weiner's model of social motivation (Weiner, 2006). That is, causal attributions predicted responsibility judgments and the effect of responsibility on helping was mediated through the emotional reaction sympathy.

The question of the current paper is not how people in general attribute blame to the addicted, but rather how this varies as a function of individual differences on the two ideological orientations, and how these differences affect

the attribution process and the willingness to help. Previous studies have found relations between attributions, helping and political ideology suggesting that those with higher levels of SDO and RWA may blame the addict and be less willing to help. For instance, Right-Wing Authoritarianism and Social Dominance Orientation are closely related to conservative political ideology (e.g., Peterson, Doty, & Winter, 1993; Van Hiel & Mervielde, 2002), and in a study of perceptions of poverty, Zucker and Weiner (1993) found that conservatism was systematically linked to less willingness to personally help and to judgments of deservingness to government assistance such as welfare. Political conservatism influenced willingness to help and approval of welfare for the poor through a chain of causal beliefs, responsibility judgments, and emotional reactions in accordance with the theory of social motivation outlined above, but had no direct effect on willingness to help personally. On the other hand, political conservatism exerted a direct impact on welfare judgments, and there was also a direct path from judgments of responsibility, bypassing emotional reactions, to welfare judgments (Zucker & Weiner, 1993). A similar result was obtained by Skitka (1999) in a study of deservingness of public assistance after a natural disaster. Political conservatism positively predicted perceived responsibility, which, mediated through emotional reactions, predicted perceived deservingness of aid. As in the study by Zucker and Weiner, there was also a direct path from political orientation to perceived deservingness of public assistance. This direct effect was stronger than the indirect effects through attributions.

Skitka and Tetlock (1992) found that conservatives withheld aid from hypothetical persons personally responsible for their needs, regardless of the severity of need and the likelihood of effective helping. In a later study, the same authors found that a factor reflecting a high RWA and low level of egalitarianism, the latter being closely related to SDO, was associated with generally less allocation of assistance, and particularly less assistance to claimants that were personally responsible for their situation (Skitka & Tetlock, 1993). As in the aforementioned studies, there were direct effects from political orientation to deservingness of help, but also indirect effects through responsibility and emotional reactions towards the person.

In light of the above literature there are reasons to believe that SDO and RWA are related to attributions of causes for addictions, and that this has consequences for helping. However, because past research shows evidence of direct effects of conservative ideology on helping, and because addicted persons might be perceived as a subordinate out-group that violates social norms, we expect both types of ideological orientations to be associated with a reluctance to help—independent of people's level of responsibility. This possibility is also suggested by results that link SDO and RWA to prejudice towards a range of different out-groups, many of which have no influence over their social category belonging (see Duckitt & Sibley, 2007).

One interesting question is whether the two types of ideological orientations, SDO and RWA, take different routes to helping. As described above, the relation between prejudice and SDO seems to be based on a different process than the relation between prejudice and RWA. In addition, the two scales have been found to differ in prejudice towards various categories of out-groups (e.g. derogated vs. dangerous groups; Duckitt & Sibley, 2007).

The Present Research

We expect both SDO and RWA to be positively related to the degree of personal responsibility and internal attribution of causes for addictions. In turn, these attributions are expected to affect emotional reactions to the addict, followed by less motivation to help.

We are interested in two different measures of helping. One that asks for willingness to personally help the addicted individual, and a less personal measure of motivation to help, namely the approval of public spending for treatment of the individual in question. Since political ideology has been found to directly govern only the impersonal measure of helping (Weiner, 2006), we suspected that the two measures of helping could be guided by different sets of predictors.

In order to investigate the effect of SDO and RWA on attributions and helping, we presented two target persons, one addicted to heroin and another addicted to alcohol, and we assessed relevant variables to measure the attributional process (attributions of causation, responsibility and emotions) and its consequences for the two different measures of helping.

In addition to the correlational approach outlined above, which we will refer to as Part 1 of the study, we also employed an experimental design to further explore the importance of attributions in the social motivation to help addicted individuals. If the relation between the two ideological orientations and the social motivation towards the addicted are founded on the belief that people are more responsible for their actions, one should expect higher levels of judged responsibility also for positive outcomes by the addicted (e.g. breaking out of the addiction). Following this line of reasoning, we compared judgments of responsibility for positive vs. negative outcomes regarding addictions (manipulated between groups). If individuals with higher scores on SDO and RWA selectively blame addicted persons for negative outcomes, and not for positive outcomes, their expected negative attitude towards helping cannot be justified through a stronger emphasis on personal responsibility. Results from the experimental investigation will be presented under Part 2.

