Are Attitude Towards Capital Punishment and Right-Wing Authoritarianism Related to Capital and Non-Capital Sentencing?

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Abstract

Having completed measures of attitude towards capital punishment and of right-wing authoritarianism, 807 undergraduates read a murder scenario and made judgments about offender punishment. People were more likely to recommend the death penalty if they had a positive rather than a negative attitude towards capital punishment, if they were higher than lower on right-wing authoritarianism, and if they were male rather than female. Men also chose a more severe method of execution. Importantly, people with a positive attitude towards capital punishment recommended longer prison sentences than those with a negative attitude. Practically, this implies that attitude towards capital punishment can be an extralegal factor that biases prison sentences. Theoretically, the results show that attitudes have a stronger relationship to behavior to which they are more closely related, but they do not support the contention that attitude towards capital punishment is based on right-wing authoritarianism.

Keywords: attitude towards capital punishment, right-wing authoritarianism, sex differences, crime judgments

When a criminal has been found guilty, the next step is to recommend an appropriate sentence. Such judgments should follow the law and be free of bias. That is, they should be based on evidential (legal) factors and not on extralegal factors (Mazzella & Feingold, 1994). According to law, severity of punishment varies with severity of the crime and with offender intentionality (Mueller-Johnson & Dhami, 2010; Piquero & Davis, 2004; Ryckman, Burns, & Robbins, 1986; Sinha & Kumar, 1985; Zamble & Kalm, 1990). Thus, a person convicted of first-degree murder should receive the maximum penalty.

However, research and practice have shown that sentences are sometimes influenced by extralegal factors, with more severe sentences given to minorities, the poor, men, and people who are less attractive-looking (Foley, 1987; Mazzella & Feingold 1994; Piquero & Davis, 2004; Stewart, 1980, 1985). Extralegal factors may also apply to the people making the judgments, where socioeconomic status and race may be factors (Bornstein & Rajki, 1994). Research on sex of judge, with both experimental participants and actual judges, has shown both nonsignificant (Faulkner & Steffensmeier, 1979; Goldman & Portney, 1997; Riedel, 1993) and significant results. Women often render harsher judgments than men (Bergeron & McKelvie, 2004; McKelvie, 2002), although men are usually more likely to recommend the death penalty than women (Honeyman & Ogloff, 1996). Sex of judge may also interact with sex of offender (Goldman & Portney, 1997), sex of victim (McKelvie, 2002) and the kind of crime (Bergeron & McKelvie, 2004).

In addition, attitudes and values of the judge may play a role in the sentences that they deliver. People who are more conservative (Davis, Severy, Kraus, & Whitaker, 1993) and people who are more authoritarian (Gerbasi, Zuckerman, & Reis, 1977), specifically right-wing authoritarian (Altmeier, 1996, p. 41; Feather, 1996), are more likely to render guilty verdicts (Narby, Cutler, & Moran, 1993) and are more punitive than people who are more liberal. The findings for right-wing authoritarianism are consistent with the fact that that one of its three components is authoritarian aggression, according to which people feel aggression towards others when it is sanctioned by
established authority (Altemeyer, 1981, p. 330). This reasoning might apply particularly to death penalty judgments, where the offender suffers physical harm leading to death.

Of particular relevance to this kind of judgment is the person’s attitude towards capital punishment. From the practical point of view, jurors in capital cases in the United States are screened to ensure that they are “death qualified” (Mauro, 1992). That is, if capital punishment is an option, jurors must be willing to recommend it (Horowitz & Seguin, 1986) while considering the evidence objectively (O’Neil, Patry, & Penrod, 2004). If they fail to meet these criteria, they are excluded (Conrad, 2001).

When the death penalty is recommended under these circumstances, attitude towards capital punishment is not an extralegal factor because it defines a condition that must be met for a judgment to be rendered (O’Neil et al., 2004). At the same time, it has been argued that death qualification excludes certain kinds of people, which implies that the jury may not be representative of the community. Indeed, minorities and women are underrepresented on death-qualified juries (Conrad, 2001). However, if people who favor the death penalty differ in other kinds of judgments, then attitude towards capital punishment would become an extralegal factor, and would certainly constitute a source of bias. In fact, juries that are death-qualified convict more often than those that are not (e.g., Allen, Mabry, & McKelton, 1998; Conrad, 2001; Finch & Ferraro, 1986; Moran & Comfort, 1986). Moreover, if the recommendation for punishment is a prison sentence, any relationship between attitude and length of sentence would constitute evidence of bias (Mauro, 1992; O’Neil et al., 2004). Such a result would also have implications for attitude theory, where an important issue is the relationship between attitude and behavior (Ajzen & Fishbein, 2005). It is expected that attitudes would predict behavior to which they are related. In fact, general attitudes predict aggregated behavior quite well and specific attitudes predict corresponding specific behavior quite well (Ajzen & Fishbein, 2005; Newcomb, Rabow, & Hernandez, 1992).

However, it has also been proposed that specific attitudes reflect deeper social and political values or personality (e.g., Bohm, 1987; Howells, Flanagan & Hagan, 1995; McKelvie, 1983; McKelvie, 2007b; McKelvie & Daoussis, 1982; Whisler, 2011)). If that is true, they may predict a broader set of behaviors. In particular, Eysenck (1954) has also argued that people who favor capital punishment are more conservative than people who oppose it. Consistent with this position, people who favor capital punishment have been found to be more authoritarian (Moran & Comfort, 1986; McKee & Feather, 2008; Ray, 1982, Stack, 2000; Tyler & Weber, 1982; Vidmar, 1974) and less liberal (Stack, 2000) than people who are opposed.

