Ambivalence and Persuasion: The Processing of Messages about Immigrant Groups

GREGORY R. MAIO, DAVID W. BELL, AND VICTORIA M. ESSES

University of Western Ontario, London, Ontario, Canada

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Previous research has found that ambivalence is an important characteristic of attitudes toward minority groups. In the present research, we determined whether people who are ambivalent toward a minority group exhibit more systematic processing of persuasive messages pertaining to the group than do people who are not ambivalent toward the group. To test this hypothesis, we measured 113 participants’ ambivalence toward Oriental people. After a delay, the participants were presented with a persuasive message that contained either strong or weak arguments in favor of immigration from Hong Kong. We examined the effects of the persuasive message on agreement with immigration from Hong Kong, attitudes toward residents of Hong Kong, and immigration-relevant thoughts. In accordance with our hypothesis that ambivalence leads to systematic processing, we predicted first that the strong message would cause ambivalent participants to be more favorable toward residents of Hong Kong and toward their immigration from Hong Kong than would the weak message; this tendency was expected to be weaker among nonambivalent participants. Second, we predicted that the effect of message strength on ambivalent participants’ agreement with immigration from Hong Kong would be mediated by their immigration-relevant thoughts. Results indicated support for both predictions.

People are said to have ambivalent attitudes when their attitudes contain both negative and positive elements (Eagly & Chaiken, 1993; Kaplan, 1972; Katz & Hass, 1988; Olson & Zanna, 1993; Thompson, Zanna, & Griffin, 1995). In the intergroup context, it seems that attitudes toward minority groups (e.g., African-Americans; Native peoples) have recently become more ambivalent or conflicted.

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In particular, negative attitudes toward minority groups have recently had a positive dimension added to them. For example, many Whites in the United States still hold negative feelings toward African-Americans, but they now also feel sympathy for their plight (Katz & Hass, 1988). Thus, instead of merely disliking members of minority groups, people may simultaneously dislike and like them. Such ambivalence is believed to cause polarized or amplified responses to minority group members (see Katz, 1981, and Dovidio & Mullen, 1996, for reviews). Specifically, ambivalence toward a group is believed to cause either extremely negative or extremely positive responses to members of the group, depending on situational factors. For example, people who are ambivalent toward a group should respond more favorably toward a group member who behaves in a desirable manner than toward a group member who behaves in an undesirable manner, whereas this differential response to group members should be weaker among people who are not ambivalent toward the group. Thus, the existence of ambivalence toward minority groups can have important consequences for the treatment of group members.

The effects of ambivalence may extend beyond the polarization of responses toward group members. In the present research, we suggest that ambivalence toward a group might also affect the way in which people process persuasive messages pertaining to the group. Specifically, people who are ambivalent toward a particular group may more thoughtfully consider the merits of messages about the group.

ATTITUDE AMBIVALENCE AND THE PROCESSING OF INFORMATION ABOUT A GROUP

Our hypothesis is based on the fact that people who are ambivalent toward a group possess attitudes that contain both positive and negative dimensions. These conflicting dimensions may cause ambivalent people to be more motivated to process messages pertaining to the group because the messages might contain information that would help them resolve the conflict between their incompatible attitude dimensions. That is, by carefully processing the messages, people who are ambivalent might obtain information that helps them become either favorable or unfavorable toward the group, rather than having to cope with tension that results from being simultaneously favorable and unfavorable toward the group (see Hass, Katz, Rizzo, Bailey, & Moore, 1992; Katz, Wackenhut, & Hass, 1986, for discussions of the tension evoked by ambivalence). In fact, this reasoning is consistent with past theorizing suggesting that people will devote attention to stimuli that can resolve conflict or dissonance (e.g., Berlyne, 1960; Festinger, 1957). This motivation to reduce internal conflict is evident in people’s processing of information about themselves (e.g., Trope & Ben-Yair, 1982) and others (see Stangor & McMillan, 1992).

The conflicting attitude dimensions may also make ambivalent people more able to process the messages because, together, the dimensions contain positive
and negative associations that can facilitate processing of the messages. That is, ambivalent people’s schemas of a group subsume both positive and negative information, rather than subsuming only positive or negative information. Perhaps the existence of these complex schemas enables ambivalent people to process new information about a group more deeply, similar to the way that extensive knowledge about an attitude object in working memory facilitates the critical processing of new information about the object (Wood, Kallgren, & Preisler, 1985).

Overall, then, people who are ambivalent toward a group might be more motivated and able to systematically process messages about the group. There are several theoretical and applied reasons to examine the validity of this hypothesis. On a theoretical level, it is important to determine whether ambivalence has consequences beyond response polarization. If level of ambivalence moderates the processing of messages about groups, the theoretical relevance of the construct of ambivalence would be broadened and the importance of the construct would be more strongly demonstrated. In addition, such evidence would be important because it would suggest a new determinant of systematic processing. Systematic processing has been shown to have important effects in persuasion settings (Chaiken, Liberman, & Eagly, 1989; Petty & Cacioppo, 1986) and, therefore, it is important to investigate potential determinants of systematic processing.

On a more applied level, there are many contexts in which people receive messages pertaining to groups, and these messages might have powerful effects on subsequent attitudes and behavior. The media is one important source of such messages. For example, during the 1980s, newspapers in Canada published several hundred articles about the Sikh people, who were immigrating in large numbers to Canada (Maio, Esses, & Bell, 1994). Previous research has found that information about an immigrant group can affect people’s attitudes toward the group and that these attitudes, once formed, predict behavioral intentions toward the group, including the endorsement of relevant immigration policies (Maio et al., 1994). Consequently, it is important to determine whether these effects are moderated by social psychological variables, such as attitude ambivalence.

If ambivalence toward a group does in fact lead to the systematic processing of messages about the group, this effect should be manifested in two ways. First, people who are ambivalent toward a group should be more persuaded by messages that contain strong, cogent arguments about the group than by messages that contain weak, implausible arguments about the group. In contrast, people who are not ambivalent toward a group should be less differentially affected by strong versus weak messages. In other words, level of ambivalence and message strength should interact to determine the effect of a message on acceptance of the opinion expressed in the message (e.g., to allow immigration of the group). This interaction should occur because people who are engaging in systematic processing should be more likely to notice the strengths in a strong message and/or the flaws in a weak message (see Chaiken et al., 1989; Petty & Cacioppo, 1986).
In addition, if ambivalence fosters systematic processing, the effect of message strength on ambivalent people’s attitudes should be mediated by the favorability of their message-relevant thoughts. That is, the favorability of their message-relevant thoughts should predict their attitudes toward the opinion expressed in the message, and the effect of message strength should be reduced or disappear when the effect of the message-relevant thoughts is statistically controlled (see Baron & Kenny, 1986). This mediation should occur because people who are engaging in systematic processing should base their attitudes on their cognitive responses to the message (see Chaiken et al., 1989; Petty & Cacioppo, 1986). If nonambivalent people engage in less systematic processing, this mediation should be less likely to occur for them.

