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The Role of Ideological Consistency in Attitude Inferences

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ABSTRACT

We examined ideological consistency in attitudes and attitude attributions in three studies in which participants responded to attitude statements and guessed the responses of one or more other persons (targets). In all studies, people whose own attitudes were ideologically consistent showed greater consistency in the attitudes they attributed to targets. People expected more consistency in others' attitudes than they expressed in their own. More consistent attitudes were attributed to male targets than to female targets, more to old targets than to young ones, and more to attractive targets than to unattractive ones. We conclude that the perception of ideological consistency serves to simplify the structure of complex social information and sets the ground for generalizations and stereotypes about members of particular target groups.

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INTRODUCTION

Social psychologists have long recognized that people's attitudes on diverse social and political issues can be organized along ideological lines. The prevalence of ideological thinking in the general population, however, is uncertain. Converse (1964) concluded that ideological structure characterizes the thinking of only a relatively small portion of the population, a "political elite." In contrast, Judd and Milburn (1980) argued that some degree of ideological predisposition is typical across a wide spectrum of the population. Although this issue has generated considerable debate (for reviews, see Judd & Krosnick, 1989; Kinder & Sears, 1985), the notion of reliable dispositional differences in attitude structure is now largely accepted (cf., Lavine, Thomsen, & Gonzales, 1997).

Milburn (1987) suggested that there may be variations in ideological thinking not just between people but also within the same person over time. In the present paper we develop this idea further. When people think about attitude issues, their thinking may sometimes be directed toward establishing their own positions and other times, toward making sense of the positions they hear expressed by the people around them (cf., Messick, 1956, 1961; Nelson, 1974; Button et al., 1993). In the studies to be reported, we compared the degree of ideological consistency in people's own attitudes with the consistency in the attitudes they attributed to others. We tested two predictions. First, we predicted that the degree of ideological consistency in participants' own attitudes would be a significant predictor of the consistency they perceived in the attitudes of others. This prediction was based on the results of several studies showing that the characteristics we consider most relevant and important in ourselves are the same characteristics that guide and organize our perceptions and recollections of others (e.g., Carpenter, 1988; Lewicki, 1983, 1984; Markus, Smith, and Moreland, 1985).

A second prediction we tested was that ideological consistency would be more evident in the attitudes people attribute to others than in the attitudes they express for themselves. From studies of causal attributions (e.g., Nisbett, Caputo, Legant, & Marecek, 1973; Watson, 1982) we know that people often give more weight to situational factors when explaining their own behaviour than when explaining the behaviour of someone else. Similarly, from studies of stereotyping (e.g., Krueger & Rothbart, 1988; Locksley, 1980, 1982) we know that information that individuates a target can sometimes lessen the likelihood that broad, undifferentiated stereotypes will be applied. In the present context, situational attributions for one's own attitude expressions on particular issues might be expected to lead to more variability in attitudes across different issues. In contrast, dispositional, stereotyped attributions for another person's attitude expressions (e.g., The person is a "redneck" conservative.) might be expected to lead to a set of highly inter-related inferences about other attitudes the person is likely to have.

We report results from three studies in which participants indicated their own attitudes on a range of social and political issues and guessed the attitudes of one or more other persons (targets). The studies differed in the information participants had about the target person(s) prior to making their guesses. In the first study, participants were shown how a target of their own gender, tested earlier, had responded to a few statements on an attitude survey and then were asked to guess the target's responses to the remaining statements. In the second and third studies, participants guessed the attitudes of persons whose pictures they were shown. In the second study, each participant guessed the attitudes of a single target on a large number of issues. In the third study, participants guessed the attitudes of 20 different targets on a small number of issues.

The use of target pictures in the second and third studies allowed us to examine the effects of easily visible target characteristics on perceptions of attitude consistency. Specifically, we looked to see if such perceptions were influenced by targets' gender, age, and physical attractiveness. From previous research (e.g., Grant, Button, Ross, & Hannah, 1997; Grant, Ross, Button, Hannah, & Hoskins, 2001; Grant, Button, Hannah, & Ross, 2002) we know that all of these variables are associated with stereotypic inferences about targets' attitudes. However, we do not yet know how these variables influence perceptions of attitude consistency. We predicted that salient target characteristics that elicited stereotyped attitude attributions would, at the same time, heighten perceptions of attitude consistency.

Different attitude sets were used in the three studies reported here but each set contained statements expressing liberal or conservative viewpoints to which participants responded on a 7-point disagree-agree scale. After responses to conservative statements were reverse scored, we calculated the variance of each participant's responses across all statements. Response variability as a measure of ideological inconsistency was suggested originally by Barter and Parsons (1977) and has been used frequently since (e.g., Lavine, et al., 1997; Milburn, 1987; Mueller & Judd, 1981). To obtain a measure of consistency rather than inconsistency, we subtracted the response variance from a constant of 10.

STUDY 1

Method

Attitude Statements

Attitude statements were selected from a large pool of statements that had been compiled for an earlier study (Grant, Button, Hannah, & Ross, 1994). Participants in that study had been shown a large number of attitude statements and asked to consider a hypothetical person who either agreed strongly or disagreed strongly with each one. They were then asked to rate the hypothetical person on a scale that ranged from 1 (very conservative) to 7 (very liberal). We designated a statement as liberal (or conservative) if ratings of a person who agreed with the statement were significantly ($p < .05$) more liberal (conservative) than ratings of a person who disagreed with the statement. We selected ten liberal statements and 10 conservative ones for use in the present study. The 20 statements along with descriptive statistics for the responses of male and female participants are shown in Appendix A.

Participants

Participants were 80 undergraduates (40 men and 40 women) at Memorial University. Half the males and half the females served as target participants and were tested first. Each of the remaining (experimental) participants was randomly paired with a target participant of the same gender.