Based on both of these practical and theoretical considerations, McKelvie (2006) conducted a study in which Canadian undergraduates read a mock scenario in which an intentional murder was committed, after which they made capital (death penalty), capital-related (method of execution), and non-capital (length of prison time) judgments. Not surprisingly, he found that people with a positive attitude towards capital punishment were more likely to recommend the death penalty that those with a negative attitude. They were also marginally more in favor of a harsher method of execution. However, of most interest for the present argument, people who were in favor capital punishment also recommended harsher prison sentences than those who were not. This suggests that attitude towards capital punishment may be an extralegal factor in criminal judgment (a practical issue), and that it may reflect a broader set of values that favor punishing criminals (a theoretical issue). However, in a replication of this study, McKelvie (2007b) obtained mixed results, at least for the prison sentencing judgments. In Study 1, with two forms (A and B) of his Questionnaire on Capital Punishment (QCP), attitude towards capital punishment as measured by Form A was not associated with the prison sentencing judgments. In Study 2, with Form B, people with a positive attitude towards capital punishment recommended longer prison sentences than those with a negative attitude.

The Present Study

One purpose of the present study was to reexamine the relationship between attitude towards capital punishment and capital, capital-related, and non-capital judgments, using McKelvie’s (2006, 2007b) murder scenario. The central question was whether or not people with a positive attitude towards capital punishment would recommend longer prison sentences than those with a negative attitude. This would show that attitude towards capital punishment is an extralegal factor. In the three previous studies (McKelvie, 2006, and two in McKelvie, 2007b), the sample sizes for people classified as having a positive or a negative attitude were 67 and 45 respectively (McKelvie, 2006), 23, 28 and 25, 26 respectively (McKelvie, 2007b, Study 1), and 83 and 150 (McKelvie, 2007b, Study 2) respectively. Given that the previous nonsignificant relationship between attitude towards capital punishment and prison sentencing occurred with the lowest numbers, sample sizes were large in the present research. It was predicted that people with a positive attitude would be more likely to recommend the death penalty, would choose a harsher method of execution, and would recommend a longer prison sentence than those with a negative attitude. However, the third relationship might be weaker than the first two.
It was noted above that attitude towards capital punishment may be based on a deeper set of values such as conservatism or authoritarianism. Consistent with this possibility, McKelvie (2007b) found a positive relationship between scores on the QCP and scores on a version of Altemeyer’s (1996) scale measuring right-wing authoritarianism (Right-Wing Authoritarianism – Short Version Scale; RWA-SV) (see also McKee & Feather, 2008, for a similar result). The correlations for each form were .353 (Form A) and .399 (Form B). If attitude towards capital punishment is related to crime judgments, the association might be based on this deeper set of values. Consequently, the second purpose of the present study was to examine the relationship between right-wing authoritarianism and crime judgments. It was hypothesized that authoritarianism would be related to the capital, capital-related and non-capital judgments. Moreover, given that authoritarian aggression is one component of right-wing authoritarianism (Altemeyer, 1981, p. 330), it was hypothesized that authoritarianism might have a stronger relationship to capital judgments and to capital-related judgments than to non-capital (prison sentence) judgments. In addition, it was expected that the previous positive significant relationship between scores on the QCP and the RWA-SV (McKelvie, 2007b) would be replicated.

Above, it was predicted that attitude towards capital punishment would be more strongly related to the death penalty judgments than to the prison sentencing judgments. However, if the generalization to prison sentencing judgments was based on right-wing authoritarianism, it can also be predicted that the relationship between attitude towards capital punishment and prison sentencing would weaken further or even disappear when the relationship with right-wing authoritarianism was controlled. The most important contribution of the present study was to accomplish this by simultaneously examining the relationships between the two subject variables (attitude towards capital punishment and right-wing authoritarianism) and non-capital judgments of the offender.

The third purpose of the present study was to examine sex differences in the criminal judgments. This is an important practical issue, because if death-qualified juries have more men than women (Conrad, 2001), then their non-capital judgments may differ because of sex, which also becomes an extralegal factor. As noted above, research outcomes have varied, although men have been more likely to recommend the death penalty than women (Honeyman & Ogloff, 1996). Of particular interest, using the murder scenario that was employed in the present study, McKelvie (2006) found that women tended to be more severe than men for non-capital judgments, but not for capital and capital-related judgments. However, McKelvie (2007a) found that men were more likely to recommend the death penalty than women, with no significant sex difference for capital-related or non-capital judgments (McKelvie, 2007a). Overall, it seemed likely that men would favour a capital judgment more than women. However, predictions were not formulated for the effect of sex of participant on the capital-related and non-capital judgments.

Finally, based on previous results (McKelvie, 1983; McKelvie, 2007b, Studies 1 and 2; McKelvie & Daoussis, 1982; Moran & Comfort, 1986; O’Neil et al., 2004), it was expected that men would score higher than women on attitude towards capital punishment. Similarly, no sex differences were expected on right-wing authoritarianism (Altemeyer, 1988, p. 30; 1996, p. 41; McKelvie, 2007b, Studies 3 and 4).

Method

Participants

A total of 807 Canadian undergraduate students took part in this study. They represented the university population, for which the strata were programme, year of study, and sex. Because some demographic information was lacking, data were available from 797 participants. Sample size also varied because some people did not make all three kinds of judgment. Two hundred and seventy (152 women) people were tested with Form A of the Questionnaire on Capital Punishment (QCPA) and Form A of the Right-Wing Authoritarian-Short Version Scale (RWA-SVA) and 527 people (309 women) were tested with Form B of each scale (QCPB, RWA-SVB). The sample size for Form A was similar to the number of people (233) tested with QCP Form B by McKelvie (2007b, Study 2), for which significant differences were obtained between people who had a positive or negative attitude towards capital punishment. However, to maximize power for detecting both QCP and sex differences, the sample size was increased for Form B. Age was not recorded but participants were mostly between 18 and 24.