THE PRESENT RESEARCH

In the present experiment, we tested whether people who are ambivalent toward a group would exhibit these effects of systematic processing. In particular, we tested whether people who are ambivalent toward Oriental people would systematically process a message advocating increased immigration from Hong Kong. We chose this issue because recently the media in Canada has been presenting many stories about residents of Hong Kong and their increasing immigration to Canada (e.g., Goodspeed, 1993; Ramondt, 1992; Sonmor, 1995; see also Li, 1994). In addition, Hong Kong immigrants currently make up the largest proportion of Oriental immigrants to Canada (Costa & Renaud, 1995; Employment and Immigration Canada, 1994). Thus, measuring our participants’ ambivalence toward Oriental people was closely akin to measuring their ambivalence toward people from Hong Kong.1

To test our hypothesis, we measured participants’ ambivalence toward Oriental people and then presented them with a strong or weak persuasive message in favor of immigration from Hong Kong. Ambivalence toward Oriental people was measured using Bell, Esses, and Maio’s (1996) open-ended measure of ambivalence. This measure asks participants to indicate the emotions elicited by group members, group members’ personality traits, and group members’ values. Participants then rate the valence (i.e., favorability) of each item generated, and the valences are used to calculate an index of ambivalence. By using this open-ended measure, we were able to tap three important and separable components of participants’ attitudes toward Oriental people (see, e.g., Bell & Esses, 1996; Esses, Haddock, & Zanna, 1993; Haddock, Zanna, & Esses, 1993, 1994). In addition, the open-ended measure permitted us to tap those emotions, traits, and values that were most relevant to the participants, rather than forcing them to rate emotions, traits, and values that might not have been relevant to them. Such utilization of participants’ idiosyncratic responses is the most important benefit of

1 We used the term “Oriental people” rather than “Asians” because “Asians” seemed too broad for our purposes, including people from a large number of countries (e.g., Russia, India, China). In contrast, in popular usage, the term “Oriental people” refers more specifically to people from China, Japan, and our target region—Hong Kong.
open-ended measures, which has caused several researchers to recommend their use (e.g., Eagly, Mladinic, & Otto, 1994; Stangor & Lange, 1994). Another advantage of the open-ended procedure is that it can be used to measure and statistically control attitudinal properties other than ambivalence (e.g., evaluative/cognitive consistency; see Results).

The strong and weak messages both described positive emotions elicited by residents of Hong Kong, their positive personality traits, and their positive values. In both messages, this positive information was used as support for the immigration of people from Hong Kong. The strong message described a strong tendency for residents of Hong Kong to possess the positive emotions, traits, and values, whereas the weak message described only a weak tendency for residents of Hong Kong to possess the positive emotions, traits, and values. By varying the probabilistic nature of the association between residents of Hong Kong and positive qualities, the strength of the message in favor of immigration was varied. This technique for manipulating message strength closely follows current recommendations (see Areni & Lutz, 1988; Eagly & Chaiken, 1993).

We examined the effect of these messages on agreement with immigration from Hong Kong, favorability toward residents of Hong Kong, and the immigration-relevant thoughts that participants listed in response to the messages. Because agreement with immigration from Hong Kong was the focal topic of the strong and weak messages, this variable was our most important dependent measure. We expected that participants who read the strong message would exhibit more agreement with immigration from Hong Kong than would participants who read the weak message. In accordance with the hypothesis that ambivalence facilitates systematic processing, we expected that this effect would be stronger for participants who were ambivalent toward Oriental people than for participants who were not ambivalent toward Oriental people. In addition, we expected that the effect of message strength on ambivalent participants’ agreement with immigration from Hong Kong would be mediated by their immigration-relevant thoughts. We did not make this prediction for nonambivalent participants because we suspected that the effect of message strength for these individuals would be weak or nonsignificant.

Despite the fact that the focus of the messages was on immigration from Hong Kong, we also expected that participants who read the strong message would express more favorable attitudes toward residents of Hong Kong than would participants who read the weak message and that this effect would be stronger for the ambivalent participants than for the nonambivalent participants. We expected this pattern of findings because we suspected that message strength would partly influence ambivalent participants’ thoughts about residents of Hong Kong, which, in turn, would influence ambivalent participants’ attitudes. However, because the residents of Hong Kong, per se, were not the focal issue in the editorial, we could not be certain that participants would actually list thoughts about residents of Hong Kong. Thus, we could not be certain that we would be able to test whether
participants' thoughts about residents of Hong Kong mediated the effect of message strength on their attitudes.

METHOD

Participants
Participants were 113 psychology undergraduates (73 female and 40 male), who participated for course credit. The data from 9 additional participants were excluded from the analyses because they failed to complete the ambivalence measure properly \((N = 5)\), failed to complete the dependent measures properly \((N = 2)\), or expressed suspicion during the debriefing \((N = 2)\). None of the participants were Oriental.

Procedure
Participants were run individually by two male experimenters. The first experimenter stated that he had designed two different surveys and that completion of the surveys would take half an hour. He told participants that, to fill up the hour allocated for the session, they would be taken to a second experimenter after they completed the surveys and that the second experimenter would present them with his own brief survey. Participants were assured that their responses to all of the surveys would be confidential and anonymous.

The "first survey" contained the measure of attitudes and ambivalence toward Oriental people. We included the measure of attitudes so that we could statistically control for the possibility that ambivalent participants would possess different initial attitudes than would nonambivalent participants. To provide a rationale for examining attitudes and ambivalence toward Oriental people, the first experimenter told participants that he was investigating students' attitudes toward a wide variety of ethnic groups. He stated that he could not ask each student to answer questions about their perceptions of every ethnic group because it would take too much time for each student to respond. Consequently, he asked each participant to draw the name of a group from a cup. He told participants that 20 different groups were present in the cup and that he hoped to eventually have each group drawn by at least 10 different students. Actually, "Oriental people" was the only group present in the cup. After participants drew this group, the experimenter went to another room, retrieved a booklet containing the measures of attitudes and ambivalence toward Oriental people, and brought it to the participant.

