Ego-involvement as an Alternative Measure of Resistance to Persuasion

1976

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EGO-INVolVEMENT AS AN ALTERNATIVE
MEASURE OF RESISTANCE TO PERSUASION

BY

WILLIAM J. SNIDER
B.A., Florida Technological University, 1975

THESIS
Submitted in partial fulfillment of the requirements
for the degree of Master of Arts: Communication
in the Graduate Studies Program of the
College of Social Sciences Florida Technological University

Orlando, Florida
1976
ACKNOWLEDGEMENTS

Acknowledgements are for readers to read, for receivers to feel.

I would like to express my special appreciation to my parents, Francis and Margaret Snider, and in-laws, Bud and Joan Swift for the uncountable "little things" they have done along the way.

I am also deeply indebted to Bert Pryor, who, in COM 301, opened the door to a fascinating field and provided the inspirational push to go through it. As advisor, confidant, and friend, he continually gave unselfishly of himself.
To Debbie -- my wife, my life --
who kept unfailing faith in me when I doubted myself;
who tolerated me with understanding;
who shared my successes with joy;
I dedicate this work
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INTRODUCTION

One's very existence in a mass and democratic society necessarily subjects one to a bombardment of purposive messages which are destined to change, reinforce, or in some way manipulate the target's attitude toward specific issues. While a great deal of research has focused on message variables in persuasion, relatively little effort has been devoted to the study of messages aimed at inducing resistance to persuasion.

When McGuire and Papageorgis (1961) developed the foundation for inoculation theory, their "biological analogy" guided them through a series of studies testing the effects of message strategies, order permutations, and stimulus times. Tannenbaum and Norris (1965) and Tannenbaum, Macauley, and Norris (1966) worked within a congruity theory framework to examine the effects of source attribution on inducing resistance. (See Burgoon and Miller, 1974, for a brief review of the McGuire and Tannenbaum research paradigms).

The message elements themselves have also come under scrutiny. Burgoon and Chase (1973) replaced McGuire's "cultural truisms" with salient topics which were subjected to persuasive attacks that varied in levels of language intensity (Burgoon and Chase, 1973). Burgoon and King (1974) continued this line of development by
manipulating active versus passive message reception and combinations of pretreatments and levels of attack intensity.

The assumption inherent in inoculation theory is that the receiver will listen to weakened, although still somewhat threatening, forms of counter-argument. The effectiveness of the defense, then might be affected by the degree to which the receiver is open-minded (or, closed-minded) enough to attend to the defensive pre-treatment. The interaction of dogmatism and attitude was studied intensively by Sherif and Hovland (1961) and later by Sherif, Sherif, and Nebergall (1965). Their findings led to the development of social judgment, or assimilation/contrast theory.

Central to social judgment theory is a revised concept of attitude. Attitude is interpreted as more than an isolated issue-position, but rather as a continuum of degrees which reflect not only the attitude position itself but also define its relation to other possible issue positions. This new dimension of analysis was termed "involvement" or "ego-involvement" and refers primarily to the intensity with which an attitude is held.

Sherif and Hovland (1961) and Sherif, Sherif, and Nebergall (1965) have noted three theoretical constructs which serve to define the degree of involvement one has on an issue/attitude dimension. The latitude of acceptance is that range of potentially
acceptable issue positions surrounding the subject's most preferred position. The latitude of rejection is that set of positions a person defines as objectionable. The latitude of non-commitment essentially denotes a range of neutrality; those positions which are neither acceptable or objectionable. The relative sizes of these latitudes serve to operationalize the "involvement" concept (Kiesler, Collins, and Miller, 1969).

A highly ego-involved position, on, of course, a specific issue, will tend to have small latitudes of acceptance and non-committal and a large latitude of rejection. A low involvement position is characterized by a small latitude of rejection, a larger latitude of noncommitment, and perhaps a larger latitude of acceptance. Sherif and Hovland (1961) had postulated that highly involved persons would tend to also have smaller latitudes of acceptance, but this concept has not been consistently supported. The key determinant, then, of involvement (high or low) seems to be the size of the latitude of rejection (Sherif, Sherif, and Nebergall, 1965).