Procedure

In a computerized procedure, target participants indicated their agreement with the 20 attitude statements, presented in a random order, by typing a number between 1 (strongly disagree) and 7 (strongly agree). Other data, subsequently gathered from these participants, are not relevant to the present report and will not be discussed here.

Using a procedure identical to that for the targets, experimental participants indicated the extent of their agreement or disagreement with the attitude statements. They also saw how the target person with whom they had been paired had responded to two of the conservative statements and

two of the liberal statements, selected at random. These four statements together with the target's responses remained displayed on the top portion of the participant's screen while the other 16 statements were presented sequentially, in a random order, on the bottom of the screen. Participants were asked to guess which point along the 7-point scale the target had chosen for each of these statements. Half the participants indicated their own attitudes before seeing and guessing the attitudes of the target; for the remainder, the order was reversed.

Results

Intercorrelations and summary statistics for the variables in this study are shown in Appendix B.

Consistency in Participants' Own Attitudes

Consistency in participants' attitudes was analyzed in an analysis of variance in which participant gender and task order were between-participant factors. The analysis revealed no significant effects.

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Consistency in Own Attitudes versus Consistency in Attitudes Attributed to Target

Consistency scores were analyzed in a three-factor analysis of variance in which participant gender and task order were between-participant factors and self versus predicted was a within-participant factor. The analysis revealed a marginal main effect for self versus predicted, $F(1, 36) = 3.69, p = .063$. Participants' own attitudes were less consistent ($M = 6.94$) than were the attitudes they predicted for the target ($M = 7.34$).

Consistency in Attitudes Attributed to Target versus Consistency in Target's Actual Attitudes

An analysis similar to the one just described was conducted in which the within-participant factor was predicted target attitudes versus the target's actual attitudes. This analysis revealed that the consistency in attitudes predicted for the target ($M = 7.34$) was significantly greater than the consistency in the target's actual attitudes ($M = 6.77$), $F(1, 36) = 4.91, p = .033$.

Predictors of Consistency in the Attitudes Attributed to Targets

The consistency in the attitudes predicted for the target was regressed on participant gender, participant consistency, and task order. Participants whose own attitudes were consistent perceived greater consistency in the attitudes of the targets, $Beta = .375, t(36) = 2.53, p = .016$. Regression models that included higher order interaction terms did not significantly increase explained variance.

Discussion

The results provide support for our hypotheses. As expected, the degree of consistency in participants' own attitudes was positively related to the degree of consistency they perceived in the attitudes of others. Thus people whose own attitudes showed evidence of a liberal-conservative ideology, were especially likely to use this same framework when they inferred the attitudes of others. This finding is consistent with those of Markus et al. (1985) in demonstrating the important role played by salient aspects of the self concept in shaping our perceptions of others.

Our findings go further, however. It appears that people do not simply project their own ideology onto the attitudes of others. Instead, they project a version of that ideology that is exaggerated in its consistency. People saw more consistency in the attitudes of others than in their own attitudes and more consistency than actually existed.

Despite the support the results provided for our hypotheses, there is need for caution. The number of participants was small and the difference between own and inferred attitudes was relatively weak. Moreover, participants had very little information about the targets in comparison to the multiple cues that are visually prominent in most everyday interactions. In the study to be reported next, we examined the consistency hypotheses using a larger sample of participants and a procedure that involved inferences about target persons shown in pictures. This procedure had the additional advantage that it allowed us to examine the effects of target gender, age, and attractiveness on perceptions of attitude consistency.

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STUDY 2

Method

Target pictures

We compiled a pool of pictures of adult men and women (showing head and shoulders). Some pictures came from internet websites, some were taken from television using a video-capture device, and others were digitally scanned from pictures in magazines and family pictures contributed by colleagues. All pictures were digitally cropped to a width of 172 pixels and a height of 203 pixels and saved as 256-colour, bit-mapped images. Half of the pictures were of women and half were of men. In earlier studies, participants had rated either the attractiveness (1 = very unattractive, 10 = very attractive) or the apparent age (in years) of the person in each of the pictures. A mean attractiveness and mean age rating were thus available for each picture.

Attitude statements

A survey of 100 statements was prepared containing some statements used in previous studies and others written specifically for the current study. Each of the four authors independently categorized each statement as either conservative or liberal. Unanimous agreement was obtained for 58 liberal statements and 36 conservative ones. All results to be reported are based on

analyses using these 94 statements. The 94 statements along with descriptive statistics for the responses of male and female participants are shown in Appendix C.

Participants

Participants were 294 undergraduates (147 men and 147 women) at Memorial University.

Procedure

Participants responded to the attitude survey indicating their own attitudes and guessing the responses of a target person whose picture they were shown. Each participant saw a different picture, 6.1 cm. wide and 7.2 cm. high, printed in the centre of a single page. For half the participants, the target was male while for the remainder, the target was female. Half the participants indicated their own attitudes before guessing the attitudes of the target; for the remainder, the order was reversed.

Results

Intercorrelations and summary statistics for the variables in this study are shown in Appendix D.

Consistency in Participants' Own Attitudes

Consistency in participants' attitudes was analyzed in an analysis of variance in which participant gender and task order were between-participant factors. The analysis revealed one significant effect, a main effect for gender, $F(1, 290) = 4.85, p = .028$. Men's attitudes were more consistent ($M = 6.38$) than were women's ($M = 6.09$).

Consistency in Own Attitudes versus Consistency in Attitudes Attributed to Target

Consistency scores were analyzed in a three-factor analysis of variance in which participant gender and task order were between-participant factors and self versus target was a within-participant factor. The analysis revealed main effects for both task order, $F(1, 290) = 6.52, p = .011$, and self-target, $F(1, 290) = 6.18, p = .013$, as well as an interaction between these two factors, $F(1, 290) = 10.75, p = .001$. The cell means relevant to these effects are shown in Table 1.