Following completion of the "first survey," participants completed a second, filler "survey," which asked them to rate their attitudes toward a variety of famous celebrities. Next, the first experimenter took participants to another room. The second experimenter then entered the room and introduced his "survey," which contained the manipulation of message strength followed by the dependent measures. For this "survey," the second experimenter claimed to be interested in examining students' attitudes toward some new issues relevant to Canadians. He stated that he was presenting students with photocopies of two recent editorials that summarize the issues and that he would like each student to read the editorials and then indicate their attitudes regarding the issues. The first editorial was a filler essay on the topic of banning aerosol spray cans. The second editorial gave background information on the upcoming takeover of Hong Kong by China and it presented either the strong or weak message in favor of the immigration of people from Hong Kong. Each editorial was created by photocopying an editorial page from a popular magazine and using photo-duplication methods to replace the existing text with our own text.

Participants then completed the dependent measures. Finally, they were probed for suspicion, debriefed, and given a feedback letter. It was emphasized during the debriefing that the editorials were written by us and not published by a magazine.

Initial Attitudes toward Oriental People
Attitudes toward Oriental people were assessed using a thermometer-like scale with the lower point (0) being extremely unfavorable and the upper point (100) being extremely favorable (Esses et al., 1993). Labels were provided every 10° to indicate different levels of favorable or unfavorable
attitudes, with the midpoint (50) being labeled “neither favorable nor unfavorable.” Participants were required to indicate a number on the scale representing how favorably or unfavorably they evaluated “Oriental people.” Participants’ responses ranged from 0 to 100 ($M = 71.45$).

The attitude thermometer is solely evaluative in nature, which differs from the “feeling thermometer” used previously to primarily assess affect (Campbell, 1971). That is, participants are asked to use the thermometer to indicate their overall evaluation of the group, and this overall evaluation could be based on affect, cognition, or a combination of both. Recent use of the attitude thermometer has demonstrated that it is reliable and valid (Haddock et al., 1993; Stangor, Sullivan, & Ford, 1991).

**Ambivalence toward Oriental People**

Ambivalence was calculated using the valence of participants’ emotions, stereotypes, and symbolic beliefs with regard to Oriental people. Emotions, stereotypes, and symbolic beliefs were assessed separately using an open-ended procedure (see also Eagly & Mladinic, 1989; Eagly et al., 1994; Esses et al., 1993; Esses, Haddock, & Zanna, 1994; Stangor et al., 1991). To assess emotions, participants were asked to list emotions and feelings that they experienced when they saw, met, or thought about Oriental people. To assess stereotypes, participants were asked to list adjectives or short phrases that described the characteristics of Oriental people. To assess symbolic beliefs, participants were asked to list the values, customs, and traditions that they believed were held or practiced by Oriental people. The order of assessment of emotions, stereotypes, and symbolic beliefs was counterbalanced across participants.

For each component (i.e., emotions, stereotypes, and symbolic beliefs), participants were asked to list as many responses as necessary to convey their impressions of “Oriental people” (to a maximum of 12 for each component). After indicating responses for a particular component (e.g., emotions), participants were asked to go back and assign a valence (favorability rating) to each of their responses for that component. Valences ranged from $-3$ (extremely negative) to $+3$ (extremely positive).

Because ambivalence is proportional to the amount of conflict between the positive and negative dimensions of participants’ attitudes, we used participants’ valence ratings to calculate the positive and negative dimensions of their attitudes. For each component, positive dimension scores were obtained by summing the positive valences across the items listed. Likewise, negative dimension scores were obtained by summing the negative valences across the items listed. Ambivalence was then calculated using a formula developed by Bell et al. (1996) for use with open-ended measures (see also Bell & Esses, 1996). Specifically, participants’ ambivalence for each of emotions, stereotypes, and symbolic beliefs was calculated as $P + N - 2 | P - N | + 36$, where $P =$ the positive dimension score, $N =$ the absolute value of the negative dimension score, and 36 is a constant that is added to preclude negative ambivalence scores. The ambivalence scores calculated using this formula are a linear function of the scores calculated using the formula recently proposed and validated by Thompson et al. (1995) for use with closed-ended measures. Unlike other formulae for calculating ambivalence (e.g., Hass, Katz, Rizzo, Bailey, & Eisenstadt, 1991; Kaplan, 1972), our formula produces a score that is a direct function of the extent to which the dimensions of people’s attitudes contain conflicting vs nonconflicting elements (see Bell et al., 1996, for the derivation of the formula).

These calculations were performed for each attitude component separately and then the ambivalence scores for each attitude component were averaged to form overall ambivalence scores for each participant. Table 1 presents the correlations involving the component scores and the overall average scores. Table 2 presents descriptive statistics for the components and the overall average scores.

To select participants who were highly ambivalent toward Oriental people and participants who were not ambivalent, participants whose ambivalence scores were in the top or bottom 33% were retained in the analysis. The final sample included 38 ambivalent ($M = 38.90$) and 38 nonambivalent participants ($M = 26.15$).

**Manipulation of Message Strength**

In the second editorial that participants received, they read a page of text that argued in favor of immigration from Hong Kong. Half of this text constituted either the strong or weak message. The
strong message contained arguments that presented a high probability that the people of Hong Kong possess positive emotions, personality traits, and values. Conversely, the weak message contained arguments that presented a low probability that the people of Hong Kong possess the positive emotions, personality traits, and values. The section of the editorial that presented the strong message is below. The text in parentheses (i.e., not brackets) represents the modifications that were present in the weak message.

In general, the residents of Hong Kong are (somewhat) hardworking, friendly, and polite. In addition, they (sometimes) make others feel comfortable, happy, and respected. I do not just say this from my own experience as a Canadian who lived in Hong Kong for six years. These facts are evident if you consider the effect that residents of Hong Kong have had on other countries to which they have migrated. For example, Singapore has experienced a large increase in Hong Kong immigrants over the last four years. During this time, the Singapore trade surplus has increased by a whopping (“a whopping” omitted) 26% (0.2%) [Singapore Daily, May 12, 1994]. In other words, Singapore industries have become 26% (0.2%) more productive during this migration of Hong Kong residents. These newcomers to Singapore have had (some) positive effects in other ways as well. In a newspaper survey of Singapore natives, 93% (9%) of those surveyed reported that Hong Kong immigrants were friendly and “made them feel comfortable,” while 86% (12%) of those surveyed reported that Hong Kong immigrants “were fun to be around.” It is also important to note that the residents of Hong Kong share (a few of) our values. Hong Kong residents strongly (“strongly” omitted) value law and order, the family, and education. Thus, it is not surprising that Hong Kong police deal with 59% (1.3%) fewer murders per capita than do Metro Toronto police. It is