Part 1: An Attributional Analysis

Method

Participants — Participants were recruited through the online labor market Amazon Mechanical Turk (see Casler, Bickel, & Hackett, 2013; Goodman, Cryder, & Cheema, 2013 for more information about this population) and paid \$1 for completing the survey. Eleven participants were excluded for not giving the correct response to an attentional test item that asked participants to select a specific alternative. Nineteen participants were excluded because they spent less than 14 seconds on one of the survey pages, which was shorter than the minimum amount of required time to answer the page in a testing session. The remaining sample consisted of 367 respondents. The age ranged from 18 to 72, $M = 33.7$, $SD = 11.6$, and 52% were female participants.

Procedure — A web page accessed through the Mechanical Turk interface informed potential participants about the study. By clicking the link to the survey people agreed to participate in the research project. The link opened a survey developed in the program Qualtrics. First, we requested age and sex, then participants rated the items from the SDO and RWA scales, followed by one of two priming tasks and a manipulation check. The priming tasks involved explaining sentences related to situational constraints vs. free will. This manipulation exerted a weak effect on judgments of causality, but did not interact with the SDO or the RWA scales on any of the dependent measures, $p > .05$. We therefore do not discuss this task further.

Participants were then asked to imagine meeting “Nicole”, a woman depicted in a photograph who suffered from an addiction to heroin. No other information about the person was given. The questions regarding causes, respons-

ibility, emotions towards the addict, and helping followed. A similar presentation and set of questions were given for “John”, a man addicted to alcohol. The order of John and Nicole was counter-balanced across participants.

Materials — Social Dominance Orientation. The SDO scale (Pratto et al., 1994) consists of 16 items rated on a scale from 1 (completely disagree) to 7 (completely agree). The scale measures approval of inequality among groups (e.g., “To get ahead in life, it is sometimes necessary to step on other groups”).

Right-Wing Authoritarianism. The RWA scale (Altemeyer, 2006) consists of 22 items responded to on a scale from -4 through 4, with 0 labeled as neutral and the other scale points labeled slightly, moderately, strongly, and very strongly agree/disagree. Sample item: “The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.”

Attributions, Responsibility, Emotional Reactions. Internal and external attributions were measured by asking to what extent the addiction is caused by the person himself, and to what extent the addiction is caused by external circumstances. Responsibility was measured by asking to what extent the person should be held responsible for being addicted, and emotional reactions were rated by indicating the extent one felt sympathy for, and anger towards the addicted person. All questions above were answered on a scale with six incremental alternatives from “Not at all” to “To a very great extent”.

Motivation to Help. Motivation to personally help was measured by the question: “To what extent are you willing to personally help [name of the addicted]?”, answered on the scale described in the previous section. Approval of public spending was indicated by agreement with the statement: “The society should pay for the treatment of [name of the addicted]’s [name of substance] addiction”. There were six response alternatives from “Strongly disagree” to “Strongly agree.”

Results

The ratings across the two scenarios (heroin vs. alcohol) were highly correlated. We therefore computed an index for each rating. Cronbach’s alphas and zero-order correlations between all aggregated measures can be found in Table 1. As evident from Table 1, the two types of ideological orientations demonstrated a similar pattern of zero-order correlations. The exception was that SDO correlated negatively with motivation to personally help, whereas RWA practically had no correlation with motivation to personally help. In addition, RWA seemed to have stronger correlations than the SDO with the variables Internal causes, Responsibility, and Anger.

To test how SDO and RWA affected the attributional process outlined in the introduction, we developed path models in IBM AMOS 20. The amount of missing data was low, maximum 1.9% for a single variable. We therefore performed only a single imputation (based on the Markov chain Monte Carlo method), with all variables in the model presented below as predictors in the imputation model. Indirect effects were computed with a bootstrap sample of 10000, confidence intervals and p-values were derived by the percentile bootstrap method and were not corrected for bias (see Fritz, Taylor, & MacKinnon, 2012).

