Two hypotheses are examined: 1) Low Machiavellians writing counterattitudinal essays will report greater attitude change toward the direction of the position advocated than will high Machiavellians; and 2) Intrinsically religious persons writing counterattitudinal essays will report greater attitude change toward the direction of the position advocated than will extrinsically religious persons. Machiavellianism is defined as a high need to control others, regardless of the attending ethical considerations. Intrinsically religious persons are motivated to practice their beliefs in everyday life; extrinsically religious persons use religion as a utilitarian method for self-gain. Sixty-six subjects were classified as High or Low Machs on the basis of the Christie et al. Machiavellianism Scale and as Intrinsically or Extrinsically Religious on the Allport and Ross Religiosity Scale. The experimental group of 53 wrote essays advocating two years mandatory military service prior to college enrollment; they believed these were to be read by persons who were undecided on the issue. Pretesting had indicated that no subjects supported this proposition. It was believed that writing the counterattitudinal essay would induce greater cognitive dissonance, and hence attitudinal change, in Low Machs and Intrinsically Religious subjects. Posttesting revealed that Low Machs displayed greater attitude change than did High Machs; however, the religiosity hypothesis was not confirmed. (KW)
MACHIAVELLIANISM AND RELIGIOSITY AS DETERMINANTS OF COGNITIVE DISSONANCE
IN A COUNTERATTITUDBINAL SITUATION

by Robin N. Widgery and Stewart L. Tubbs
Department of Communication and Organizational Behavior
General Motors Institute
Flint, Michigan 48502

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This study investigated the hypotheses that (1) low Machiavellian subjects will experience greater attitude change than high Machiavellians after writing a counterattitudinal essay; (2) intrinsically religious subjects will experience greater attitude change than extrinsically religious subjects after writing a counterattitudinal essay.

Subjects were asked to write belief-discrepant essays advocating two years of mandatory military service for all men before being accepted by a college. The hypothesis concerning Machiavellianism was confirmed, the hypothesis concerning religiosity was not. Low Machiavellians experience greater attitude change as a result of counterattitudinal advocacy than do high Machs. Findings were discussed and possible explanations were offered.

Robin N. Widgery
Stewart L. Tubbs
Department of Communication and Organizational Behavior
General Motors Institute
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MACHIAVELLIANISM AND RELIGIOSITY AS DETERMINANTS OF COGNITIVE DISSONANCE IN A COUNTERATTITUINAL SITUATION

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Robin Widgery and Stewart Tubbs

General Motors Institute

Recent studies, using counterattitudinal advocacy as a means of inducing cognitive dissonance, have supported the view that the locus of dissonance arousal is the advocate's fear of aversive consequences to the receivers of his belief-discrepant message. Helmreich and Collins (1968), Nel, Helmreich and Aronson (1969), Bodaken (1970), and Widgery and Miller (1972), have all reported greater attitude change among subjects who encoded belief-discrepant messages for uncommitted, as opposed to, committed receivers. Widgery and Miller also reported that subjects experienced greater dissonance when writing essays for known, as opposed to, unknown receivers. These researchers assumed that counterattitudinal advocates would experience greater dissonance arousal when concerned about the possible harmful effects of their advocating on others. It was supposed that the uncommitted receiver would be more open to persuasive attempts and the persuader would be more concerned lest his counterattitudinal message have some harmful result. It was also assumed that concern would be greater for the known receiver than for the unknown one.

This experiment was based on the assumption that a locus of dissonance arousal is the advocate's fear of aversive consequences for his audience. If this is true, it is reasonable to assume that some individuals will be more concerned for the well-being of their audience than will others. Burgoon, Miller, and Tubbs (1971) have shown
that the Machiavellian personality experiences little inconsistency in some counterattitudinal situations. They found that low Machiavellians (Low Machs) experienced greater dissonance and subsequent attitude change in a low incentive condition, while the High Machs responded inversely by changing attitude more in the high incentive condition.