<table>
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<th>Type of ambivalence</th>
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<td>N 113</td>
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<tr>
<td>1. Emotions</td>
<td>—</td>
<td>.45</td>
<td>.30</td>
<td>.74</td>
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<td>2. Stereotypes</td>
<td>—</td>
<td></td>
<td>.39</td>
<td>.84</td>
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<td>3. Symbolic beliefs</td>
<td>—</td>
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<td>4. Average</td>
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*Note. All correlations were significant at p < .005.*

In general, the residents of Hong Kong are (somewhat) hardworking, friendly, and polite. In addition, they (sometimes) make others feel comfortable, happy, and respected. I do not just say this from my own experience as a Canadian who lived in Hong Kong for six years. These facts are evident if you consider the effect that residents of Hong Kong have had on other countries to which they have migrated. For example, Singapore has experienced a large increase in Hong Kong immigrants over the last four years. During this time, the Singapore trade surplus has increased by a whopping (“a whopping” omitted) 26% (0.2%) [Singapore Daily, May 12, 1994]. In other words, Singapore industries have become 26% (0.2%) more productive during this migration of Hong Kong residents. These newcomers to Singapore have had (some) positive effects in other ways as well. In a newspaper survey of Singapore natives, 93% (9%) of those surveyed reported that Hong Kong immigrants were friendly and “made them feel comfortable,” while 86% (12%) of those surveyed reported that Hong Kong immigrants “were fun to be around.” It is also important to note that the residents of Hong Kong share (a few of) our values. Hong Kong residents strongly (“strongly” omitted) value law and order, the family, and education. Thus, it is not surprising that Hong Kong police deal with 59% (1.3%) fewer murders per capita than do Metro Toronto police. It is

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<td>6.97</td>
<td>13.00</td>
<td>59.00</td>
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<td>2. Stereotypes</td>
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<td>9.05</td>
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<td>52.00</td>
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<td>3. Symbolic beliefs</td>
<td>30.37</td>
<td>7.44</td>
<td>8.00</td>
<td>51.00</td>
</tr>
<tr>
<td>4. Average</td>
<td>32.64</td>
<td>6.04</td>
<td>15.33</td>
<td>49.00</td>
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*Note. For the components of ambivalence and average ambivalence, participants’ scores could range from 0 to 72.*
also not surprising that researchers often (sometimes) find that families in Hong Kong are (slightly) more stable and happy than families in the United States.

**Dependent Measures**

Attitudes toward residents of Hong Kong. Consistent with past research (e.g., Bell & Esses, 1996; Esses et al., 1993; Maio et al., 1994; Stangor et al., 1991), we measured attitudes using a scale that asked participants to rate their overall favorability toward the target group. Unlike past research, however, we could not use the “thermometer” measure of participants’ favorability because we had already used this measure in the “first survey,” and we did not want to use a measure that appeared similar to the measure in the “first survey.” Thus, instead of using the attitude thermometer, participants rated their favorability toward residents of Hong Kong using a scale from $-3$ (very unfavorable) to $+3$ (very favorable).

Positive and negative dimensions of attitudes toward residents of Hong Kong. Because we expected some degree of ambivalence in participants’ attitudes toward residents of Hong Kong, we decided to measure both the positive and negative dimensions of participants’ attitudes toward residents of Hong Kong. By assessing the positive and negative dimensions, we were able to test whether they were similarly affected by the experimental variables (ambivalence and message strength).

We used Kaplan’s (1972) split semantic differential scale to separately assess the positive and negative dimensions of participants’ attitudes toward residents of Hong Kong. (We used this measure instead of our open-ended measure because our open-ended measure was used in the “first survey,” and we did not want participants to detect a connection between this measure and the “first survey.”) To measure the positive dimension of participants’ attitudes, participants were asked to consider only the favorable aspects of their attitudes and to rate the extent to which they were favorable. These ratings were made using a scale from $0$ (not at all favorable) to $+3$ (extremely favorable). To measure the negative dimension of participants’ attitudes, participants were asked to consider only the unfavorable aspects of their attitudes and to rate the extent to which they were unfavorable. These ratings were made using a scale from $-3$ (extremely unfavorable) to $0$ (not at all unfavorable).

Note that, for both 4-point scales, a low rating implied less favorability than a high rating. Thus, both scales essentially used a 4-point scale to measure favorability toward residents of Hong Kong. The only difference between the scales was that one scale measured the positive dimension of participants’ attitudes, whereas the other scale measured the negative dimension of participants’ attitudes.

Agreement with immigration from Hong Kong. Using a 9-point scale from $-4$ (Disagree Very Strongly) to $+4$ (Agree Very Strongly), participants rated their agreement with the recommendation that residents of Hong Kong should be encouraged to come to Canada.

Thoughts about immigration from Hong Kong. The instructions and coding procedures for the thought listing task were adapted from Cacioppo and Petty (1981). Participants were asked to list the thoughts that occurred to them while they were reading the editorial. They were told that these thoughts might have been relevant to the editorial or irrelevant to the editorial. Participants were asked to list as many thoughts as they wished, up to a maximum of five. By asking participants to list no more than five thoughts, we were able to reduce the likelihood that participants would report newly constructed, post-message thoughts (see Petty & Cacioppo, 1984).

Two trained raters independently classified participants’ thoughts according to whether they reflected unfavorability, neutrality, or favorability toward the immigration of people from Hong Kong. The raters, who were blind to experimental condition, agreed on 94.83% of their classifications. Discrepancies were discussed and final categorizations were agreed upon. For each participant, the final categorizations were averaged to provide an overall index of the favorability of the participant’s thoughts.

Examination of the data revealed that few participants listed thoughts expressing favorability or unfavorability to the residents of Hong Kong, per se. Instead, participants’ thoughts generally pertained to the focal issue, which was immigration from Hong Kong. Thus, we did not code whether participants’ thoughts expressed favorability or unfavorability toward residents of Hong Kong.
RESULTS

There were no main effects or interactions involving sex of participant in our principal analyses. Consequently, sex was not included as a factor in any of the reported analyses.

Initial Differences between Ambivalent and Nonambivalent Attitudes

Using both our attitude thermometer and our open-ended measure of ambivalence, we were able to calculate several different characteristics of participants’ initial attitudes toward Oriental people. We examined these characteristics in order to test whether there were any initial differences that should be statistically controlled in our comparisons of ambivalent and nonambivalent participants. In the analyses below, we tested whether our ambivalent and nonambivalent participants differed in terms of seven initial attitude characteristics: evaluative/cognitive consistency, evaluative/affective consistency, affective/cognitive consistency, attitude-relevant knowledge, attitude-relevant affect, initial attitude favorability, and attitude extremity. In addition, Table 3 presents the correlations between these initial attitude characteristics in our full sample (i.e., including participants who were moderate in ambivalence).