Table 1

Zero-Order Correlations Between SDO, RWA, and Dependent Measures Across Two Judgments.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. SDO	(.95)								
2. RWA	.52**	(.97)							
3. Internal causes	.13*	.22**	(.84)						
4. External causes	-.13*	-.16*	-.30**	(.79)					
5. Responsibility	.15*	.21**	.71**	.30**	(.86)				
6. Sympathy	-.27**	-.27**	-.30**	.25**	-.32**	(.86)			
7. Anger	.12*	.22**	.24**	-.01	.24**	-.22**	(.87)		
8. Personal help	-.21**	-.02	-.16*	.16*	-.14*	.54**	-.03	(.88)	
9. Public spending	-.38**	-.39**	-.36**	.25**	-.44**	.62**	-.17**	.37**	(.94)

Note. Cronbach's Alpha in Parentheses. *N* = 365-367.

p* < .05. *p* < .001.

First, we fit a model that roughly corresponded to the one proposed in Weiner’s theory of social motivation (Weiner, 2006), with the addition of SDO and RWA as predictors of internal and external attributions, and as direct predictors of helping. The causal chain of the indirect effect was as follows: (a) SDO and RWA (allowed to correlate), (b) internal and external causal attributions (correlated residuals), (c) responsibility, (d) the emotional reactions anger and sympathy (correlated residuals), and (e) motivation to personally help and approval of public spending. The model provided a poor fit to the data, $\chi^2 = 91,692$, *df* = 17, *p* < .001; *NFI* = .905; *CFI* = .920; *RMSEA* = .110, *AIC* = 165.692. After inspecting the covariance matrix and modification indices (Chi-square threshold = 4) we included several potentially relevant paths, then we trimmed the model for paths with *p*-values below .05 (starting with the lowest coefficient). The resulting model is presented in Figure 1, $\chi^2 = 19.783$, *df* = 16, *p* = .230, *NFI* = .979, *CFI* = .996, *RMSEA* = .025, *AIC* = 95.783.

If we first ignore the influence of the SDO and RWA we see that the model is relatively consistent with previous work on Weiner’s model of social motivation (e.g., Weiner, 2006). Attributions of causality predicted responsibility judgments, responsibility predicted the emotional reactions, and sympathy predicted helping. There was no effect of anger on motivation for personal or public helping, but it is not uncommon to find small or no effects of anger on willingness to help (see Weiner, 2006, Table 2.5). There was also a direct path from responsibility to public spending, which is consistent with the results on welfare judgments in the study by Zucker and Weiner (1993). The direct path from external attributions to sympathy, bypassing responsibility, was not expected, but overall, the data behaved as in previous studies (see Rise et al., 2013).

Motivation to Personally Help — The model predicted 31% of the variance in the measure of motivation to personally help. The strongest predictor was sympathy. RWA, but not SDO, was indirectly related to sympathy through attributions, and both RWA and SDA were directly associated with lower sympathy towards the addicted. The total indirect effect of RWA on motivation to personally help was $\beta = -.092$, 95% CI [-.157, -.034], and the total indirect effect of SDO was $\beta = -.085$, 95% CI [-.147 to -.026]. The separate indirect effect of RWA via attributions was small, which is not surprising since the effect dilutes through the chain of variables, but the influence was statistically significant, $\beta = -.034$, 95% CI [-.055 to -.016].

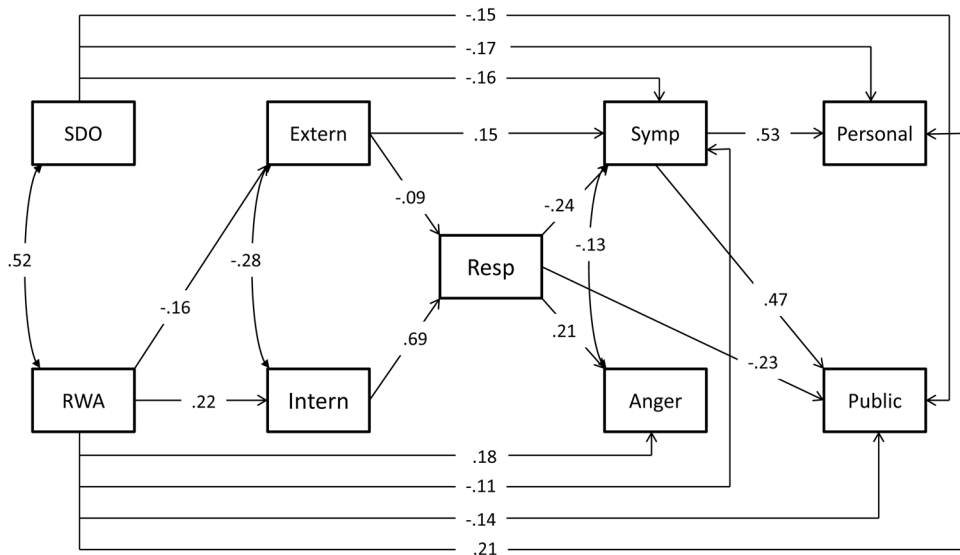


Figure 1. Model predicting motivation to personally help and approval of public spending for treatment of the addicted.