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Table 1: Consistency in Participants' Own Attitudes and in the Attitudes They Attributed to the Target in Different Task-order Conditions

	Consistency in participant attitudes	Consistency in attitudes attributed to target	$t(146)$	p
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Task order				
Self-target (<i>n</i> = 147)			0.52	.601
Mean	6.21	6.15		
SD	1.07	1.34		
Target-self (<i>n</i> = 147)			-4.24	< .001
Mean	6.26	6.71		
SD	1.19	1.24		

Predictors of Consistency in the Attitudes Attributed to Targets

Consistency in attitudes attributed to the target was examined in relation to six variables: Participant gender, the degree of consistency in the participant's own attitudes, task order, target gender, target age, and target attractiveness. These variables together with all possible 2-way interaction terms were entered as predictors in a regression analysis. In the first step of the analysis, the six main effects were entered simultaneously. Three of the predictors together accounted for 25 percent of the variance and had beta coefficients that differed significantly from zero. First, in line with the results shown in Table 1, people attributed more consistent attitudes to targets when they made these attributions before indicating their own attitudes, $Beta = .208$, $t(287) = 4.06$, $p < .001$. Second, the more consistency people exhibited in their own attitudes, the more consistency they expected in the attitudes of the target, $Beta = .388$, $t(287) = 7.54$, $p < .001$. Finally, people attributed more consistent attitudes to male targets than to female targets, $Beta = -.261$, $t(287) = -4.83$, $p < .001$. The addition of two-way interaction terms did not result in a significant increase in explained variance, $F(15, 272) = 1.30$, $p = .202$.

Discussion

The results provide further support for the importance of ideological structure in inferences about others. As in study one, the more consistent participants were in their own attitudes, the more consistency they perceived in others. The results also supported the hypothesis that people see more consistency in the attitudes of others than they exhibit in their own attitudes. However, this was only true when participants rated the target before indicating their own attitudes. It appears that stereotypic thinking about the target's attitudes is less likely to occur when people have had a chance to reflect on their own positions and the situational factors which can lead them to be liberal on some issues and conservative on others.

The only target characteristic to have a significant influence on attitude attributions was gender, with males being perceived as more consistent in their attitudes than females. In this case, the perception had some validity. The attitudes of male participants were in fact more consistent than those of female participants. It is likely that we are more aware of normative male attitudes in the liberal-conservative arena of politics and economics, which may contribute to the perception of consistency. To further explore the influence of target characteristics and the self-other consistency effect, a third study was done using a more powerful within-subjects design.

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STUDY 3

Method

Attitude Statements

Ten statements dealing with the issues of discipline of children, homosexuality, feminism, immigration, and religion were used. For each of the five issues, one statement expressed a liberal position and another expressed a conservative position. The 10 statements along with descriptive statistics for the responses of male and female participants are shown in Appendix E.

Participants

Participants were 223 undergraduates (76 men and 147 women) at Memorial University. [1]

Procedure

Participants were tested up to three at a time. Each person sat in a separate cubicle equipped with a personal computer running a Visual Basic program in a Windows environment. All instructions and experimental materials were presented by the computer and participants responded by pointing and clicking the mouse.

Assessment of participants' own attitudes. The ten attitude statements were shown on the screen one at a time in a random order. The participant was asked to indicate his or her attitude using a 7-point scale with endpoints labeled (1) Strongly disagree and (7) Strongly agree.

Assessment of attitude inferences. For each participant, 20 pictures (10 of men and 10 of women) were randomly selected from the pool of pictures used in Study 2. Pictures of these target persons were displayed one at a time in a random order on the participant's computer screen. When displayed on a 36-cm. computer screen, the images were approximately 4.7 cm. wide and 5.4 cm. high. While each picture remained on the screen, the ten attitude statements were presented one at a time in a random order. The participant was asked to estimate, using the same 7-point scale described above, how the person in the picture would respond to the attitude statement. When all ten statements had been presented for a particular photograph, a new picture

appeared and the procedure was repeated. The procedure ended when the participant had made ten attitude inferences for each of the 20 different target persons.

Approximately half of the participants indicated their own attitudes before making inferences about the attitudes of the targets. The remaining participants performed these tasks in the reverse order.

Results

Consistency scores were calculated for each participant's own attitudes and for the attitudes that he or she attributed to each of the 20 targets. Average consistency scores were then calculated for the 10 male targets, the 10 female targets, and for all 20 targets combined. Intercorrelations and summary statistics for the variables in this study are shown in Appendices F and G.

Consistency in Participants' Own Attitudes

Consistency in participants' attitudes was analyzed in an analysis of variance in which participant gender and task order were between-participant factors. The analysis revealed no significant effects.

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Comparisons of Self and Targets

Consistency scores were analyzed in a three-factor analysis of variance in which participant gender and task order were between-participant factors and self versus target was a within-participant factor. The analysis revealed main effects for both task order, $F(1, 219) = 4.87, p = .028$, and self versus targets, $F(1, 219) = 41.62, p < .001$, as well as a three-way interaction, $F(1, 219) = 4.85, p = .029$. The means and standard deviations relevant to these effects are shown in Table 2.

Table 2: Consistency in Men's and Women's Own Attitudes and in the Attitudes They Attributed to the Target in Different Task-order Conditions

Task order	Participant gender	Consistency in Participant attitudes	Consistency in attitudes attributed to target
Self-target	Men ($n = 41$) <i>Mean</i> <i>SD</i>	6.99 1.61	7.20 0.90

	Women ($n = 72$) Mean SD	6.48 1.35	7.38 0.95
Target-self	Men ($n = 35$) Mean SD	7.05 1.26	7.76 0.87
	Women ($n = 75$) Mean SD	6.97 1.54	7.53 0.85

The attitudes participants expressed for themselves were less consistent than were the attitudes they attributed to targets and greater consistency in self and target attitudes was evident when participants indicated their own attitudes after attributing attitudes to targets.