Evaluative/cognitive consistency. Evaluative/cognitive consistency refers to the extent to which people’s attitudes toward an object are consistent with the evaluative implications of their cognitions about the object (Chaiken, Pomerantz, & Giner-Sorolla, 1995). Evaluative/cognitive consistency can be measured by calculating $z$ scores for participants’ overall attitudes and for the net favorability of participants’ beliefs (Chaiken et al., 1995). The absolute value of the difference between the two $z$ scores is then determined for each participant, such that higher values imply less consistency. To calculate participants’ evaluative/cognitive consistency, we used their symbolic belief and stereotype ratings as the basis for
determining the net favorability of their cognitions, and we used participants’ attitude thermometer ratings as the index of their overall evaluations. A two-level (ambivalent vs nonambivalent) one-way analysis of variance (ANOVA) on the evaluative/cognitive consistency scores revealed no significant effect, $F(1, 74) < 1$.

**Evaluative/affective consistency.** Evaluative/affective consistency refers to the extent to which people’s attitudes toward an object are consistent with the evaluative implications of their feelings toward the object (Chaiken et al., 1995). Evaluative/affective consistency can be measured by calculating $z$ scores for participants’ overall attitudes and for the net favorability of participants’ emotions (Chaiken et al., 1995). The absolute value of the difference between the two $z$ scores is then determined for each participant, such that higher values imply less consistency. To calculate participants’ evaluative/affective consistency, we used their emotion ratings to determine the net favorability of their feelings, and we used participants’ attitude thermometer ratings as the index of their overall evaluations. A two-level (ambivalent vs nonambivalent) one-way ANOVA on the evaluative/affective consistency scores revealed no significant effect, $F(1, 74) < 1$.

**Affective/cognitive consistency.** For each participant, we also calculated the absolute value of the difference between their $z$ scores on the affective and cognitive components. A two-level (ambivalent vs nonambivalent) one-way ANOVA on the affective/cognitive consistency scores revealed no significant effect, $F(1, 74) < 1$.

**Attitude-relevant knowledge.** To test whether level of knowledge about Oriental people was different between ambivalent and nonambivalent participants, we conducted a two-level (ambivalent vs nonambivalent) one-way ANOVA on the total number of stereotypes and on the total number of symbolic beliefs that participants indicated on the open-ended measures. Results indicated no significant effects, $Fs(1, 74) < 1$.

**Attitude-relevant affect.** To test whether total amount of affect toward Oriental people was different between ambivalent and nonambivalent participants, we conducted a two-level (ambivalent vs nonambivalent) one-way ANOVA on the total number of emotions that participants indicated on the open-ended measure. Results indicated no significant effect, $F(1, 74) < 1$.

**Attitude favorability and attitude extremity.** A two-level (ambivalent vs nonambivalent) one-way ANOVA was conducted on participants’ responses to the attitude thermometer. Results indicated a main effect of ambivalence, $F(1, 74) = 9.84$, $p < .005$, such that participants who were ambivalent toward Oriental people were less favorable toward Oriental people ($M = 66.21$) than were participants who were not ambivalent toward Oriental people ($M = 80.42$).

Given that ambivalent participants’ attitudes were more neutral than were nonambivalent participants’ attitudes ($M = 66.21$ vs 80.42; neutral = 50), it is not surprising that a two-level (ambivalent vs nonambivalent) one-way ANOVA on the extremity of participants’ initial attitudes, [rating minus 50], also revealed a main effect of ambivalence, $F(1, 74) = 35.96$, $p < .001$. Participants who were
ambivalent toward Oriental people indicated less extreme attitudes toward Oriental people ($M = 19.21$) than did participants who were not ambivalent toward Oriental people ($M = 35.68$).

**Primary Dependent Variables**

Because people who were ambivalent toward Oriental people possessed different initial attitudes toward the group than did people who were nonambivalent, we statistically controlled for attitude favorability in all of our analyses that included level of ambivalence as a factor. It should be noted that analyses controlling for attitude extremity revealed the same pattern of findings as those that occurred when attitude favorability was controlled.

Attitudes toward Oriental people were statistically controlled using analyses of covariance (ANCOVA). In all of our ANCOVAs, initial attitudes toward Oriental people were positively related to the dependent measures (i.e., favorability toward residents of Hong Kong and agreement with their immigration), which further justifies the inclusion of this covariate. Also, preliminary analyses revealed that the relation between the covariate and each of the dependent measures was stable across the experimental conditions, which is an important prerequisite for interpreting the ANCOVAs (Marascuilo & Levin, 1983). Thus, the reported means were adjusted for the presence of the covariate.

**Attitudes toward residents of Hong Kong.** We performed a $2 \times 2$ (level of ambivalence $\times$ message strength) analysis of covariance (ANCOVA) on participants’ favorability toward residents of Hong Kong, with initial attitude toward Oriental people entered as the covariate. Results indicated a main effect of message strength, $F(1, 71) = 8.44, p < .005$, such that participants who received the strong message were more favorable toward residents of Hong Kong ($M = 1.66$) than were participants who received the weak message ($M = 1.15$). This effect was qualified by an ambivalence $\times$ message strength interaction, $F(1, 71) = 5.55, p < .03$. Analysis of this interaction revealed that ambivalent participants who received the strong message were more favorable toward residents of Hong Kong ($M = 1.77$) than were ambivalent participants who received the weak message ($M = .84$), $t(71) = 3.76, p < .001$. In contrast, nonambivalent participants were not differentially affected by the strong ($M = 1.54$) and weak messages ($M = 1.44$), $t(71) = 0.41, ns$. In addition, ambivalent participants who received the weak message were less favorable toward the residents of Hong Kong than were nonambivalent participants who received the weak message, $t(71) = 2.52, p < .02$. Ambivalent participants who received the strong message were not more favorable than were nonambivalent participants who received the strong message, $t(71) = 0.90, ns$.