In summation, the concept of involvement can be reduced to the intensity with which an attitude is held, and is almost synonymous with expressed commitment to the subject's most acceptable attitude position (Wilmont, 1971). Intensity varies positively with the size of the expressed rejection region.
Involvement and Familiarity with Counter-Argument as Factors in Resistance to Persuasion

<table>
<thead>
<tr>
<th>Ego-Involved</th>
<th>Not Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiar (Refutational)</td>
<td>++</td>
</tr>
<tr>
<td>Not Familiar (Supportive)</td>
<td>+-</td>
</tr>
</tbody>
</table>

+ = presence of resistance  
- = absence of resistance

The possible ramifications of attitude intensity measurement upon studies in resistance to persuasion are noteworthy. The failure of Vohs and Garrett (1968) to successfully replicate the distraction experiment of Festinger and Maccoby (1964) initiated a post-experimental attempt to integrate the findings of these two studies. This analysis suggested that an interaction exists between degree of ego-involvement and familiarity with arguments counter to the subject's own position. This interaction is represented by the 2 X 2 table in Figure 1. Vohs and Garrett (1968) postulate that the greatest resistance to persuasion will be found in those who find the topic highly involving and are also familiar with the counter-arguments. In an inoculation theory framework, "familiarity" would correspond to a refutational defense
condition, where subjects obtain relevant information on ways
to defend their beliefs, while "non-familiarity" would correspond
to a supportive defense condition due to its lack of relevant
information. Thus, Figure 1 also suggests a defense type/involvement interaction. This study will seek to clarify that relationship.
That is, if certain message strategies intensify one's adherence
to a position, this belief-strengthening should render that person
more resistant to subsequent persuasive appeals.

Since the existing body of research has used single point
attitude measures instead of involvement techniques, the effects
of the manipulated defense and attack strategies have been only
partially examined. It is possible, for example, that a subject's
attitude would remain constant after exposure to a defense message,
yet the intensity with which he adheres to that attitude may have
increased. Such an outcome would go undiscovered with previously
used dependent measures.

While studying ego-involvement and attitude change, Sereno
and Bodaken (1972) noted that the "findings of the present study
suggest cautious interpretation of research which has purported
to describe the impact of persuasive communication through single
point measurement instruments . . . future research should
incorporate measures conceptualizing an expanded notion of attitude
change" (p. 158). Thus, the variable of ego-involvement represents
an important void in the existant body of research on resistance to
Another variable which merits continued systematic inquiry in resistance research is topic salience. Burgoon and Chase (1973) varied defense-type intensity while holding the intensity of the attack message constant in the moderate range. Intensity was operationalized as the degree to which language deviated from neutrality. All messages were passively read by the subjects. Their findings supported the hypothesis that, given a subsequent moderate attacking message, a) the supportive defense will supply resistance only when intense, and b) the refutational defense will be effective only when its intensity matches that of the attack.

Burgoon and King (1974) used the same topic (making the university a two-year, upper division school) and intensity manipulations developed by Burgoon and Chase (1973), but extended the conditions to include differential levels of the attack. They hypothesized that a combinational defense type would be superior to both single defenses, while the refutational defense alone would induce more resistance than the supportive defense alone. As this hypothesis was not supported, the authors concluded that the refutational, supportive, and combinational defenses were all equally effective in conferring resistance to subsequent persuasive appeals.

Another hypothesis which received strong support was that in a passive condition, a low intensity attack can overcome the resistance
imparted by a moderate to highly intense defense type, either supportive or refutational. The rationale for this hypothesis revolves around the relative believability of the messages. After exposure to an intense defense, the subject subsequently expects the forthcoming attack to also be intense. When this expectancy is not confirmed by the low intensity attack, the receiver must then decide which message to believe. Because of the attack's low intensity, it appears to be the more objective appraisal of the issue and, therefore, its credibility is enhanced. In contrast, the defense arguments are now perceived as unjustifiably high; motives are questioned, credibility is undermined, and the defensive message is rejected.

These findings suggest that intensity is a necessary consideration in the prediction of message effects in resistance to persuasion. The research thus far indicates that, for a salient topic, intense defenses supply resistance to intense attacks; moderate refutational defenses provide resistance against moderate attacks (Burgoon and Chase, 1973), and a moderate to highly intense supportive defense (passive) is not effective against a low intensity attack (Burgoon and King, 1974). Together, these findings lend support, although indirect, to the "matching" construct, which would also predict that the intense supportive defense would be an effective inoculation mechanism against an intense attack.
Therefore:

H1 In a condition of passive reception of intense defense and attack messages, both refutational and supportive defenses will impart resistance to persuasion. The "boomerang" phenomena predicted and found by Burgoon and King (1974) in the supportive condition should not occur since the intensity of the defense and attack are isomorphic.