Materials

Form A and Form B of the Questionnaire on Capital Punishment (QCP) were developed by McKelvie (2007b). Each version of the questionnaire consists of 20 items (10 in favor of capital punishment and 10 against) that are rated on a 5-point scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. Scores can range from 20 to 100. McKelvie obtained the following estimates for reliability: split half: .896, .950 (Form A), .851, .935, .902, .907 (Form B); test-retest (10-14 days): .894 (Form A), .933, .913 (Form B); delayed alternate-form: .908 (Form A), .888, .850 (Form B). All values exceed the standards adopted by McKelvie (2007b; see also McKelvie, 1994, 2004): .85 for internal consistency, .80 for test-retest, and .70 for alternate-form.
Form A and Form B of the Right-Wing Authoritarian-Short Version Scale (RWA-SV) were also developed by McKelvie (2007b). Each version of the scale consists of 16 items (8 protrait and 8 contrait) that are rated on a 9-point scale: 1 = Very Strongly Disagree, 2 = Strongly Disagree, 3 = Moderately Disagree, 4 = Slightly Disagree, 5 = Neutral, 6 = Slightly Agree, 7 = Moderately Agree, 8 = Strongly Agree, 9 = Very Strongly Agree. Scores can range from 16 to 144. McKelvie obtained the following estimates for reliability: split half: .808, .567, .843, .438 (Form A), .524, .768 (Form B); test-retest (10-14 days): .867, .830 (Form A), .742 (Form B); delayed alternate-form: .782, 720 (Form A), .888, .799 (Form B). Most values exceed the standards of .85 for internal consistency, .80 for test-retest, and .70 for alternate-form.

The murder scenario was taken from McKelvie (2006, 2007b; see also McKelvie, 2002; Whisler, 2011). See McKelvie (2007b) for the complete text. In the 200-word vignette, a man died of a heart attack after he failed to obtain a job. His brother sought out and killed the successful applicant because he blamed the applicant for his brother’s death. It was clear that victim was blameless in the brother’s death, that the murder was intentional, and that the defendant did not suffer from a mental illness. Following the vignette, participants were told to imagine that they were a member of the jury that had found the accused guilty of murder. A number of questions followed, but the ones that were important here referred to prison sentencing (5 to 99 years), the death penalty (rated on a labeled scale from 1 = Definitely no to 6 = Definitely yes), the method of execution (electric chair, hanging, lethal injection, gas chamber, guillotine, firing squad, stoning), and perception of intent (rated on a labeled scale from 1 = Definitely no to 6 = Definitely yes).

**Procedure**

In Session 1, participants gave informed consent and then completed the Questionnaire on Capital Punishment Form A (QCPA) and the Right-Wing Authoritarianism Scale-Short Version Form A (RWA-SVA) or the QCPB and the RWA-SVB in counterbalanced order. In Session 2, from 10 to 14 days later, participants read the crime scenario and answered the questions. Finally, they were thanked and debriefed.

**Results**

Scores on the QCP and on the RWA-SV could range from 20 to 100 and from 18 to 144 respectively. Scores on the question about prison sentencing were the number of years recommended, which could range from 5 to 99. For the death penalty recommendation and for perceived intent, the rating could range from 1 to 6. For the seven methods of execution, scores for perceived severity could range from 1 to 7. These ranked scores (from low to high severity) were derived from ratings of perceived severity for the execution methods obtained by McKelvie (2006, 2007b). The numbers corresponded to the methods as follows: 1 = lethal injection, 2 = gas, 3 = guillotine, 4 = hanging, 5 = electric chair, 6 = firing squad, 7 = stoning.

Alpha was set at .05 for most analyses. However, the stricter Bonferroni procedure was included in the univariate post hoc tests.

**Preliminary Analyses**

For all participants considered together, the correlation between scores on the QCP and RWA-SV was $r = .384, p < .001$. Considering the two forms of the scales separately, the correlations were $r = .382, p < .001$, for Form A of the two scales and $r = .400, p < .001$, for Form B of the two scales.

Again for all participants considered together, the correlations for the scores among the three crime judgments were $r = .179, p < .001$ (sentence and death penalty), $r = .031, p = .416$ (sentence and execution method), and $r = .206, p < .001$ (death penalty and execution method).

Based on the procedure adopted by McKelvie (2006, 2007b; see also Kennedy-Kollar & Mandery, 2010), participants were initially classified as having a positive or a negative attitude towards the death penalty if their total score on the questionnaire was above or below the midpoint (60) respectively. This makes sense because the midpoint of 3 on the rating scale indicated a neutral rating, so that a score of 60 represented a positive attitude for or against capital punishment. However, the cutting points were altered slightly to be above 62 for a positive attitude and below 58 for a negative attitude. This split may not be optimal according to the 27% rule (Feldt, 1961), where the higher and lower groups are formed from people in the top and bottom 27% of the distribution, but it yielded healthy sample sizes in the two groups.

Participants were also classified as higher or lower on right-wing authoritarianism, but in this case on the basis of a median split. For the RWA-SV, it makes little sense to split at the midpoint of the scale because scores above and below cannot meaningfully be interpreted as “for” or “against” right wing authoritarianism. The medians were 56 and 62 for the RWS-SVA and RWS-SVB respectively. However, following the practice adopted with the classification of participants on the basis of their QCP scores, the cutting points were set at above 58 and above 64.
for the classification as “higher” on Forms A and B respectively and below 54 and below 60 for the classification as “lower” on Forms A and B respectively.