SDO = Social Dominance Orientation Scale; RWA = Right-Wing Authoritarianism Scale; Extern = Attributions to external cause; Intern = Attributions to internal cause; Resp = Responsibility; Symp = Sympathy; Personal = Motivation to personally help; Public = Approval of public spending on treatment.

As evident from Figure 1, both scales also exerted a direct effect on willingness to help. It is noteworthy that SDO showed the hypothesized negative effect on motivation to personally help, $\beta = -.173$, 95% CI [-.274, -.070], whereas RWA exerted a positive effect on motivation to personally help, $\beta = .210$, 95% CI [.111, .308]. This means that when the impact of SDO and sympathy were partialled out, higher scores on the RWA scale were actually associated with more willingness to help, a pattern which was not apparent from the zero-order correlations in Table 1.

Public Spending — The model explained 50% of the variance on this measure. Consistent with past research on welfare judgments (Zucker & Weiner, 1993), sympathy and responsibility predicted approval of public spending on treatment of the addict. The total indirect effect of SDO on public spending was $\beta = -.076$, 95% CI [-.133, -.022], and the total indirect effect of RWA was $\beta = -.120$, 95% CI [-.180, -.060]. The separate indirect effect of RWA on public spending through attributions was statistically significant, $\beta = -.067$, 95% CI [-.104, -.036]. As shown in Figure 1, public spending was also predicted by direct effects from both SDO and RWA. Higher SDO and higher RWA were independently associated with less approval of public spending for treatment of the addicted.

Contrary to our expectations, the results above revealed that attributions played only a minor role in the association between RWA and willingness to help, and no role in the association between SDO and willingness to help. RWA seemed to affect the attributional process at several stages, whereas SDO was only associated with lower levels of sympathy. However, the most substantial influence of the ideological orientations on both measures of help were direct effects that did not involve attributional cognitions or affective reactions. For motivation to personally help the effects of SDO and RWA went, surprisingly, in opposite directions, but for approval of public spending, the influences of both scales were negative.

Part 2: Responsibility for Positive and Negative Outcomes

Method

Part 2 was given in the same survey and with the same respondents as reported in Part 1. Participants were randomly divided to one of two conditions. One group was asked to assign responsibility for negative outcomes regarding alcohol and heroin addiction (becoming addicted to alcohol and heroin, respectively) and the other group were asked to assign responsibility for a positive outcome (breaking out of heroin and alcohol addictions, respectively). Level of responsibility was assigned on a scale from 0 (Not responsible at all) to 10 (Completely responsible) to the following parts: 1) The society, 2) Local, state and/or federal governments, 3) Family/friends, 4) The person himself/herself.

After completing the above judgments, participants were randomly divided into two groups again, independent of the first random allocation. One group judged responsibility for a positive outcome of treatment through public health services (breaking out of the addiction), and the other group judged responsibility for a negative outcome of treatment through public health services (remaining addicted). Levels of responsibility (from 0 to 10) were assigned to the same parts as listed above. Participants were debriefed, thanked, and on the last page of the survey they were given an individual code required for submission of the work on the Mechanical Turk web site.

Results

The judgments of responsibility for heroin and alcohol addictions were quite similar. We therefore computed aggregated ratings, Cronbach's Alphas = .83 to .95. Mean ratings of responsibility for the four different parts, along with rank correlations between ratings and the two ideological orientations, can be found in Table 2. The ratings of personal responsibility (labeled as "Personal") were highly skewed. For all items regarding the responsibility of the addict himself/herself, between 40-50% of the respondents chose response alternative 10 ("Completely Responsible"). For this reason Kendall's tau b correlations are reported in Table 2.

Table 2

Rank-Correlations (Kendall's tau b) Between Judgments of Responsibility and the Two Ideological Orientations for Negative and Positive Outcomes, With Means and Standard Deviations for Ratings of Responsibility (Scale From 0 to 10).