Christie (1969) has described the Machiavellian person as one who exhibits a high need to control others, regardless of the attending ethical considerations. In a condition where the probability of harmful consequences to others is likely, it is reasonable to predict that the High Mach individual will experience little concern for the aversive effects of his belief-discrepant message. On the contrary, it is likely that the Low Mach individual will experience great cognitive dissonance in such a situation and thus report greater attitude change toward the issue he has advocated.

It was the assumption of the researchers in this experiment that an individual's religious attitudes and values could also determine the amount of dissonance aroused in a counterattitudinal situation when there was a high probability of harmful effects to the audience. In measuring religious values, Allport and Ross's (1967) test of Intrinsic and Extrinsic Religiosity was employed. They have described the intrinsically religious person as one who is motivated to practice his religious beliefs in everyday life. The extrinsically motivated person supports his church because it is socially acceptable to do so, but may not be concerned about living his religion.

Based on Allport and Ross's description of these two personalities, we believed that the intrinsically religious individual would
probably experience greater dissonance when committing a counterattitudinal act that might harm others. It was reasonable to assume that the extrinsically religious personality would be less sensitive to the prospect of harming others, thus experiencing little dissonance.

Because the experimenters believed that relative Machiavellianism and Religiosity might be predictors of amount of attitude change in a counterattitudinal situation, the following hypotheses were proposed:

\( H_1: \) Low Machiavellians writing counterattitudinal essays will report greater attitude change toward the direction of the position advocated than will high Machiavellians.

\( H_2: \) Intrinsically religious persons writing counterattitudinal essays will report greater attitude change toward the direction of the position advocated than will extrinsically religious persons.

**METHOD**

**Subjects**

Subjects were sixty-six (66) freshman students at General Motors Institute who were enrolled in the basic communication course. Sections of the course were selected at random for the experimental treatment.

**Independent Variables**

Subjects were classified by their scores on two personality measures: (1) Machiavellianism, and (2) religiosity.

Machiavellianism. On the Machiavellianism variable, subjects were classified as either high or low based on their scores on the 20 item, Likert-type scale constructed by Christie, et al. (1969).
Items are scored from one (Disagree Strongly) to seven (Agree Strongly). Adding a constant of 20 to each score, the scores range from a lowest possible Mach score of 40, through a midpoint of 100, to a highest possible Mach score of 160. This instrument has a split-half reliability of .79, and has been used in numerous previous studies (Christie and Geis, 1970).

In the present study, subjects were classified as high if their score was above 100, and low if it was below 100.

Religiosity. On the religiosity variable, subjects were classified as either intrinsically religious or extrinsically religious. Allport (1968) describes the intrinsically religious person as one who places a high value on religion, strives to rise above self-centered needs, is humble, and tries to practice the teachings of his faith. The extrinsically religious person, on the other hand, is described as self-centered, and one who looks after his own personal safety, social standing and way of life. He uses religion as a utilitarian method for self-gain.

In the present study, Allport and Ross's (1967) scale for measuring religiosity was used. The scale includes 20 items, each of which is scored from one (I definitely disagree) to 5 (I definitely agree). Possible scores ranged from a low of 21 to a high of 105.* Intrinsic religiosity is determined by the lower scores (up to 60) and extrinsic religiosity by the scores above 60. Item-to-subscale correlations for this scale ranged from .18 to .58.

Dependent Variable

Subjects' attitude was the dependent variable in this study. The
pre-test consisted of six concepts which were each rated on four semantic-differential type scales. The four evaluative scales on one of the concepts (all college male students should be required to serve at least two years in the armed service before being accepted by a college or university) were used as pre-test scores. This concept (topic) was chosen since pre-test responses indicated a fairly unanimous negative reaction. Thus, we were reasonably assured of being able to create a counterattitudinal situation by having subjects write essays supporting this topic.