As a stimulus check, 2 x 2 x 2 x 2 (Attitude x Authoritarianism x Sex x Form) ANOVAs were conducted on QCP scores and on RWA-SV scores. For QCP scores, there was a significant main effect of attitude, \( F(1, 622) = 1107.14, p < .001 \), a significant main effect of right-wing authoritarianism, \( F(1, 622) = 12.57, p < .001 \), and a significant interaction between the two variables, \( F(1, 622) = 17.21, p < .001 \). The effect of sex approached significance, \( F(1, 630) = 6.33, p = .069 \).

Table 1 shows that QCP scores were higher for participants with a positive attitude than for participants with a negative attitude (standardized effect size \( d = 3.18 \)) and for participants who were higher on right-wing authoritarianism than for those who were lower (\( d = 0.75 \)). The effect of attitude was clear for people who were both higher and lower in authoritarianism. The interaction occurred because there was an effect of authoritarianism for people who had a negative attitude but not for those with a positive attitude. For people with a negative attitude, QCP scores were higher for people who were higher in right-wing authoritarianism than for people who were lower. Care was taken to observe whether this interaction occurred in the main analyses below. Finally, scores tended to be higher for men than for women (\( d = 0.31 \)).

For RWA-SV scores, the 2 x 2 x 2 x 2 (Attitude x Authoritarianism x Sex x Form) ANOVA showed that there were three significant effects: attitude, \( F(1, 622) = 19.97, p < .001 \), authoritarianism, \( F(1, 622) = 1008.61, p < .001 \), and form, \( F(1, 622) = 28.29, p < .001 \). Table 1 shows that RWA-SV scores were higher for participants who had a positive attitude than for those with a negative attitude (\( d = 0.76 \)) and for participants who were higher than for those who were lower in authoritarianism (\( d = 3.06 \)). In addition, scores were also higher on Form B than on Form A (\( d = 0.21 \)), which is commensurate with the higher median on Form B that was reported above. This main effect was also checked in the main analyses below.

Finally, another stimulus check was conducted in the ratings of intention. In the 2 x 2 x 2 x 2 (Attitude x Authoritarianism x Sex x Form), none of the effects was significant (see Table 2 for the mean scores).

**Main Analyses**

**Multivariate Analysis of Variance.** A 2 x 2 x 2 x 2 (Attitude x Authoritarianism x Sex x Form) MANOVA was conducted on the scores for prison sentence, death penalty and method of execution. Because the effect of form was not significant, the data were collapsed over this variable and a second 2 x 2 x 2 (Attitude x Authoritarianism x Sex) MANOVA was conducted. The three main effects were significant: \( F(3, 548) = 61.13, p < .001 \) (Attitude), \( F(3, 548) = 4.21, p = .006 \) (Authoritarianism), and \( F(3, 548) = 7.56, p < .001 \) (Sex). Inspection of the mean scores in Table 2 shows that scores were generally higher for people with a positive attitude than for people with a negative attitude, for people who were higher than for people who were lower on authoritarianism, and for men than for women. It is worth emphasizing that the only significant factors in the MANOVA were the three main effects. In the preliminary analyses, it was found that there was a significant interaction between attitude and authoritarianism, but this effect did not occur here.

To investigate if the three main effects were significant for each crime judgment, univariate 2 x 2 x 2 (Attitude x Authoritarianism x Sex) ANOVAs were conducted. Attitude towards capital punishment was significant for likelihood of recommending the death penalty \( F(1, 576) = 199.35, p < .001 \), and for prison sentence, \( F(1, 579) = 5.27, p = .022 \). People with a positive attitude were more likely to recommend the death penalty (\( d = 1.35 \)) and recommended longer prison sentences (\( d = 0.24 \)) than people with a negative attitude. Note also that, for future reference below, the effect size for prison sentences was slightly lower (\( d = 0.20 \)) when calculated from the marginal means. Right-wing authoritarianism was significant for likelihood of recommending the death penalty, \( F(1, 576) = 12.62, p < .001 \). People who were higher in authoritarianism were more likely to recommend it than people who were lower (\( d = 0.64 \)). Sex was significant for both likelihood of recommending the death penalty, \( F(1, 576) = 8.99, p = .003 \), and for the severity of the execution method chosen, \( F(1, 552) = 16.99, p < .001 \). Men were more likely than women to recommend the death penalty (\( d = 0.34 \)), and they recommended a more severe method (\( d = 0.41 \)).

The effect of attitude towards capital punishment on execution method approached significance, \( F(1, 552) = 2.91, p = .089 \). When the data were collapsed over right-wing authoritarianism, which did not approach significance, \( F(1, 552) = 0.80, p = .372 \), the 2 x 2 (Attitude x Sex) ANOVA showed that the effect of attitude was significant, \( F(1, 626) = 6.54, p = .011 \). People with a positive attitude recommended a more severe method than people with a negative attitude, \( d = 0.23 \).

Given that these post hoc tests are based on the MANOVA, they should be corrected for Type I error with the Bonferroni procedure which, for three variables, sets alpha at .017 (Field, 2009, p. 605; Tabachnik & Fidell, 1996, p. 402). Using this guideline, attitude towards capital punishment was significant for the death penalty, \( p < .001 \), right-wing authoritarianism was significant for the death penalty, \( p = .001 \), and sex was significant for both the death penalty, \( p = .007 \), and for the execution method, \( p < .001 \). For prison sentence, attitude towards capital
punishment was only significant with $p = .022 > .017$. However, when the data were collapsed over both right-wing authoritarianism and sex, which were not significant, the effect of attitude was significant, $F(1, 661) = 6.80, p = .009 < .017$. Also, for the one-way ANOVA for the effect of attitude towards capital punishment on execution method, $p = .011 < .017$.