**Positive and negative dimensions of attitudes toward residents of Hong Kong.** To determine whether the positive and negative dimensions of participants’ attitudes were similarly affected by the manipulations, we performed a $2 \times 2 \times 2 \times 2$ (level of ambivalence $\times$ message strength $\times$ attitude dimension) mixed-model
ANCOVA on participants’ ratings of the positive and negative dimensions of their attitudes toward residents of Hong Kong. Attitude toward Oriental people was entered as the covariate. Results indicated significant main effects of message strength, $F(1, 70) = 15.49, p < .001$, and attitude dimension, $F(1, 71) = 680.67, p < .001$. Specifically, participants who received the strong message were more favorable toward residents of Hong Kong ($M = 0.75$) than were participants who received the weak message ($M = 0.38$) and, of course, ratings of the negative dimension were more negative ($M = -0.83$) than were ratings of the positive dimension ($M = 1.95$). The main effect of message strength was qualified by an ambivalence x message strength interaction, $F(1, 70) = 6.26, p < .02$. Analysis of this interaction revealed that ambivalent participants who received the strong message were more favorable toward residents of Hong Kong ($M = 0.86$) than were ambivalent participants who received the weak message ($M = 0.25$), $t(70) = 3.24, p < .01$. In contrast, nonambivalent participants were not differentially affected by the strong ($M = 0.63$) and weak messages ($M = 0.50$), $t(70) = 0.69, ns$. Ambivalent participants who received the weak message showed a tendency to be less favorable than the nonambivalent participants who received the weak message, but this tendency was not significant, $t(70) = 1.34, p < .20$. Ambivalent participants who received the strong message were not more favorable than nonambivalent participants who received the strong message, $t(70) = 1.18, ns$. No other main effects or interactions were significant. Thus, because attitude dimension did not interact with ambivalence and message strength, the positive and negative dimensions were similarly affected by ambivalence and message strength.

Agreement with immigration from Hong Kong. We performed a $2 \times 2$ (level of ambivalence x message strength) ANCOVA on participants’ agreement with the immigration of people from Hong Kong, with attitude toward Oriental people entered as the covariate. Results indicated significant main effects of ambivalence, $F(1, 70) = 6.91, p < .01$, and message strength, $F(1, 70) = 7.65, p < .01$. Specifically, ambivalent participants agreed less with the immigration of people from Hong Kong ($M = 0.54$) than did nonambivalent participants ($M = 1.50$), and participants who received the strong message agreed with the immigration of people from Hong Kong ($M = 1.50$) more than did participants who received the weak message ($M = 0.59$). These effects were qualified by a significant ambivalence x message strength interaction, $F(1, 70) = 8.24, p < .01$. Analysis of this interaction revealed that ambivalent participants who received the strong message agreed more with the immigration of people from Hong Kong ($M = 1.51$) than did ambivalent participants who received the weak message ($M = -.29$), $t(70) = 4.01, p < .001$. In contrast, nonambivalent participants were not differentially affected by the strong ($M = 1.49$) and weak messages ($M = 1.51$), $t(70) = 0.04, ns$. In addition, ambivalent participants who received the weak message agreed less with the immigration of people from Hong Kong than did nonambivalent participants who received the weak message, $t(70) = 4.24, p < .001$. Ambivalent
participants who received the strong message did not differ from nonambivalent participants who received the strong message, $t(70) = 0.04, ns$.\(^2\)

**Mediating Role of Thoughts about Immigration from Hong Kong**

*Mediation of the relation between message strength and agreement with immigration from Hong Kong.* Following Baron and Kenny (1986), we conducted three regression equations to test whether the effect of message strength on ambivalent participants’ agreement with immigration from Hong Kong was mediated by the favorability of their thoughts about this immigration. First, we used participants’ message strength condition to predict their agreement with immigration from Hong Kong. Second, we used participants’ message strength condition to predict the favorability of their thoughts regarding immigration from Hong Kong. Third, we used participants’ message strength condition and the favorability of their thoughts to predict their agreement with immigration from Hong Kong. As would be expected if there is mediation, the effects of message strength on agreement, $t(35) = 2.28$, $p < .03$, and thought favorability, $t(35) = 2.14$, $p < .04$, were significant in the first two regression equations, and the effect of thought favorability on agreement was significant in the third regression equation, $t(34) = 4.72$, $p < .001$. The effect of message strength on agreement was not significant in the third regression equation, where favorability of thoughts was simultaneously entered as a predictor, $t(34) = 1.11$, ns (see the top panel of Fig. 1 for the full and semipartial correlations).

We repeated the above analyses for nonambivalent participants. As shown in the bottom panel of Fig. 1, message strength did not influence nonambivalent participants’ thought favorability or their agreement, thus precluding the notion that thought favorability mediated an effect of message strength for these participants.\(^3\)

*Mediation of the relation between initial attitudes and agreement with immigration from Hong Kong.* For exploratory purposes, we also tested whether ambivalent or nonambivalent participants’ thoughts might mediate the relation between their initial attitudes toward Oriental people and their agreement with immigration from Hong Kong. If participants’ initial attitudes influenced their agreement, perhaps through their thoughts, it would appear that participants were using their

\(^2\) We also tested whether ambivalence within each component (e.g., stereotype ambivalence) moderated the effects of message strength on the principal dependent measures, using the ANCOVAs described in the text. In general, these supplementary analyses indicated that ambivalence within each of the three components produced the same pattern of results as did overall ambivalence, but they failed to reach statistical significance. This suggests that all three components need to be considered in order to provide a powerful measure of ambivalence.

\(^3\) If ambivalent participants are engaging in more systematic processing of the messages, they should also list more thoughts than nonambivalent participants. A $2 \times 2$ (ambivalence $\times$ message strength) ANOVA on the number of thoughts listed revealed a marginal effect of ambivalence, such that ambivalent participants tended to list more thoughts ($M = 3.89$) than did nonambivalent participants ($M = 3.55$), $F(1, 72) = 1.89$, $p < .18$. (The size of this effect may have been weak because we asked participants to list no more than five thoughts.)
attitudes as a heuristic cue in forming their opinions. Nonambivalent participants might be particularly likely to use their attitudes as a heuristic cue.

As shown in the top panel of Fig. 2, ambivalent participants’ initial attitudes predicted neither their thought favorability nor their agreement, thus precluding the notion that thought favorability mediated an effect of initial attitudes for these participants.