	Outcome							
	Negative (n = 174 to 182)				Positive (n = 182 to 189)			
	<i>r_b</i>		<i>M</i>	<i>SD</i>	<i>r_b</i>		<i>M</i>	<i>SD</i>
SDO	RWA	SDO			RWA			
Heroin/Alcohol addiction								
Society	-.126*	-.127*	3.0	2.1	-.087	-.083	3.0	2.3
Governments	-.095	-.100	1.8	1.9	-.045	-.035	2.6	2.2
Family/Friends	-.021	-.058	3.8	2.5	-.049	-.029	5.9	2.2
Personal	.069	.179**	8.4	1.8	-.021	.072	8.8	1.5
Outcome of treatment								
Society	-.111*	-.171**	2.6	2.3	-.027	-.109*	3.9	2.5
Governments	-.085	-.104	2.5	2.3	-.110*	-.154**	4.6	2.6
Family/Friends	-.043	-.094	3.4	2.7	-.056	-.004	5.3	2.5
Personal	.073	.209**	8.5	2.0	-.037	.032	8.3	2.1

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

Table 2 reveals that the ideological orientations correlated negatively with assigned responsibility to the Society and Governments. Regarding ratings of the personal responsibility of the addict, it looks like SDO was unrelated to responsibility judgments, whereas RWA was positively related to the level of personal responsibility. Judged by the magnitude of the correlations, it seems like Right-Wing Authoritarians selectively assigned more personal responsibility to negative outcomes than to positive outcomes. In order to statistically test this pattern, we divided participants into four groups according to their ratings: (a) Complete Personal Responsibility ($M = 10$); (b) Very High Personal Responsibility ($M = 9$ to 9.5); (c) High Personal Responsibility ($M = 8$ to 8.5); and (d) Medium to Low Personal Responsibility ($M < 7.5$). This was done as a measure against the problematic distribution of the variable. We performed a hierarchical linear regression¹ with the new personal responsibility variable as dependent, and the following predictors in the first block: Outcome (negative vs. positive), SDO, and RWA (continuous measures were based on z-scores, and Outcome was recoded -1 and 1). There was a main effect of RWA, $\beta = .158$, $p = .009$, and Outcome, $\beta = .162$, $p = .002$, indicating higher ratings of personal responsibility for those scoring high on the RWA scale and higher ratings of personal responsibility in the positive scenario. In the second block we entered the two interaction terms RWA x Outcome and SDO x Outcome. The R^2 change (.007) was not statistically significant, $p = .263$.

A similar procedure was performed with the personal responsibility ratings of the positive vs. negative outcome of treatment scenario (single-item ratings). We first tested for sequence effects from the first random assignment, but found no main effect or interaction with the second random assignment, $p > .6$. The R^2 change (.003) after including the interaction terms was not significant, $p = .572$, and suggested that assignment of responsibility was not dependent on valence of outcome. The only significant predictor was the main effect of RWA, $\beta = .177$, $p = .004$.

The two regression analyses above showed that those with higher scores on RWA rated the addict as more responsible across the valence of the outcomes, whereas SDO seemed to be unrelated to the judgments of personal responsibility.

Discussion

In the present paper we found that RWA and SDO were associated with two different forms of helping, willingness to personally help and approval of public spending for treatment. Although we found indirect effects on helping through attributions for the RWA scale and indirect effects through sympathy for both RWA and SDO, the relation between the two scales and helping was largely direct. A test of differences between judgments of responsibility for positive and negative outcomes further showed a relation between RWA and responsibility judgments across different types of outcomes, but not a relation between SDO and responsibility. This suggests that the negative attitude towards public spending among high RWAs is partly explained by a greater emphasis on personal responsibility. On the other hand, SDO was not related to judgments of responsibility, and not related to attributions in the path analyses described in Part 1 of the study. Thus, the negative influence of SDO on both willingness to personally help and approval of public spending cannot be justified by a stronger emphasis on the individual as a causal and responsible agent.

The results on motivation to personally help were puzzling. In the path analysis, when the influence of SDO and sympathy were controlled for, there was a significant and positive relation between RWA and motivation to personally help. This positive effect of RWA was partly counteracted by a negative indirect effect of RWA through

attributions and sympathy, but only to a small extent. The positive impact of RWA on motivation to personally help might be related to the moral aspect of RWA. A higher score on the RWA scale is associated with endorsement of religious standards and social norms (Altemeyer, 1996, pp. 31-33), which may include helping those in need. However, the zero-order correlation revealed that high RWAs were not more likely to be motivated to personally help. Accordingly, one might speculate that even if high RWAs think it is right to help the needy, they may also show contempt towards the addict. In Figure 1 the latter effect may work through attributions and a lower level of sympathy towards the addict, whereas the direct path from RWA to personal helping could be an expression of moral duty. Such an inconsistency would be in line with other results on RWA that indicate a disposition towards double standards and contradictory beliefs (Altemeyer, 1996, p. 144). The negative association between RWA and endorsement of *public* help indeed suggests that high RWAs do not think that the addict deserves help, but instead may feel a moral responsibility to personally help.