Specific comparisons between consistency scores for self and targets were carried out for men and women in each of the task-order conditions using t-tests. Among participants who indicated their own attitudes first, the self-target difference was significant for women, $t(71) = 6.24, p < .001$, but not for men, $t(40) = 1.01, p = .318$. Among participants who attributed attitudes to targets first, the self-target difference was significant for both women, $t(74) = 3.42, p < .001$, and men, $t(34) = 3.91, p < .001$.

Predictors of Consistency in the Attitudes Attributed to Targets

The average consistency in the attributed attitudes across all 20 targets was regressed on participant gender, participant consistency, and task order. Participants whose own attitudes were consistent tended to perceive greater consistency in the attitudes of the targets, $Beta = .453, t(219) = 7.53, p < .001$. In addition, there was a marginal tendency for participants to perceive greater consistency in targets' attitudes when they made their attributions before indicating their own attitudes, $Beta = .108, t(219) = 1.81, p = .072$ (see Figure 1). Regression models that included higher order interaction terms did not significantly increase explained variance.

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For each participant, the consistency in attitudes attributed to targets was regressed simultaneously on target gender, target age, and target attractiveness. The regression coefficients for these three predictors were then treated as dependent variables in two subsequent sets of analyses. In the first of these sets, single-sample *t*-tests were used to test whether the average coefficient for each predictor differed significantly from zero. In the second set of analyses, regression analyses were conducted to determine whether the size of the coefficients could be predicted on the basis of participant gender, participant consistency, and task order, and the interactions among these factors.

T-test comparisons against zero. All three target characteristics yielded regression coefficients that, when averaged across participants, differed significantly from zero. There was a strong positive correlation between the consistencies of the attitudes attributed to male and female targets, $r(221) = .784, p < .001$, but in absolute terms, consistency was greater in the attitudes attributed to males than to females, Mean Beta (M_b) = $-.604, t(222) = -13.18, p < .001$.

Consistency was also greater in the attitudes attributed to old persons than to young persons, $M_b = .005, t(222) = 2.37, p = .019$, and greater in the attitudes attributed to attractive persons than to less attractive persons, $M_b = .075, t(222) = 3.29, p = .001$.

Predictors of regression coefficients. Regression analyses revealed no instances where target characteristic effects were significantly related to participant gender, participant consistency, task order, or the interactions among these factors.

Discussion

The results of Study 3 provided still further evidence that ideological structure characterizes people's own attitudes and guides the inferences they make about others. As in the previous two studies, the more consistent participants were in their own attitudes, the more consistency they saw in others. As predicted, participants saw less consistency in their own attitudes than they inferred for others. As in Study 2, this effect was most pronounced when participants judged target attitudes first suggesting that this is a reliable effect and one that needs theoretical attention.

People thought the attitudes of male targets would be more consistent than those of female targets. In the present study, however, unlike Study 2, no actual difference between male and female participants was found. A second difference in the results of the two studies is that, in the present case, in addition to target gender, target age and attractiveness significantly affected attitude inferences. People inferred that more consistent attitudes would be characteristic of older targets and more attractive targets. It appears that attitude inferences are driven by both perceiver *and* target characteristics, and also, perhaps, by other social and contextual cues that target pictures provide (cf., Kunda and Spencer, 2003). The attribution of more consistency to particular kinds of targets may reflect their prominence in media as exponents of attitude positions, particularly in the political and economic arenas. Exemplars of liberal and conservative attitudes are thus typically men, older rather than younger, and attractive rather than unattractive. Our findings have a parallel in those reported by Eagly and Kite (1987) who found that national stereotypes corresponded more closely to those of men of those nationalities than to those of women.

The target gender effect across two studies also raises a number of intriguing possibilities. Do men and women think about these issues differently? Since people see men as consistent on the liberal-conservative dimension and women less so, do people think some other dimension is more useful in organizing women's attitudes? These questions await further research.

GENERAL DISCUSSION

Evidence of ideological consistency emerged across all three studies, lending strong support to our hypotheses. First, all three studies provided evidence that there are reliable individual differences in ideological consistency. The more consistent people's own attitudes, the more consistency they expected in the attitudes of others. Additional evidence of reliable individual differences was found in the third study. The more consistency people saw in the attitudes of male targets, the more they saw in those of female targets.

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Second, the prediction that ideological consistency would be more characteristic of the attitudes attributed to others than of the attitudes that participants expressed for themselves was confirmed. Although the size of the finding was not large in most cases, its consistency across three studies is notable. To us it suggests that attitude inferences may be susceptible to biases similar to those that underlie the perception of personality traits. Specifically, people appear to overestimate the cross-situational consistency in others' attitudes and underestimate the role that situational factors (i.e., issue-specific concerns) play in determining those attitudes. This finding extends the well documented attributional bias in trait inferences to attitude inferences, and may well be a critical component of the stereotype process. The perception that others are more consistent than the self may be one of the bases for invariant trait and attitude attributions made to stereotyped groups.

The finding of greater consistency attributed to targets when target inferences are made first deserves further consideration. In our experience, order effects are usually transitory and result from some artifact in the study design. However, the replication of this effect across two studies with different stimulus materials, designs and participants leads us to conclude that this is not a spurious finding. There appears to be something about having one's attention drawn to one's own attitudes that leads to a focus on non-dimensional variability, resulting in more variable attributions.