In contrast, nonambivalent participants’ initial attitudes strongly predicted their thought favorability, \( t(36) = 3.64, p < .001 \), and agreement, \( t(36) = 6.57, p < .001 \) (see the bottom panel of Fig. 2 for the full and semipartial correlations). When both initial attitudes and thought favorability were entered as simultaneous predictors of agreement, the relation between initial attitudes and agreement was reduced but not eliminated, \( t(35) = 4.62, p < .001 \), indicating that thought favorability does not fully mediate the relation between participants’ initial attitudes and their agreement. Nevertheless, the relation between thought favorability and agreement was significant, \( t(35) = 3.60, p < .001 \), indicating that thought favorability must at least partly mediate the relation between initial attitudes and agreement (Baron & Kenny, 1986).4

4 Because participants provided very few thoughts regarding residents of Hong Kong, per se (see Method), we could not test whether participants’ thoughts about residents of Hong Kong mediated relations between message strength or initial attitudes and attitudes toward residents of Hong Kong.
DISCUSSION

This experiment demonstrated that people who hold ambivalent attitudes toward a group are more likely to systematically process persuasive messages about the group than are people who hold nonambivalent attitudes toward the group. This conclusion was supported by the finding that ambivalent participants who were given a strong positive message in favor of immigration from Hong Kong were more favorable toward immigration from Hong Kong than were ambivalent participants who were given a weak positive message; nonambivalent participants were not differentially affected by the strong and weak messages. The same pattern of findings occurred when we examined participants’ attitudes toward residents of Hong Kong.

Results of our mediational analyses also supported the hypothesis that ambivalence increased systematic processing. For both the ambivalent and nonambivalent participants, their thoughts while reading the message predicted their agreement with the message. Importantly, however, ambivalent participants’ thoughts mediated the effect of message strength on their agreement with immigration from Hong Kong, whereas nonambivalent participants’ thoughts partially mediated the relation between their initial attitudes toward Oriental people and their agreement with immigration from Hong Kong. Overall, ambivalent participants’
thoughts and agreement were influenced only by message strength; nonambiva-
ental participants’ thoughts and agreement were influenced only by their prior
attitudes. Thus, ambivalent participants were processing the message systemati-
cally, whereas nonambivalent participants were simply using their initial attitudes
toward Oriental people as a heuristic cue.

Given that ambivalent participants processed the persuasive message more
systematically than nonambivalent participants, it is important to examine whether
the effect of ambivalence was more pronounced for the weak or the strong
message. Interestingly, ambivalent participants formed less favorable attitudes
after reading the weak message than did nonambivalent participants, but ambiva-
 lent participants did not form more favorable attitudes after reading the strong
message than did nonambivalent participants—although the latter tendency was
in the predicted direction. This finding suggests that ambivalent participants may
have been more affected by the weak message than by the strong message.

To provide a clearer test of whether the weak message had a greater effect on
ambivalent participants’ attitudes, it is necessary to examine the attitudes that they
would possess without having received a strong or weak message. If ambivalent
participants were more strongly affected by the weak message, ambivalent
participants who are given no message should indicate attitudes that are more
favorable than the attitudes of ambivalent participants who received the weak
message, but the attitudes of ambivalent participants who are given no message
should not significantly differ from the attitudes of ambivalent participants who
received the strong message.

To test this hypothesis, we asked an additional 36 undergraduates to complete
the procedures of our main experiment, except that these participants were not
given the editorial about immigration from Hong Kong. Participants were then
retained who were either low (N = 17) or high (N = 11) in ambivalence, using
the boundary ambivalence scores evident in the bottom and upper tertiles in our
main sample. Next, to simplify comparisons between these participants and the
participants in our main sample (who received a strong or weak message), we
calculated the average of each participant’s z-scores on all three of our attitude
measures (agreement with immigration from Hong Kong, attitudes toward
residents of Hong Kong, and the split-scale attitude measure [positive scale
rating − negative scale rating]), which were highly correlated in both our main
sample and our new sample (rs > .64, p < .001). Planned contrasts were then
performed, while controlling for initial attitudes toward Oriental people. Results
indicated that, for ambivalent participants, attitudes after reading the weak
message (M = −0.67) were significantly more negative than attitudes after
reading no message (M = −0.14), t(27) = 2.78, p < .01, whereas attitudes after
reading the strong message (M = −0.03) did not significantly differ from atti-
dates after reading no message, t(25) = 1.17, ns. For nonambivalent participants,
attitudes after reading no message (M = 0.20) did not significantly differ from
attitudes after reading the weak (M = 0.42), t(34) = 0.62, ns, or strong message
These comparisons support the conclusion that ambivalent participants were particularly affected by the weak message.\footnote{Interestingly, in the no message condition, ambivalent participants’ composite attitudes ($M = -0.14$) did not significantly differ from nonambivalent participants’ composite attitudes ($M = 0.20$) when initial attitudes toward Oriental people were statistically controlled, $t(24) = 1.02$, $ns$. This finding indicates that including initial attitudes toward Oriental people as a covariate successfully eliminated any a priori differences in the attitudes subsequently assessed.}

Why was an effect of ambivalence more apparent in the weak message condition? The only difference between the weak message and the strong message was that the weak message contained statistics that, upon careful examination, only weakly supported the message’s assertion. In contrast, the information in the strong message was strongly congruent with the message’s conclusion. Perhaps systematic processing revealed the incongruencies in the weak message, but nothing exceptional about the strong message. Future research should test whether a similar pattern is obtained using different argument strength manipulations and attitude topics.

Possible Mediating Mechanisms

Overall, our results indicate that people who are ambivalent toward a group are more likely to engage in systematic processing. This finding might have occurred because people who are ambivalent toward a group are more likely to possess both positive and negative dimensions in their attitudes. Because of these conflicting dimensions of their attitudes, ambivalent people may be motivated to attend to new information about the group, and they may be more able to process the information.

With regard to the motivational processes, ambivalent participants might devote more attention to new information about the group in order to reduce the tension that results from being simultaneously favorable and unfavorable toward the group (see Hass et al., 1992; Katz et al., 1986, for discussions of the tension evoked by ambivalence). This reasoning is consistent with past theorizing (see Introduction) and with an additional analysis that we conducted. Specifically, we tested whether ambivalent participants who read the strong message or the weak message reported less post-message ambivalence toward residents of Hong Kong than did ambivalent participants who read no message. To calculate a post-message measure of ambivalence toward residents of Hong Kong, we applied our ambivalence formula (see Method) to participants’ ratings of the positive and negative dimensions of their attitudes toward residents of Hong Kong. Planned contrasts were then performed, while controlling for initial attitudes toward Oriental people. Results indicated that ambivalent participants were significantly less ambivalent toward residents of Hong Kong after reading the strong message ($M = -0.06$) than after reading no message ($M = 1.71$), $t(26) = 2.82, p < .01$, whereas their ambivalence after reading the weak message ($M = 1.50$) did not significantly differ from their ambivalence after reading no message, $t(27) = 0.04$, $ns$. Thus, message processing did facilitate a reduction in ambivalence, albeit only...
after reading the strong message. This finding makes intuitive sense because the strong message provided participants with new, strong information that could reduce their ambivalence. In contrast, the weak message provided information that was too weak to help participants develop well-founded conclusions.