The finding that SDO negatively predicts all forms of helping is in line with previous research. Those scoring high on SDO accept that some people are worse off than others. The path analyses presented in Part 1 and the experimental study in Part 2 suggest that attributions and judgments of responsibility has no role in high SDOs motivation to help. Those scoring high on the SDO scale do not want to help, and they are not sympathetic towards the addicts.

The most notable difference between the measures of SDO and RWA may be linked to previous results on the role of conservative political ideology (see Weiner, 2006). Only RWA paralleled these results in terms of having a direct negative effect on public spending and indirect effects on both types of motivation to help through the attributional sequence. This was not the case for SDO bypassing the attribution process and entering the motivational sequence through a low level of sympathy and having direct effects on the two helping measures.

Methodological Issues

Would our conclusions be different if we started with a different attributional model? Bäckström and Björklund (2007) investigated the antecedents of generalized prejudice, and proposed a model where reduced empathy precedes SDO and RWA (but see Sidanius et al., 2013). Applied to our case, empathy could drive both SDO and RWA, as well as sympathy, with consequences for helping. If this was the case we believe that the associations between sympathy, which is likely to be closely related to empathy, and the SDO/RWA scales would have been stronger. And the fact that SDO and RWA exerted direct effects on helping when sympathy was controlled for, may indicate that the Bäckström and Björklund model is not transferrable to motivation for helping. Furthermore, recent work by Sidanius et al. (2013) suggests that the effect of SDO on empathy is slightly larger than the effect of empathy on SDO.

McFarland (2010) also found empathy to have explanatory power in a model of generalized prejudice. In McFarland's study, SDO predicted prejudice directly, but also indirectly through reduced empathy. In addition, RWA predicted prejudice directly, but also through principled moral reasoning. This, along with our results connecting RWA to attributions and responsibility judgments, might suggest that the influence of RWA on social motivations towards out-groups originates from cognitive processes rather than immediate affect. It may however be questionable to compare previous models of prejudice to our results on helping. We did not include measures of prejudice and empathy in the current study, but the inclusion of these measures in future studies may be helpful in mapping potential paths from ideological orientations to helping.

There are at least two indications that the current data diverges somewhat from previous studies on the SDO and RWA scales. First, the Cronbach's Alphas were very high (see Table 1), suggesting that people did not differentiate much between various types of statements. However, we do not believe this is a major problem. Both SDO and RWA are balanced scales with inversely framed items and would therefore produce low alphas if people were inattentive or if they responded similarly on all statements. Another characteristic of the current data was the high correlation between SDO and RWA. Often, these scales are only weakly or moderately correlated (see Van Hiel & Mervielde, 2002). This complicates the results of analyses involving both SDO and RWA as predictors. What is left of RWA when controlling for SDO and vice versa? Although specific details in the models might be unstable, the main results are also evident from the zero-order correlations in Tables 1 and 2. Furthermore, we also tested the model separately for SDO and RWA and obtained similar results as in the combined model.

The framing of the target person might have affected the responses in the current study. Research on donation to charity have shown that it may matter whether the target person is represented as an identifiable or a statistical victim (Small & Loewenstein, 2003; Small, Loewenstein, & Slovic, 2007), although the direction of the results sometimes are unpredictable (Small et al., 2007). In the present study we used pictures of addicts, whereas in a different study that employed Weiner's social motivation model on judgments of addicted persons (Rise et al., 2013), the target of judgments was a hypothetical person. Still, both studies found support for the basic mediating chain of the Weiner model, and despite the different framing of targets and the different samples (American Mechanical Turk participants vs. representative sample of the Norwegian population) the strength of the associations between components in the models were strikingly similar. This suggests that the current results are not limited to the particular sample.

Practical Implications

Before discussing practical implications it is important to note that actual behavior was not measured in the present study. We asked for willingness to personally help addicted individuals, which in many cases would not give a true picture of actual helping behavior. This is less of a problem with helping through public spending, where people's opinion is the object of interest. Nevertheless, we consider it of value to understand willingness to personally help as a type of social perception, and as expressions of attitudes that should be somewhat related to actual helping behavior (e.g., Ajzen & Fishbein, 1977).