The present results also shed some light on the longstanding debate concerning the role of ideology in people's thinking about attitudes. In particular, the relatively small intercorrelations in people's attitudes across issues need not be interpreted, as some authors have, to mean that such people have little grasp of abstract ideological concepts (Kinder & Sears, 1985). People whose own attitudes show little evidence of ideological consistency may nevertheless fully understand the ideology and apply it routinely in their efforts to comprehend and anticipate the attitudes of others. From this perspective, it appears that Converse (1964) may have overstated the distinction between a "political elite" who understand ideological concepts and ordinary citizens who do not. If this is the case, the results have important implications for studies of political behavior and responses to persuasion where ideology has typically not been considered an important factor.

Finally, as expected, salient target characteristics that individually elicited stereotyped attitude inferences, heightened perceptions of attitude consistency. People expected more consistent attitudes for males than for females, for old rather than young targets, and for attractive rather than unattractive targets. Clearly, attitude inferences are often the result of a number of heuristics

based on the perceiver's own attitudes, attributional biases, and readily available target characteristics, all of which support inferences of coherently structured attitudes in others.

ENDNOTE

[1] The data from 80 of the participants in Study 3 (40 men and 40 women) were analyzed for stereotype content as well as ideological consistency. The stereotype-content results for these participants were reported in Grant, Button, et al. (2002).

REFERENCES

Barter, A. H., & Parsons, W. (1977). "Measuring belief system structure." *Public Opinion Quarterly*, 41: 159-188.

Button, C. M., Grant, M. J., Hannah, T. E., & Ross, A. S. (1993). "The dimensions underlying perceived attitudes: Liberalism and concern for traditional values." *Canadian Journal of Behavioural Science*, 25: 230-252.

Carpenter, S. L. (1988). "Self-relevance and goal-directed processing in the recall and weighting of information about others." *Journal of Experimental Social Psychology*, 24: 310-332.

Converse, P. E. (1964). The nature of belief systems in mass publics. In D. E. Apter (Ed.), *Ideology and discontent* (pp. 206-261). New York: Free Press.

[41]

[42]

Eagly, A. H., & Kite, M. A. (1987). "Are stereotypes of nationalities applied to both women and men?" *Journal of Personality and Social Psychology*, 53: 451-462.

Grant, M. J., Button, C. M., Hannah, T. E., & Ross, A. S. (1994, June). Structure and consistency in attitudes and the attitudes people expect in others. Paper presented at the Annual Meeting of the Canadian Psychological Association, Penticton, British Columbia.

Grant, M. J., Button, C. M., Hannah, T. E., & Ross, A. S. (2002). "Uncovering the multidimensional nature of stereotype inferences: A within-participants study of gender, age, and physical attractiveness." *Current Research in Social Psychology*, 8: 19-38.

<http://www.uiowa.edu/~grpproc/crisp/crisp.8.2.html>

Grant, M. J., Button, C. M., Ross, A. S., & Hannah, T. E. (1997). "Accuracy of attitude stereotypes: The case of inferences based on gender." *Canadian Journal of Behavioural Science*, 29: 83-91.

Grant, M. J., Hannah, T. E., Button, C. M., & Ross, A. S. (2002, February). Ideological consistency in actual and perceived attitudes. Paper presented to the meeting of the Society for Personality and Social Psychology, Savannah, Georgia.

Grant, M. J., Ross, A. S., Button, C. M., Hannah, T. E., & Hoskins, R. (2001). "Attitudes and stereotypes about attitudes across the lifespan." *Social Behavior and Personality*, 29: 749-762.

Judd, C. M., & Krosnick, J. A. (1989). The structural bases of consistency among political attitudes: Effects of political expertise and attitude importance. In A. R. Pratkanis, S. J. Breckler, & A. G. Greenwald (Eds.), *Attitude structure and function*. Hillsdale, NJ.: Erlbaum.

Judd, C. M., & Milburn, M. A. (1980). "The structure of attitude systems in the general public: Comparisons of a structural equation model." *American Sociological Review*, 45: 627-643.

Kinder, D. R., & Sears, D. O. (1985). Public opinion and political action. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (3rd ed., Vol. 2, pp. 659-741). New York: Random House.

Krueger, J., & Rothbart, M. (1988). "Use of categorical and individuating information in making inferences about personality." *Journal of Personality and Social Psychology*, 55: 187-195.

Kunda, Z., & Spencer, S. J. (2003). "When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application." *Psychological Bulletin*, 129: 522-544.

Lavine, H., Thomsen, C. J., & Gonzales, M. H. (1997). "The development of interattitudinal consistency: The shared consequences model." *Journal of Personality and Social Psychology*, 72: 735-749.

Lewicki, P. (1983). "Self-image bias in person perception." *Journal of Personality and Social Psychology*, 45: 384-393.

Lewicki, P. (1984). "Self-schema and social information processing." *Journal of Personality and Social Psychology*, 47: 1177-1190.

Locksley, A., Borgida, E., Brekke, N., & Hepburn, C. (1980). "Sex stereotypes and social judgment." *Journal of Personality and Social Psychology*, 39: 821-831.

Locksley, A., Hepburn, C., & Ortiz, V. (1982). "Social stereotypes and judgments of individuals: An instance of the base-rate fallacy." *Journal of Experimental Social Psychology*, 18: 23-42.

[42]

[43]

Markus, H., Smith, J., & Moreland, R. L. (1985). "Role of the self-concept in the perception of others." *Journal of Personality and Social Psychology*, 49: 1494-1512.

Messick, S. J. (1956). "The perception of social attitudes." *Journal of Abnormal and Social Psychology*, 52: 57-66.

Messick, S. J. (1961). "The perceived structure of political relationships." *Sociometry*, 24: 270-278.