The post-test consisted of the same four scales which were used to initially rate the topic. The possible range of scores on the attitude measure was a minimum of 4 to a maximum of 28.

**Experimental Procedures**

Three weeks prior to the experiment, all subjects completed the pre-test questionnaire described above, along with the Machiavellianism scale and the religiosity scale.

On the actual day of the experiment, 53 subjects in several different class sections were asked to write counterattitudinal essays on the topic of two years mandatory military service prior to college enrollment. Thirteen subjects comprised the control group and knew nothing of the essays that the experimental subjects were asked to write. Experimental group subjects were told that the essays were to be read by 40 other students at General Motors Institute who had already stated that they were undecided toward this topic, and therefore would probably be easily influenced by the arguments in the essays. In order to eliminate the possibility that the subjects might have felt that they
could "take back" their arguments if they were confronted by those who read the essays, subjects were specifically asked not to put their names on the essays. The "take-back" phenomenon has been reported as a means of dissonance reduction by Widgery (1971) and Helmreich and Collins (1968).

After the essays had been written, those in the experimental group completed the post-test questionnaire. Upon questioning subjects, they indicated that they did not remember this topic being on the questionnaires that they had filled out three weeks earlier; however, they did remember filling out some questionnaires. Subjects were then told the entire purpose of the study and were later informed of the experimental results.

**RESULTS**

**Validation of Experimental Manipulation**

In order to determine the extent to which subjects reacted to the experimental manipulation, four questions were asked on the post-questionnaire.

1) Before you wrote your essay, how did you think your reading audience felt toward the issue in question? (Favorable, undecided, opposed, don't know.) Subjects' responses revealed that a majority (N=32) believed that they were writing to an undecided audience.

2) My essay may have a harmful effect on those reading it (strongly agree [5] to strongly disagree [1]). Subjects' mean response was 3.01, indicating that subjects felt there might be some harm resulting from their essays.

3) How probable is it that you may know some of the people who...
will be reading your essay (highly probable [7] to highly improbable [1]). Subjects' mean response was a 4.21 indicating that subjects' felt some probability that they might know the readers of their essay.

4) How do you evaluate the persuasive effectiveness of the essay you have written (very strong [7] to very weak [1])? Mean response was a 4.42 indicating that subjects' had written relatively mild persuasive messages.

Pre-Test Analysis

In order to determine whether the pre-test mean attitude scores for each of the five groupings of subjects were significantly different, a one-way analysis of variance was employed. (Table I) The five group pre-test means were not found to be significantly different (F=1; df=4/61).

Test of the Hypotheses

A two-way analysis of variance of the attitude change scores (Table I) yielded a significant main effect for Machiavellianism as predicted (F=10.23; df=50), thus supporting hypothesis 1.

Low Machs changed their attitudes significantly more than High Machs after writing counterattitudinal messages. The religiosity prediction was not confirmed. Intrinsically and extrinsically religious subjects did not change attitudes differentially.

DISCUSSION

Support for the Machiavellian effect in this experiment is consistent with the belief that the Low Mach individual experiences
greater cognitive dissonance when committing a belief-discrepant act. Such an individual may be more concerned than the High Mach lest his counter-advocating influence others in an aversive way. It was assumed that such fear of harmful consequences to a supposed audience would arouse dissonance in Low Machs but not in High Machs.

Failure to support the Religiosity effect in this experiment was surprising. Since it was supposed that fear of aversive consequences to the target audience was the locus of dissonance arousal, Intrinsically Religious (IR) individuals were expected to experience greater dissonance and subsequent attitude change than would Extrinsically Religious (ER) individuals. Failure to support this prediction may be explained in several ways.

For instance, the IR individual may be more firmly rooted in his attitudes than the ER person. It may be the IR religious value to hold firmly to his beliefs even in the face of inconsistent information. If this is true, perhaps the IR needs greater justification to change his opinion about an attitude object. Instead of changing attitude as a method of dissonance resolution, he may employ other means such as rejection, distortion, or selective attention to the dissonant cognitive elements.