According to the zero-order correlation and the amount of variance explained for the two outcome measures in the path model, impersonal helping (public spending) was more predictable ($R^2 = .50$) than personal helping ($R^2 = .31$). This may be related to the notion that the latter constitutes a vague measure of willingness to perform a target behavior which may be effortful and highly dependent on the context, while the former presumably reflect degree of support for a public policy measure. It follows that interventions aimed at the variables in Figure 1 might be more successful in changing support of public spending than for changing attitudes towards personal helping.

If one has a goal to decrease the negative effect of SDO and RWA on support for public assistance, only small gains are likely when targeting perceptions of responsibility. Perhaps the level of sympathy is a slightly better target, but the results suggest that other unknown factors affect the relation between SDO/RWA and approval of public assistance. It may be more promising to change the level of SDO and RWA directly. When high authoritarians learn about their score and characteristics, they presumably want to change it towards the average, and secular education seems to lower the level of RWA (Altemeyer, 1996, pp. 303-304). Targeting the underlying worldviews of RWA and SDO should also be able to produce a change (Sibley et al., 2007). If people feel that the world is

safe, they would probably lower their levels of RWA (see also Sales, 1973), and if they perceive the world as less competitive, they would score lower on SDO. Consistent with research on high-status career tracks and racism (Sidanius, Pratto, Martin, & Stallworth, 1991), Guimond, Dambrun, Michinov, and Duarte (2003) found that SDO increased during law studies, and decreased during psychology studies. Identification with superior in-groups seems to be associated with a higher level of SDO (Schmitt, Branscombe, & Kappen, 2003). Furthermore, identifying with the nation or making the personal identity salient have been found to decrease the relation between RWA and racism (Reynolds, Turner, Haslam, & Ryan, 2001). The above literature suggests that it is possible to lower the levels of SDO and RWA, and the correlational results of the current study suggests that this might be a way to increase people's motivation to help.

Notes

i) We also performed ordinal regressions with similar results.

Funding

The authors have no funding to report.

Competing Interests

The authors have declared that no competing interests exist.

Acknowledgments

The authors have no support to report.

References

- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York, NY: Harper and Row.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888-918. doi:10.1037/0033-2909.84.5.888
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Altemeyer, B. (2006). *The authoritarians*. Retrieved from <http://members.shaw.ca/jeanaltemeyer/drbob/TheAuthoritarians.pdf>
- Bäckström, M., & Björklund, F. (2007). Structural modeling of generalized prejudice: The role of social dominance, authoritarianism, and empathy. *Journal of Individual Differences*, 28(1), 10-17. doi:10.1027/1614-0001.28.1.10
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, 29(6), 2156-2160. doi:10.1016/j.chb.2013.05.009
- Duckitt, J. (2006). Differential effects of right-wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups. *Personality and Social Psychology Bulletin*, 32(5), 684-696. doi:10.1177/0146167205284282