Moreover, because the dependent variables are correlated, the relationships among the variables should be taken into account when interpreting the post hoc tests (Tabachnik & Fidell, 1996, p. 380). Tabachnik and Fidell recommend the stepdown procedure, in which the tests are conducted in order of importance, and preceding ones that are correlated with the current one are entered as covariates. The sentence question was considered first. The results for this ANOVA were presented above: prison sentences were significantly longer for people with a positive attitude towards capital punishment than for people with a negative attitude. The death penalty question was considered next. The scores were treated with a 2 x 2 x 2 (Attitude x Authoritarianism x Sex) ANCOVA in which the sentence scores were entered as a covariate. All three main effects were significant: $F(1, 573) = 195.53, p < .001$ (attitude), $F(1, 573) = 12.23, p < .001$ (authoritarianism), and $F(1, 573) = 8.55, p = .004$ (sex). Notably, these effects were also significant with the Bonferroni correction procedure. Finally, for method of execution, death penalty scores were entered as a covariate. In this case, the three-way ANCOVA showed that the only significant effect was sex, $F(1, 551) = 13.24, p < .001$. Again, this effect was significant with the Bonferroni correction. Notably, the effect of attitude towards capital punishment did not approach significance, $F(1, 551) = .074, p = .390$.

**Multivariate Analysis of Covariance.** To control for right-wing authoritarianism, a 2 x 2 (Attitude Towards Capital Punishment x Sex) MANCOVA was conducted, with authoritarianism entered as a covariate. Both the effect of attitude, $F(3, 621) = 65.53, p = .002$, and the effect of sex, $F(3, 621) = 9.59, p < .001$, were significant.

The 2 x 2 (Attitude Towards Capital Punishment x Sex) univariate ANCOVA analyses, in which right-wing authoritarianism was entered as a covariate, showed that the effect of attitude was significant for the prison sentence, $F(1, 652) = 4.09, p = .043$, for the death penalty, $F(1, 649) = 210.30, p < .001$, and for the method of execution, $F(1, 625) = 6.24, p = .013$, judgments. Both the death penalty and execution effects were also significant with the Bonferroni correction, but the effect for prison sentence was not, $p = .043 > .017$. However, the effect size for the difference between the adjusted (marginal) means was $d = 20$. For the effect of attitude towards capital punishment on the method of execution, which was not significant in the analyses presented above, people with a positive attitude recommended a more severe method than people with a negative attitude, $d = 0.24$. Furthermore, a one-way ANCOVA (collapsing over sex) for the effect of attitude towards capital punishment on prison sentence was significant at the same level as above in the three-way analysis, $F(1, 660) = 4.11, p = .043$. The effect of sex was significant for the death penalty, $F(1, 649) = 6.31, p = .012$, and for the method of execution, $F(1, 625) = 24.93, p < .001$. Both of these effects were also significant with the Bonferroni correction.

Finally, stepdown 2 x 2 (Attitude Towards Capital Punishment x Sex) ANCOVAs were performed. In addition to including right-wing authoritarianism as a covariate for the analysis of the scores on all three criminal judgments, scores for prison sentence were entered as a covariate for the death penalty analysis and scores for the death penalty were entered as a covariate for the execution method analysis. The results for prison sentence, which by definition are not corrected further, are reported above. For death penalty judgments, the effects of attitude towards capital punishment, $F(1, 646) = 207.98, p < .001$, and of sex, $F(1, 646) = 6.16, p = .013$, were significant. For execution method, the only effect that approached significance was sex, $F(1, 624) = 21.44, p < .001$. All three effects are significant with the Bonferroni correction.

**Discussion**

The two multivariate analyses yielded fairly consistent results for the relationships between the three predictors (attitude towards capital punishment, right-wing authoritarianism, sex) and the three dependent variables (prison sentence, death penalty, execution method). From the MANOVA, judgments for the three dependent variables combined were more severe for people who had a positive attitude towards capital punishment than for those who had a negative attitude, for people who were higher on right-wing authoritarianism than for people who were lower, and for men than for women. The first two results are in broad agreement with findings from previous research (e.g., Altemeyer, 1996, p. 41; Gerbasi, et al., 1977; McKelvie, 2006, 2008; Stack, 2000), and the third one adds to the mixed picture on sex differences (e.g., Bergeron & McKelvie, 2004; Honeyman & Ogloff, 1996). However, this is the first time that attitude towards capital punishment and right-wing authoritarianism have been considered together. Examination of the results for each dependent variable considered separately provides information with both practical and theoretical implications. In the following discussion of these effects, a predictor was usually only considered to be significant if the Bonferroni correction criterion ($p = .017$) was met.

It is worth recalling that the interaction between attitude and authoritarianism was significant for the QCP scores because there was an effect of authoritarianism for people who had a negative attitude but not for those with a positive attitude. If this interaction also occurred in the MANOVA, it may reflect this pattern of scores on the QCP,
which would compromise the interpretation of its effect on the dependent variables. However, the interaction was not significant in the MANOVA or, indeed, in any of the univariate analyses below.

Finally, at the end of the crime questionnaire, participants judged whether the offender had carried out the murder intentionally. Because the scenario communicated this message, the scores should be very high (close to the maximum of 6) and should not vary among the conditions (positive or negative attitude towards capital punishment, higher or lower right-wing authoritarianism, women or men). Because none of these factors was significant, and because all the means were 5.0 or greater, both of these requirements were met. This provides a stimulus check showing that participants in each group had read and understood the scenario, and that they were matched on their high agreement that the murder was intentional.