It is also possible that the IR is less ego defensive than the ER. This might militate against his changing his attitude about the counterattitudinal proposition, by lowering his own self-perception instead. In other words, IR may be more open to self-criticism and self-judgment than the ER. For the IR, humility (a Christian virtue) may be a value which lowers ego defensiveness, thus stabilizing the attitude object and facilitating changes in self-perception.
One evident reason why no effect was found for religiosity is in the apparent multidimensionality of the instrument and/or the possible measurement error accompanying the religiosity scale. The item-to-subscale correlations are quite low, indicating considerable unreliability in the instrument.

In presenting subjects with the choice of participating in this research project, students were made to feel free to refuse to write the belief-discrepant essay. Even though everyone who was asked wrote an essay, eight essays did not advocate the belief-discrepant proposition. Seven of the eight essays were written by IR subjects. This finding tends to support the belief that IR's do have a greater aversion to committing counterattitudinal acts. This suggests that they chose a means of resolving dissonance other than attitude change, i.e., refusing to communicate counter to their beliefs.

CONCLUSION

By using personality as a variable in predicting dissonance arousal, this study has suggested the need for measures other than attitude change as indicators of cognitive dissonance. Because other modes of dissonance reduction are possible, it is necessary that methods be developed for measuring alternate means of resolution, e.g., suppression and avoidance of dissonant information, or change of self-esteem.

It is possible that some individuals have higher tolerance for dissonance and thus experience less pressure to resolve it. If this is true, a standardized test would be helpful in measuring such a personality attribute. One problem in using a measure such as intrinsic and extrinsic religiosity is that it may be too global in its
measurements. Instead of measuring an individual's tolerance for dissonance in a counterattitudinal situation, it may be measuring a value system. Description of an individual's value system will not necessarily indicate how that individual processes information.

This experiment indicates that personality measures can be predictors of dissonance arousal in a counterattitudinal situation. The Machiavellian effect supports this conclusion. However, the failure to confirm the Religiosity hypothesis suggests that either religiosity is a poor predictor of cognitive dissonance or researchers need to develop other measures than attitude change when attempting to assess dissonance effects.
TABLE I

Amount of Mean Attitude Change and Analysis of Variance of Attitude Change Scores of Experimental Groups

<table>
<thead>
<tr>
<th>Condition</th>
<th>Attitude Change</th>
<th>Standard Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Mach: Intrinsic</td>
<td>1.25</td>
<td>4.84</td>
<td>16</td>
</tr>
<tr>
<td>High Mach: Extrinsic</td>
<td>1.30</td>
<td>3.83</td>
<td>10</td>
</tr>
<tr>
<td>Low Mach: Intrinsic</td>
<td>5.00</td>
<td>4.22</td>
<td>14</td>
</tr>
<tr>
<td>Low Mach: Extrinsic</td>
<td>5.55</td>
<td>4.50</td>
<td>11</td>
</tr>
<tr>
<td>(Control)</td>
<td>(.53)</td>
<td>(4.50)</td>
<td>(15)</td>
</tr>
</tbody>
</table>

Source   | S    | df | MS    | F   |
---------|------|----|-------|-----|
Machiavellianism | 15.98 | 1  | 15.98 | 10.23* |
Religiosity       | .09  | 1  | .09   | <1   |
Interaction       | .06  | 1  | .06   | <1   |
Error             | 73.32| 47 | 1.56  |      |
Total             | 89.45| 50 |       |      |

*p<.01
REFERENCES


**FOOTNOTES**

*The scale used in this study had 21 items. c.f. Feagin, J. in Robinson and Shaver, 1969, p. 506.*

**Good-bad, worthless-valuable, unpleasant-pleasant, fair-unfair.*