Milburn, M. A. (1987). "Ideological self-schemata and schematically induced attitude consistency." *Journal of Experimental Social Psychology*, 23: 383-398.

Mueller, C. M., & Judd, C. M. (1981). "Belief constraint and belief consensus: Toward an analysis of social movement ideologies — A research note." *Social Forces*, 60: 182-187.

Nelson, C. E. (1974). "The perceived structure of social attitudes." *Bulletin of the Psychonomic Society*, 4: 449-451.

Nisbett, R. E., Caputo, C., Legant, P., & Marecek, J. (1973). "Behavior as seen by the actor and as seen by the observer." *Journal of Personality and Social Psychology*, 27: 154-164.

Watson, D. (1982). "The actor and the observer: How are their perceptions of causality divergent?" *Psychological Bulletin*, 92: 682-70.

APPENDIX A: MEANS AND STANDARD DEVIATIONS FOR THE RESPONSES OF MEN AND WOMEN TO THE ATTITUDE STATEMENTS USED IN STUDY 1

Attitude Statement	Men (n = 40)		Women (n = 40)	
	Mean	SD	Mean	SD
1. It's time to close the door to refugees. (Conservative)	4.03	1.80	3.50	1.75
2. If a homosexual propositioned me, I would be within my rights to physically attack that person. (Conservative)	2.23	1.31	1.53	1.04
3. Abortion is murder. (Conservative)	3.58	2.07	3.73	2.14
4. Only countries with good records of human rights should receive this country's foreign aid. (Conservative)	4.57	1.63	4.15	1.85
5. Most unemployed people are just lazy. (Conservative)	2.75	1.66	2.95	1.66

6. University students should pay a higher proportion of the cost of their education than they do at present. (Conservative)	1.95	1.58	1.30	0.79
7. Most members of Greenpeace are just publicity seekers. (Conservative)	4.65	1.86	3.78	1.72
8. Teen pregnancy is a result of high divorce rates. (Conservative)	2.75	1.28	2.20	1.29
9. Married people are happier than singles. (Conservative)	3.83	1.66	3.65	1.79
10. I sometimes wish I were not sexual at all. (Conservative)	1.62	1.41	2.25	1.85
11. Industries should be forced to reduce toxic wastes. (Liberal)	6.50	1.09	6.73	0.64
12. The legal system should have no jurisdiction when two consenting adults have sex. (Liberal)	5.82	1.43	5.47	1.57
13. An elected senate would be good for Canada. (Liberal)	5.20	1.60	4.95	1.47
14. Beauty contests are just harmless fun. (Liberal)	4.40	1.68	3.53	1.84
15. The frequency of sexual assault is increasing in our society. (Liberal)	5.10	1.60	5.85	1.10
16. A sexually active person should use birth control. (Liberal)	6.63	1.08	6.78	0.42
17. A career is as important for a woman as for a man. (Liberal)	6.50	1.16	6.88	0.65

18. Jail terms should be imposed on men who beat their wives. (Liberal)	6.25	1.26	6.80	0.41
19. Nuclear weapons are a grave threat to our children and future generations. (Liberal)	5.23	1.75	5.78	1.54
20. Viewing sexually explicit material should be one's own business. (Liberal)	6.20	1.07	5.05	1.77

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APPENDIX B: INTERCORRELATIONS AND SUMMARY STATISTICS FOR VARIABLES IN STUDY 1

	Task order	Consistency in participant attitudes	Consistency in attitudes attributed to target	Consistency in target attitudes
Participant gender	.000	-.077	-.174	.201
Task order		-.016	.210	-.003
Consistency in participant attitudes			.383	.136
Consistency in attitudes attributed to target				.047
<i>Mean</i>		6.94	7.34	6.77
<i>SD</i>		1.05	1.32	1.07

<i>N</i>		40	40	40
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APPENDIX C: MEANS AND STANDARD DEVIATIONS FOR THE RESPONSES OF MEN AND WOMEN TO THE ATTITUDE STATEMENTS USED IN STUDY 2

Attitude Statement	Men (<i>n</i> = 147)		Women (<i>n</i> = 147)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
1. Euthanasia should be legal. (Liberal)	4.44	2.03	4.44	1.92
2. Marijuana should be legalized. (Liberal)	4.94	1.96	4.56	1.93
3. Homosexuality should be accepted. (Liberal)	5.61	2.01	6.54	1.14
4. Religion is mostly superstition. (Liberal)	3.69	2.02	3.10	1.87
5. Abortion is murder. (Conservative)	3.24	2.00	3.68	2.27
6. A teacher should be able to physically punish children. (Conservative)	2.12	1.63	1.56	1.21
7. Politicians should think more about the ordinary person and less about big business. (Liberal)	5.65	1.28	5.98	0.90
8. The decision to have an abortion should be left up to the woman. (Liberal)	4.60	2.10	5.41	1.90
9. I support feminist principles and goals. (Liberal)	4.81	1.74	5.63	1.32

10. Taxes in this country are far too high. (Conservative)	5.16	1.55	5.75	1.18
11. Prostitution should be a legitimate business. (Liberal)	3.27	2.03	2.25	1.87
12. Sexist language should be avoided. (Liberal)	4.76	1.77	5.60	1.54
13. The death penalty is barbaric. (Liberal)	3.97	2.13	4.14	2.15
14. More tax dollars should be spent to support social programs. (Liberal)	5.35	1.47	5.69	1.26
15. The punishment ought to be very severe for deliberately spreading computer viruses. (Conservative)	4.98	1.53	4.87	1.47
16. All nuclear arms should be dismantled. (Liberal)	5.33	1.87	5.59	1.82
17. Upper income Canadians should be taxed more than they are. (Liberal)	4.65	1.86	4.32	1.96
18. More transition houses should be established to aid battered women. (Liberal)	5.83	1.14	6.31	0.83
19. Too many immigrants are being allowed into this country. (Conservative)	3.63	1.93	3.27	1.73
20. Most sentences handed down by the courts are too lenient. (Conservative)	5.16	1.43	5.19	1.41
21. The use of violence by environmentalists ought to be severely punished. (Conservative)	5.00	1.48	4.85	1.35