**Capital and Capital-Related Judgments**

As expected, people with a positive attitude towards capital punishment were more likely to recommend the death penalty than people with a negative attitude. According to Cohen’s (1977) guideline of 0.20, 0.50, and 0.80 for small, medium, and large, respectively, this effect ($d = 1.35$) was extremely large. This result replicates two similar reports (McKelvie, 2006, 2007b), and confirms that there is a strong relationship between attitudes and behavior when the attitude is specific and refers directly to the behavior (Ajzen & Fishbein, 2005).

Also as expected, people who were higher in right-wing authoritarianism were more likely to recommend the death penalty than those who were lower. This effect, which was slightly greater than medium ($d = 0.64$), is not as large as the effect size for attitude towards capital punishment ($d = 1.35$). However, the smaller relationship is consistent with attitude theory, because the values associated with right-wing authoritarianism are more general than attitude towards capital punishment, and less directly related to the death penalty judgment. In addition, the relationship between right-wing authoritarianism and the death penalty recommendation is also consistent with Altemeyer’s (1981, p. 330) construct, in which one of the components of right-wing authoritarianism is authoritarian aggression. In particular, because the death penalty is sanctioned by the authorities, it is a punishment of which right-wing authoritarians are likely to approve.

The significant relationships between both attitude towards capital punishment and right-wing authoritarianism on the one hand and the likelihood of recommending the death penalty on the other were not clearly duplicated for execution method. First, right-wing authoritarianism was not significant in any of the analyses. This was surprising, because it was expected that the component of authoritarian aggression would lead people who were higher in right-wing authoritarianism to choose a more severe method of execution. Second, attitude towards capital punishment was significant in the univariate analyses following the MANOVA and the MANVOCA (with a small effect size of $d = 0.23$), showing that people with a positive attitude chose a more severe method than people with a negative attitude. This result clarifies the marginally significant relationship between these variables reported by McKelvie (2006), and is probably due to the much greater sample size in the present study (196 and 364 for positive and negative attitude here compared to 67 and 45 in the previous study). However, this relationship disappeared when the death penalty scores were entered as a covariate. It seems that attitude towards capital punishment was related to both recommending the death penalty and choosing an execution method. However, people who were more likely to recommend the death penalty were also more likely to choose a harsher method immediately afterwards. Choice of method was most directly influenced by the death penalty judgment, so that when this influence was controlled, the relationship to attitude towards capital punishment was accounted for.

Turning to sex differences on crime judgments, men were more likely to recommend the death penalty than women, an effect ($d = 0.34$) that was small to medium. Past research on this question with capital punishment has shown somewhat mixed results, with no significant difference (McKelvie, 2006) and a difference in favor of men (Honeyman & Ogloff, 1996; McKelvie, 2007a). However, the present effect is consistent with other evidence that men are more aggressive than women (Archer, 2004, 2009) and with the fact that there are usually more men than women on death-qualified juries (Conrad, 2001). If women are less likely to favor the death penalty than men, more of them will be excluded. However, as just noted, the present result differs from the result obtained in McKelvie’s (2006) study with the same scenario and a similar capital punishment questionnaire, where there was no effect of sex on the likelihood of recommending the death penalty. One reason for the difference between the results of these two studies is that the sample size was much larger here: 342 women and 245 men vs 55 women and 52 men. The larger sample size provided more power for detecting the small to medium effect as significant ($d = 0.64$), as compared to .43.

**Non-Capital Judgments (Prison Sentence)**

An important goal of the present research was to investigate whether attitude towards capital punishment would predict non capital judgments, specifically the recommended length of a prison sentence for the convicted murderer. In previous research with the present materials, results were mixed, with two positive relationships (McKelvie, 2006; 2007b, Study 2) and one nonsignificant relationship (McKelvie, 2007b, Study 1). It was suggested that this discrepancy might have been due to sample size, which was smaller in the study with the nonsignificant
result. In the present study, the number of people with a positive or a negative attitude towards capital punishment was much larger than before, with 196 and 364 respectively here, compared to numbers that ranged from 23 to 67 in McKelvie (2006, 2007b).

Under these conditions, there was a significant relationship between attitude towards capital punishment and length of prison sentence, although it was not as clear as the relationship with death penalty judgments. First, in the three-way univariate ANOVA following the significant MANOVA, the effect of capital punishment was significant at the .05 level, but not at the .017 level required by the Bonferroni procedure. However, when the data were collapsed over right-wing authoritarianism and sex, which were not significant, this level was attained ($p = .009$). Overall, when people with a positive attitude were compared to people with a negative attitude, the effect size was small ($d = 0.23, 0.24$). Second, in both the two-way ANOVAs and one-way univariate ANCOVAs following the significant MANCOVA where right-wing authoritarianism was a covariate, the effect of capital punishment was only significant at the .05 level. Generally, these analyses demonstrate that attitude towards capital punishment predicts the length of the recommended prison sentence.

This finding confirms the significant results obtained by McKelvie (2006, 2007b), and supports the contention that attitude towards capital punishment can be an extralegal factor that biases non capital judgments. Although the effect size was small, it represents a difference of approximately seven years (see Table 1) between people with a positive and a negative attitude towards capital punishment. Practically, the results suggest that if a jury is death qualified but it asked to judge prison sentence, then it is likely recommend a longer period in jail than a jury that is not death qualified.