With regard to the effect of ambivalence on people’s ability to process messages, it is possible that people who are ambivalent toward a group possess more complex schemas of the group, which enable them to process information about the group more extensively. That is, ambivalent people might possess the same amount of knowledge about the group as do nonambivalent people, but this knowledge might be organized in a more complex manner, thereby facilitating deeper processing of new information. In fact, the ambivalent and nonambivalent participants in our experiment did not indicate different amounts of information about the group on the emotions, stereotypes, and symbolic beliefs measures. The ambivalence scores, however, reflected ambivalent participants’ greater conflict within their emotions, stereotypes, and symbolic beliefs. Such evaluative conflict might promote the formation of linkages between the inconsistent elements. In fact, research on person memory (see Srull & Wyer, 1989) has shown that observing inconsistencies between a target person’s behavior and one’s evaluation of the person (e.g., a likeable person does something negative) tends to facilitate the formation of interbehavior linkages in memory. Thus, it is plausible that evaluative conflict in one’s perceptions of a group also promotes the formation of linkages between inconsistent perceptions. These additional linkages could facilitate the processing of new information about the group.

**Alternative Explanations?**

Nevertheless, it is important to consider other possible explanations for the moderating role of ambivalence. It could be suggested that ambivalence covaries with specific personality traits that facilitate systematic processing. For example, people who are ambivalent toward a group might generally possess a higher need for cognition, which is an individual difference variable that has been shown to facilitate systematic processing (e.g., Cacioppo, Petty, Kao, & Rodriguez, 1986; Cacioppo, Petty, & Morris, 1983). To test whether this possible relation might explain our findings, we asked our additional sample of 36 participants to complete measures of need for cognition (Cacioppo, Petty, & Kao, 1984), need for closure (Kruglanski, Webster, & Klem, 1993), and tolerance for ambiguity (McLain, 1993). Results indicated that ambivalence toward Oriental people was not significantly related to need for cognition, $r(34) = -.27$, ns. If anything, this personality variable was negatively related to ambivalence (see also Thompson & Zanna, 1995), so it could not have mediated the effect of ambivalence on systematic processing. Ambivalence toward Oriental people was also not significantly related to need for closure, $r(32) = -.02$, ns, or tolerance for ambiguity, $r(31) = -.22$, ns. Thus, these individual differences could not have been responsible for the moderating effect of ambivalence on systematic processing.

It could also be suggested that ambivalence might covary with specific
attitudinal variables, which may mediate the moderating role of ambivalence on systematic processing. In our experiment, however, the effects of ambivalence were not mediated by seven different attitudinal variables: evaluative/cognitive consistency, evaluative/affective consistency, affective/cognitive consistency, attitude-relevant knowledge, attitude-relevant affect, attitude favorability, and attitude extremity. These findings are interesting because research to date has not examined relations between ambivalence and these attitudinal variables.

Of course, it remains possible that there are other unmeasured attitudinal variables that might mediate the effect of ambivalence. For example, ambivalent attitudes might be held with less confidence than nonambivalent attitudes (Pomerantz, Chaiken, & Tordesillas, 1995). Because new information about a group can provide ambivalent people with a more solid basis for their attitudes, ambivalent people might be motivated to attend to new information more closely.

In addition, ambivalent attitudes might be less accessible than nonambivalent attitudes, which might cause them to exert less of an effect on message processing. In our experiment, this explanation seems implausible because both the ambivalent and nonambivalent participants completed a measure of their attitudes 30 min prior to completing the dependent measures, which should have made both groups’ attitudes at least somewhat accessible. Nonetheless, we would not be surprised if a mediating role of attitude accessibility is found in future research, because previous research has shown that attitude accessibility can play a mediating role in nearly any effect of attitudes (see Fazio, 1990, for a review), including effects on message processing (e.g., Houston & Fazio, 1989; Roskos-Ewoldsen & Fazio, 1992).

Regardless of whether such findings are obtained in the future, our results help place ambivalence within the list of variables that are relevant to understanding systematic processing. Thus, it is important for future research to test whether ambivalence might mediate the effects of other attitudinal variables in addition to discovering whether other attitudinal variables mediate the effect of ambivalence.

Implications

There are several theoretical and practical implications of these findings. From a theoretical perspective, these findings show that ambivalence toward a group does more than cause response polarization. By showing that ambivalence toward a group can cause increased systematic processing of messages about the group, this experiment reveals another way that ambivalence can affect responses toward groups. More generally, this experiment provides further evidence that attitude ambivalence can have important social psychological effects.

Importantly, this research is also relevant to contemporary models of persuasion, such as the elaboration likelihood model (Petty & Cacioppo, 1986) and the heuristic-systematic model (Chaiken et al., 1989). Both of these models suggest that systematic processing of messages is an important mediator of the effects of external cues (e.g., persuasive messages) on attitude change. To determine the effects of various external cues, it is important to know whether systematic
processing of the cues is likely. By finding that level of ambivalence moderates the use of systematic processing, this experiment contributes a new variable to help predict the likelihood of systematic processing.

With regard to the applied implications of our findings, our results indicate that the media should be especially sensitive in its portrayal of groups. In its effort to attract attention, the media often dramatizes stories about a group. For example, in covering the plight of Cuban refugees to the United States, the media has frequently illustrated dramatic instances of Cuban refugees risking their lives to reach the United States (Navarro, 1994; Newmann, 1994). Such portrayals elicit sympathy for the plight of the refugees, which might make people more favorable to permitting their immigration. However, such portrayals do not present any cogent reasons to accept the refugees. For people who are ambivalent toward the refugees, this lack of content might be an important deficit because ambivalent people are motivated to obtain information that might help them resolve the conflict in their attitudes. Because such portrayals lack content, ambivalent people might regard the portrayals as weak messages in favor of the refugees. Perhaps, therefore, such sensational portrayals cause ambivalent people to agree less with the refugees’ immigration than if they were not shown such portrayals.

In conclusion, our research has found that ambivalence moderates the impact of persuasive messages about immigrant groups. Given the increasing attention being allocated to immigration issues by the government (e.g., Palmer, 1994), the media (e.g., Morganthau, 1993) and special interest groups (e.g., Federation for American Immigration Reform; see “Federation for,” 1995), it is important to continue examining the psychological variables that might affect people’s attitudes regarding immigrant groups. Certainly, these attitudes are not formed in a vacuum. There are social psychological variables that rightly or wrongly influence these attitudes, and future research should continue to search for such variables.

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