22. Video rental outlets should carry a greater selection of erotic films. (Liberal)	4.12	1.59	3.22	1.46
23. The trouble with tax cuts is that they will benefit the rich more than the poor. (Liberal)	5.10	1.39	4.93	1.40
24. Nuclear arms are a deterrent to war. (Conservative)	4.09	1.88	3.90	1.67
25. We need controls to eliminate sex sites on the internet. (Conservative)	3.61	1.82	5.11	1.68
26. Stricter gun controls would eliminate much of the violence in our society. (Liberal)	4.23	2.02	5.31	1.74
27. People place too much emphasis on respect for authority. (Liberal)	3.97	1.78	3.47	1.69
28. Mass work stoppages will eventually be necessary to bring about real change. (Liberal)	3.86	1.58	3.77	1.25
29. There is too much explicit sex on television. (Conservative)	3.18	1.55	4.48	1.65
30. There is no justification for censoring pornographic material on the internet. (Liberal)	3.71	1.96	2.82	1.79
31. I have little respect for authority. (Liberal)	3.01	1.86	2.04	1.34
32. I support government subsidies for farmers and fishers. (Liberal)	4.90	1.52	4.82	1.42
33. Jail sentences should be given to those who dump toxic wastes. (Liberal)	6.07	1.02	5.82	1.27

34. Sexual abusers should be given counselling. (Liberal)	5.81	1.66	6.37	1.07
35. Traditional values are important guiding principles in my life. (Conservative)	4.69	1.83	5.23	1.70
36. School boards should not hire homosexuals. (Conservative)	2.39	2.01	1.46	1.12
37. Religious people are either ignorant or weak-willed. (Liberal)	2.63	1.67	2.14	1.47
38. Religion has no place in the modern world. (Liberal)	2.51	1.70	2.24	1.48
39. Solving unemployment is more important than cutting the deficit. (Liberal)	5.18	1.38	5.29	1.22
40. Bilingualism should be encouraged in all parts of Canada. (Liberal)	5.22	1.82	5.86	1.40
41. Religion has no place in the public school system. (Liberal)	4.06	2.04	3.57	2.09
42. User fees should be introduced to the health care system. (Conservative)	2.41	1.65	2.22	1.53
43. Censorship of rock videos is ridiculous. (Liberal)	5.43	1.75	4.20	1.81
44. Breakdown of the family is a serious social problem. (Conservative)	5.60	1.35	5.65	1.37
45. What our society needs is a return to fundamental family values. (Conservative)	4.39	1.62	4.97	1.60
46. Most computer hackers are just innocent kids having fun. (Liberal)	3.45	1.71	3.19	1.50

47. Pornography improves the sex lives of those who view it. (Liberal)	4.09	1.79	3.06	1.58
48. I enjoy nudity in magazines and movies. (Liberal)	5.10	1.58	3.21	1.75
49. Canada ought to spend more money on the military. (Conservative)	4.37	1.67	3.82	1.60
50. We should be doing more to help the people living in native communities. (Liberal)	4.52	1.77	5.03	1.48
51. Furs belong on animals, not people. (Liberal)	5.01	1.70	5.48	1.81
52. Most unemployed persons do not want to find work. (Conservative)	3.44	1.78	3.30	1.86
53. People over 65 should not be required to retire. (Liberal)	4.62	1.98	4.61	1.87
54. Mentally ill people should not be allowed positions of responsibility. (Conservative)	3.96	1.87	3.09	1.65
55. Canadians depend too heavily on government handouts. (Conservative)	4.46	1.52	4.44	1.55
56. Police should crack down on panhandlers. (Conservative)	3.84	1.65	4.23	1.47
57. Nudity should be permitted on public beaches. (Liberal)	4.64	1.73	2.83	1.62
58. I favor a more open immigration policy for Canada. (Liberal)	3.91	1.72	4.19	1.60
59. The idea of gay or lesbian marriages seems ridiculous. (Conservative)	2.95	2.08	1.90	1.49

60. Women should avoid going out to work when their children are really young. (Conservative)	4.10	1.67	3.22	1.89
61. Labour unions need to play a greater role in the politics of this country. (Liberal)	4.23	1.39	4.32	1.21
62. Labor unions are too powerful. (Conservative)	4.12	1.37	3.86	1.12
63. There should also be private hospitals for people who want better care and can afford it. (Conservative)	3.14	2.02	2.73	1.70
64. Child abusers should be shot. (Conservative)	3.97	2.07	3.78	2.08
65. Testing of nuclear weapons should be banned. (Liberal)	5.21	1.94	5.22	1.79
66. Information about gay lifestyles should not be provided in the school system. (Conservative)	3.45	2.14	2.44	1.70
67. Government ought to do something to lower university tuition. (Liberal)	6.39	0.92	6.75	0.57
68. Profits made in the stock market should be taxed much more heavily than other income. (Liberal)	4.16	1.68	3.92	1.51
69. The women's movement deserves strong support. (Liberal)	4.88	1.47	5.82	1.10
70. A monetary union with the US would be good for the Canadian economy. (Conservative)	3.88	1.85	3.94	1.65