The effect size for the relationship between attitude towards capital punishment and prison sentence was considerably smaller ($d = 0.23, 0.24$) than the effect size for the relationship between attitude towards capital punishment and the death penalty ($d = 1.35$). This provides further support for attitude theory, because attitude towards capital punishment is more directly related to death penalty judgments than to prison sentence judgments.

Also relevant to theory, it was suggested in the introduction that attitude towards capital punishment may be based on a deeper set of personality traits or values, particularly right-wing authoritarianism. Indeed, the present study is the first to examine these two subject variables simultaneously. Three predictions were made. First, there should be a positive correlation between the scores on the QCP and the RWA-SV. Second, right-wing authoritarianism should be related to the prison sentence judgments, although the relationship would weaker than its relationship to death penalty judgments. Third, and most importantly, the relationship between attitude towards capital punishment and prison sentence judgments would be weaker (and might even disappear) if the effect of right-wing authoritarianism was controlled.

The first prediction was upheld: attitude towards capital punishment (scores on the QCP) and right-wing authoritarianism (scores on the RWA-SV) were significantly associated, and the correlations of $r = .382$ and $r = .400$ for Form A and for Form B respectively were commensurate with previous results (.353, .399; McKelvie, 2008) and with previous evidence of a positive relationship (Moran & Comfort, 1986). However, contrary to expectation, the second prediction was not supported: right-wing authoritarianism was not significantly related to prison judgments. Consequently, the third prediction was also not supported: following the ANCOVA in which right-wing authoritarianism was the covariate, the effect size for the difference in prison sentence between people who had a positive or a negative attitude towards capital punishment was similar for the corrected (marginal) means ($d = 0.20$) and for the original marginal means ($d = 0.24$). Therefore, the present results do not support the contention that attitude towards capital punishment is based on right-wing authoritarianism. However, it is possible that the relationship between attitude towards capital punishment and prison sentence judgments is based on another form of conservatism because people who are more conservative prefer more severe punishment for criminal behavior (Davis et al., 1993). The common link may also be some other value that favors general punitiveness (see Hessing, de Keijser, & Elffers, 2003). These suggestions might provide a direction for future research.

The present study also investigated sex differences in prison sentence judgments. It may be an acceptable consequence of the sex difference in death penalty judgments that death-qualified juries would have fewer women than men, but if such juries were called upon to make recommendations about prison sentences, and if there was a sex difference, then sex would become an extralegal factor for these judgments. In fact, in previous research with this kind of scenario, results varied: women’s recommendations tended to be more severe than those of men (McKelvie, 2006) or there was no significant difference between women and men (McKelvie, 2007b; Riedel, 1993). In the present study, men and women did not differ in their prison sentence recommendations. Furthermore, with the large sample sizes employed, there was no lack of power to detect any difference. As noted in the introduction, effects of sex of judge may vary with other factors such as sex of offender, sex of victim, and type of crime. For example, when the crime involved a female victim of sexual assault, women were harsher than men (Abwender & Hough, 2001; Schutte & Hosch, 1997).
Finally, from previous research with the QCP and RWA (Altemeyer, 1988, p. 30; 1996, p. 41; McKelvie, 1983; McKelvie, 2007b, Studies 1 and 2; McKelvie & Daoussis, 1982; Moran & Comfort, 1986), it was predicted that men would score higher than women on attitude towards capital punishment, whereas there would be no sex differences on right-wing authoritarianism. There was a trend for men to score higher than women on the QCP (with an effect size of 0.35 that was small to medium), which is consistent with the greater likelihood that they recommended the death penalty than women. The lack of a significant effect of sex on right-wing authoritarianism is also consistent with previous research.

Limitations and Strengths of the Present Study

Canadian university students read a mock crime scenario and made judgments on rating scales. It is not clear whether or not the results would generalize to the members of the general population on actual jury duty in the United States where, unlike Canada, capital punishment is an option. On the other hand, other studies shared these characteristics (e.g., Honeyman & Ogloff, 1996; McKelvie, 2006), and experiments in the laboratory are particularly useful for theory testing (Mook, 1983), which was a goal of the present research.

A weakness of the crime questionnaire may be that the items were presented in a fixed order (prison sentence, death penalty, and execution method). In particular, the judgments of execution method were almost certainly influenced by the death penalty judgments. As noted above, they should be given before death penalty judgments in a future study. Another possibility is to counterbalance the order of the two questions.

However, given that the major aim of the study was to identify the predictors of prison sentence judgments, it was important to have these judgments given first. If they had been given later, they may have been contaminated by the death penalty judgment. In addition, there was a time delay between the administration of the attitude and authoritarianism measures (QCP, RWA-SV), which minimized the possibility of a carry-over effect. Carry-over effects were also minimized between the QCP and RWA-SV because they were administered in a counterbalanced order.

A criticism of the present method might be that the choices for prison sentence (5 to 99 years) are unrealistic. However, this kind of scale has been used before (e.g. Hendrick & Fraser, 1975; McKelvie, 2006), and the maximum of sentence of 99 years contains the useful connotation of a true life sentence (Bergeron & McKelvie, 2004). It is also interesting to compare the mean score for the number of years recommended in the present study with corresponding statistics for murder cases in the U.S. Two main sources were consulted. The first, “Federal Sentencing Statistics” (United States Sentencing Commission), contains national statistics from 1995 to 2011. From Table 7 from each year, the mean number of months in prison was 246 (approximately 21 years). The second source contained documents entitled “Felony Defendants in Large Urban Counties”, which include national sentencing statistics for various years. The years 2002 and 2006 (which is the latest one available) were chosen. For 2002, the document was “Felony Defendants in Large Urban Counties, 2002” (U.S. Department of Justice). For 2006, the document was “Felony Defendants in Large Urban Counties, 2006” (Cohen & Kyckelhahn, 2010). For 2002, the percentage of cases receiving different monthly ranges is provided, and the data are summarized by their mean. For murder, the mean number of months was 349 (approximately 29 years). Notably, the highest category is “Life”, which is coded as 480 months. In addition, the second highest category is “>120 months”, and any sentence greater than 480 months was coded as 480 months. For 2006, the percentages for the same monthly ranges are also provided, but the mean is not given. The mean for 2002 was calculated from the data provided for the ranges, and the same procedure was used to estimate the mean for 2006. The result was 402 months (approximately 33 years). Clearly, mean sentences from the second kind of source (29 years, 33 years) are greater than the mean calculated from the first source (21 years). However, it is not clear if life imprisonment was included in the second source. If the data from the first source are calculated without the top category (life imprisonment), the mean number of years is 24, which is very similar.