- Duckitt, J., & Sibley, C. G. (2007). Right-wing authoritarianism, social dominance orientation and the dimensions of generalized prejudice. *European Journal of Personality, 21*(2), 113-130. doi:10.1002/per.614
- Fritz, M. S., Taylor, A. B., & MacKinnon, D. P. (2012). Explanation of two anomalous results in statistical mediation analysis. *Multivariate Behavioral Research, 47*(1), 61-87. doi:10.1080/00273171.2012.640596
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making, 26*(3), 213-224. doi:10.1002/bdm.1753
- Guimond, S., Dambrun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality and Social Psychology, 84*(4), 697-721. doi:10.1037/0022-3514.84.4.697
- Kymalainen, J. A., & Weisman, A. (2004). Reactions toward mental, physical, and substance-abuse disorders. *Journal of Applied Social Psychology, 34*(9), 1883-1899. doi:10.1111/j.1559-1816.2004.tb02591.x
- McFarland, S. (2010). Authoritarianism, social dominance, and other roots of generalized prejudice. *Political Psychology, 31*(3), 453-477. doi:10.1111/j.1467-9221.2010.00765.x
- Peterson, B. E., Doty, R. M., & Winter, D. G. (1993). Authoritarianism and attitudes toward contemporary social issues. *Personality and Social Psychology Bulletin, 19*(2), 174-184. doi:10.1177/0146167293192006
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*(4), 741-763. doi:10.1037/0022-3514.67.4.741
- Reynolds, K. J., Turner, J. C., Haslam, S. A., & Ryan, M. K. (2001). The role of personality and group factors in explaining prejudice. *Journal of Experimental Social Psychology, 37*(5), 427-434. doi:10.1006/jesp.2000.1473
- Rise, J., Aarø, L. E., Halkjelsvik, T., & Kovac, V. B. (2013). The distribution and role of causal beliefs, inferences of responsibility, and moral emotions on willingness to help addicts among Norwegian adults. *Addiction Research and Theory*. Advance online publication. doi:10.3109/16066359.2013.785532
- Rudolph, U., Roesch, S., Greitemeyer, T., & Weiner, B. (2004). A meta-analytic review of help giving and aggression from an attributional perspective: Contributions to a general theory of motivation. *Cognition and Emotion, 18*(6), 815-848. doi:10.1080/02699930341000248
- Sales, S. M. (1973). Threat as a factor in authoritarianism: An analysis of archival data. *Journal of Personality and Social Psychology, 28*(1), 44-57. doi:10.1037/h0035588
- Schmitt, M. T., Branscombe, N. R., & Kappen, D. M. (2003). Attitudes toward group-based inequality: Social dominance or social identity? *British Journal of Social Psychology, 42*(2), 161-186. doi:10.1348/014466603322127166
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review, 12*(3), 248-279. doi:10.1177/1088868308319226
- Sibley, C. G., Wilson, M. S., & Duckitt, J. (2007). Effects of dangerous and competitive worldviews on right-wing authoritarianism and social dominance orientation over a five-month period. *Political Psychology, 28*(3), 357-371. doi:10.1111/j.1467-9221.2007.00572.x

- Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Ho, A. K., Sibley, C., & Duriez, B. (2013). You're inferior and not worth our concern: The interface between empathy and social dominance orientation. *Journal of Personality, 81*(3), 313-323. doi:10.1111/jopy.12008
- Sidanius, J., Pratto, F., Martin, M., & Stallworth, L. M. (1991). Consensual racism and career track: Some implications of social dominance theory. *Political Psychology, 12*(4), 691-721. doi:10.2307/3791552
- Skitka, L. J. (1999). Ideological and attributional boundaries on public compassion: Reactions to individuals and communities affected by a natural disaster. *Personality and Social Psychology Bulletin, 25*(7), 793-808. doi:10.1177/0146167299025007003
- Skitka, L. J., & Tetlock, P. E. (1992). Allocating scarce resources: A contingency model of distributive justice. *Journal of Experimental Social Psychology, 28*(6), 491-522. doi:10.1016/0022-1031(92)90043-J
- Skitka, L. J., & Tetlock, P. E. (1993). Providing public assistance: Cognitive and motivational processes underlying liberal and conservative policy preferences. *Journal of Personality and Social Psychology, 65*(6), 1205-1223. doi:10.1037/0022-3514.65.6.1205
- Small, D. A., & Loewenstein, G. (2003). Helping a victim or helping the victim: Altruism and identifiability. *Journal of Risk and Uncertainty, 26*(1), 5-16. doi:10.1023/A:1022299422219
- Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes, 102*(2), 143-153. doi:10.1016/j.obhdp.2006.01.005
- Van Hiel, A., & Mervielde, I. (2002). Explaining conservative beliefs and political preferences: A comparison of social dominance orientation and authoritarianism. *Journal of Applied Social Psychology, 32*(5), 965-976. doi:10.1111/j.1559-1816.2002.tb00250.x
- Weiner, B. (2006). *Social motivation, justice, and the moral emotions: An attributional approach*. Mahwah, NJ: Erlbaum.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Journal of Personality and Social Psychology, 55*(5), 738-748. doi:10.1037/0022-3514.55.5.738
- Zucker, G. S., & Weiner, B. (1993). Conservatism and perceptions of poverty: An attributional analysis. *Journal of Applied Social Psychology, 23*(12), 925-943. doi:10.1111/j.1559-1816.1993.tb01014.x

About the Authors

Torleif Halkjelsvik is a senior researcher at the Norwegian Institute for Alcohol and Drug Research. Among other topics he is interested in addictions, self-regulation, and attitude change.

Jostein Rise is a senior researcher at the Norwegian Institute for Alcohol and Drug Research. His main research areas include social cognition models, addictions, attitudes, and effects of media campaigns.