71. It's time to close the door to refugees. (Conservative)	2.92	1.72	2.55	1.47
72. Homosexual couples should have the same legal right to marry that heterosexual couples have. (Liberal)	5.26	2.04	6.29	1.29
73. With the weakening of the trade union movement, the economy has improved significantly. (Conservative)	3.89	1.00	4.03	0.97
74. Refugees are good for this country. (Liberal)	4.43	1.62	4.81	1.38
75. If a person wants to commit suicide, it's up to them. (Liberal)	4.01	2.00	3.73	2.06
76. The tax system ought to be used to provide a better standard of living for all Canadians. (Liberal)	5.69	1.10	5.84	1.12
77. Ways must be found to monitor and regulate activity on the internet. (Conservative)	3.82	1.76	4.84	1.72
78. Industries should be forced to reduce toxic waste. (Liberal)	6.22	1.21	6.44	0.96
79. Sex education encourages kids to have sex. (Conservative)	2.11	1.37	1.88	1.16
80. People should be able to view whatever they like on the internet. (Liberal)	5.22	1.87	4.27	1.90
81. Divorces can be obtained too easily these days. (Conservative)	4.35	1.74	4.21	1.88
82. I avoid using public transportation because of the kind of people you're likely to encounter. (Conservative)	2.53	1.77	2.27	1.66

83. Marriage is outdated and unnecessary. (Liberal)	2.59	1.76	2.39	1.75
84. Condoms should be made widely available to adolescents. (Liberal)	6.20	1.13	6.05	1.28
85. The medicare system is widely abused. (Conservative)	5.05	1.48	4.58	1.52
86. Governments must get tougher with major industrial polluters. (Liberal)	6.22	1.01	6.20	0.97
87. Olympic athletes who use banned drugs should be disqualified from competition for life. (Conservative)	3.84	1.92	4.16	1.85
88. Premarital sex will spoil the marriage. (Conservative)	1.78	1.28	1.82	1.24
89. Rock videos exploit women. (Liberal)	3.60	1.95	4.93	1.60
90. Wildlife welfare is just as important as human welfare. (Liberal)	4.65	1.74	5.20	1.60
91. Homosexuals should be permitted to teach children. (Liberal)	5.48	1.96	6.45	1.09
92. Women deserve the same rights and privileges as men. (Liberal)	6.58	0.97	6.88	0.65
93. A career is just as important for a woman as for a man. (Liberal)	6.60	0.94	6.90	0.47
94. Living together is just as good as being married. (Liberal)	4.50	1.87	4.70	1.87

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APPENDIX D: INTERCORRELATIONS AND SUMMARY STATISTICS FOR VARIABLES IN STUDY 2

	Task order	Consistency in participant attitudes	Target gender	Target age	Target attractiveness	Consistency in attitudes attributed to target
Participant gender	-.007	-.128	.007	.048	-.037	-.035
Task order		.020	.007	.022	-.067	.212
Consistency in participant attitudes			.046	.005	-.014	.378
Target gender				-.016	.264	-.240
Target age					-.612	-.030
Target attractiveness						-.062
<i>Mean</i>		6.23		39.93	4.52	6.43
<i>SD</i>		1.13		13.20	1.31	1.31
<i>N</i>		294		294	294	294

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APPENDIX E: MEANS AND STANDARD DEVIATIONS FOR THE RESPONSES OF MEN AND WOMEN TO THE ATTITUDE STATEMENTS USED IN STUDY 3

Attitude Statement	Men (<i>n</i> = 76)		Women (<i>n</i> = 147)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
1. A teacher should not be allowed to physically punish children. (Liberal)	5.53	2.00	6.67	0.98
2. School boards should not hire homosexual teachers. (Conservative)	2.87	1.90	1.62	1.22
3. It's time to close the door to refugees. (Conservative)	2.99	1.47	2.82	1.51
4. Religious beliefs are important guiding principles in my life. (Conservative)	4.22	1.90	4.54	1.86
5. A woman's place is in the home. (Conservative)	1.97	1.37	1.36	0.83
6. Homosexuality should be accepted. (Liberal)	4.75	1.91	6.39	0.93
7. What young people need most of all is strict discipline by their parents. (Conservative)	4.26	1.72	3.76	1.84
8. I favor a more open immigration policy for Canada. (Liberal)	4.14	1.46	4.39	1.45
9. The feminist movement deserves strong support. (Liberal)	4.57	1.63	5.69	1.35
10. Religion is mostly superstition. (Liberal)	3.36	1.90	2.80	1.77

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APPENDIX F: MEAN INTERCORRELATIONS AMONG WITHIN-PARTICIPANT VARIABLES IN STUDY 1

	Target age	Target attractiveness	Consistency in attitudes attributed to target
Target gender	-.006 (.217)	.183 (.251)	-.245 (.268)
Target age		-.655 (.109)	-.005 (.251)
Target attractiveness			-.011 (.222)

Note. Mean intercorrelations are based on data of 223 participants. Standard deviations are in parentheses.

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APPENDIX G: INTERCORRELATIONS AND SUMMARY STATISTICS FOR VARIABLES IN STUDY 3

	Task order	Consistency in participant attitudes	Consistency in attitudes attributed to male targets	Consistency in attitudes attributed to female targets	Consistency in attitudes attributed to all targets
Participant gender	.047	-.094	-.021	.018	.000
Task order		.114	.133	.169	.162
Consistency in participant attitudes			.436	.436	.462

Consistency in attitudes attributed to male targets				.784	.938
Consistency in attitudes attributed to female targets					.951
Mean		6.83	7.73	7.19	7.46
SD		1.46	0.91	1.01	0.91
N		223	223	223	223

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AUTHORS' NOTE

Some of the data in Studies 1 and 3 were first reported at the meetings of the Canadian Psychological Association in Penticton, British Columbia, June, 1994 and the Society for Personality and Social Psychology in Savannah, Georgia, February, 2002.

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