In the present study, the mean length of recommended prison sentences was 44 years, which is clearly higher than the U.S. numbers. However, to make the calculation commensurate with the one from the first source, I recoded all the scores from 40 to 99 as 40. The result was a revised mean of 29 years, which very close to the number from the second source. This supports the external validity of the present scores.

The study also exhibited strong points. Although the participants were not drawn from the U.S. population, they were a representative sample of the local university population. In addition, the sample size was large, so that the numbers in each comparison group for attitude towards capital punishment, right-wing authoritarianism, and sex were sufficient to provide high power for detecting effects. Moreover, because the cutting scores for the groups were moved slightly away from the midpoint of the QCP scale and from the median of the RWA-SV scale, the groups were clearly separated.

Although the questionnaire for measuring right-wing authoritarianism (RWA-SV) was shorter than the standard versions employed by Altemeyer (1981, 1988, 1996), its psychometric properties are adequate. The
questionnaire for measuring attitude towards capital punishment (QCP) also had adequate psychometric properties and was longer than the instrument used in some previous work, which could be as short as a single item (e.g., Moran & Comfort, 1986).

Finally, the results generalized across each forms of the QCP and the RWA-SV. In particular, although scores on the RWA-SV were higher on Form B than on Form A, form did not interact with any of other variables in the main analyses of crime judgments. The significant main effects of attitude, authoritarianism, and sex were not compromised by the effects of form on either questionnaire. The same argument applies to the significant interaction between attitude and authoritarianism on the QCP scores, which did not appear in the main analyses.

**Conclusions**

As expected, and consistent with the requirement that juries in capital cases are death qualified, there was a very strong association between attitude towards capital punishment and willingness to recommend the death penalty. However, the relationship did not extend to the severity of the execution method chosen, probably because this judgment was connected to the death penalty recommendation. On the other hand, attitude towards capital punishment was related to the length of the recommended prison sentence, demonstrating that it can be an extralegal factor in criminal judgment. The basis of this relationship was not clear, but it did not reflect the association between attitude towards capital punishment and right-wing authoritarianism. Future research might explore the possibility that it is based on another form of conservatism. Finally, clarifying previously ambiguous results, men were more likely to recommend the death penalty and a more severe method of execution than women.

**References**


“Felony Defendants in Large Urban Counties, 2002” (U.S. Department of Justice).
   http://bjs.ojp.usdoj.gov/content/pub/pdf/fdluc02.pdf

“Felony Defendants in Large Urban Counties, 2006” (Cohen & Kyckelhahn, 2010).
   http://bjs.gov/content/pub/pdf/fdluc06.pdf


Table 1

*Mean QCP and RWA-RV Scores in Each Condition*

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Authoritarianism</th>
<th>QCP</th>
<th>RWA-SV</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>M</td>
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<tr>
<td>Negative</td>
<td>Lower</td>
<td>260</td>
<td>39.89</td>
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<tr>
<td></td>
<td>Higher</td>
<td>163</td>
<td>45.83</td>
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<tr>
<td>Positive</td>
<td>Lower</td>
<td>66</td>
<td>71.50</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td>152</td>
<td>71.37</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>368</td>
<td>49.96</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>270</td>
<td>55.13</td>
</tr>
</tbody>
</table>

*Note.* Possible range of scores: 10 to 100 (QCP), 16 to 144 (RWA-SV).

Table 2

*Mean Scores for Crime Judgments in Each Condition*

<table>
<thead>
<tr>
<th>QCP</th>
<th>RWA-SV</th>
<th>Sentence</th>
<th>Death Penalty</th>
<th>Execution</th>
<th>Intention</th>
</tr>
</thead>
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<tr>
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<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
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<td>M</td>
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<td>M</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SD</td>
<td>SD</td>
<td>SD</td>
<td>SD</td>
</tr>
<tr>
<td>Negative</td>
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<td>240</td>
<td>39.60</td>
<td>28.18</td>
<td>239</td>
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<tr>
<td></td>
<td>Higher</td>
<td>163</td>
<td>44.38</td>
<td>32.47</td>
<td>148</td>
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<tr>
<td>Positive</td>
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<td>63</td>
<td>46.49</td>
<td>29.37</td>
<td>63</td>
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<tr>
<td></td>
<td>Higher</td>
<td>137</td>
<td>50.00</td>
<td>34.31</td>
<td>137</td>
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<tr>
<td>Women</td>
<td></td>
<td>342</td>
<td>42.39</td>
<td>29.63</td>
<td>339</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>245</td>
<td>46.31</td>
<td>33.14</td>
<td>245</td>
</tr>
</tbody>
</table>

*Note.* Possible range of scores: 5 to 99 (Sentence), 1 to 6 (Death Penalty, Intention), 1 to 7 (Execution).