Even though the supportive defenses were ineffective against attacks on cultural truisms (McGuire and Papageorgis, 1961), they should supply resistance when applied to salient topics. This differential effectiveness is due to the amount of attention paid to the message by the subject. When a subject perceives a message to be of some value to his belief system, he is then motivated to incorporate the message elements into his structure. With cultural truisms, the supportive defenses were considered to simply belabor the obvious (McGuire and Papageorgis, 1961) and did not provide the motivation necessary to warrant attention and integration. Given a salient topic, however, subjects are more likely to consume the information presented, particularly when accentuated by highly intense pro-attitudinal messages. The highly intense attack, on the other hand, is likely to fall within a subject's latitude of
rejection and be contrasted, not assimilated, with his belief (Sherif and Hovland, 1961).

As observed earlier, Burgoon and others used salient topics within a resistance paradigm. Unfortunately, no attempts were made to assess any ego-involvement related effects. Considering the preceding analysis of the relationship between ego-involvement and resistance (especially Vohs and Garrett, 1968) as well as the conclusion drawn by Kiesler, Collins, and Miller (1969) that "the resistance found in 'involved' subjects is primarily due to their involvement" (p. 255), the need to test hypothesis 2 becomes apparent:

**H2** The rank ordering effect by ego-involvement through the experimental conditions should be such that the highest level of involvement will occur after exposure to a defense-attack sequence, the neither defense nor attack control should evidence less involvement, and the attack-only involvement should be significantly less than all other conditions.
METHODOLOGY

Subjects

Subjects for this experiment consisted of 88 students enrolled in beginning Speech and Communication classes at Florida Technological University, Orlando, Florida, during the Spring (1976) quarter.

Operational definitions

McGuire and Papageorgis (1961) first defined resistance as a relationship between experimental groups such that the mean for those in the defense-attack (DA) sequence would be significantly above those in the attack-only (AO) condition. A prerequisite for any resistance experiment is that the AO condition be significantly different from the NN control.

Pryor and Steinfatt (1976) incorporated the McGuire and Papageorgis (1961) definition into an expanded classificatory system which delineates four types, or levels, of resistance. Figure 2 is this author's model of this schema.

Type I resistance is the most powerful and requires that the DA condition be not significantly below the NN but significantly above AO. Type II resistance is that which conforms to the McGuire...
and Papageorgis (1961) definition. Type III resistance is, in actuality, a condition of non-resistance. While the AO group must be significantly below the NN group, the DA is not significantly different from either the NN or AO conditions. Type IV resistance is also a non-resistance classification. Once again, the NN control is significantly above the AO condition but now the DA group is significantly below the NN control.

**Figure 2**

<table>
<thead>
<tr>
<th>Resistance-Type Classification Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
</tr>
<tr>
<td>NN</td>
</tr>
<tr>
<td>DA **</td>
</tr>
<tr>
<td>**</td>
</tr>
</tbody>
</table>

** = significant difference

There are two additional concepts which must be operationally defined; attitude and ego-involvement.

Attitude will be defined as the marked position of the most preferred point on the relevant 15 point semantic differential type scale. A score of 15 denotes extreme disagreement with the counter-attitudinal message.
Involvement will be operationalized as the length of the latitude of rejection, according to the constructs of social judgment theory (Sereno and Mortensen, 1969).

Procedure

Due to the divergent nature of the hypotheses, different lines of analysis were employed. For Hypothesis 1, a one-way analysis of variance was conducted across the four experimental conditions, with attitude as the dependent measure.

For Hypothesis 2, a 1 X 4 analysis of variance was also used, with length of latitude of rejection as the dependent variable.

Previous research by Burgoon and Chase (1973) and Burgoon and King (1974) dealing with resistance and salient topics had used the issue of limiting the four year university to just a two year, upper-division college. This topic was chosen because pretests had shown that it was highly salient, but not controversial, as virtually all respondents opposed the policy. A pilot study at FTU revealed a similarly skewed distribution. Of 28 subjects, with a score of 7 being most opposed, the mean was 6.73. Thus, the topic was chosen as the issue in this experiment.

An additional pilot was administered to assess the effectiveness of both the attack message and the 15 point scale. The mean for the control condition was 13.6; the mean for the attack-only condition was 10.22. A one-tailed t-test (t = 2.142) revealed that
this difference was significant beyond the .025 level ($t_{9.75, 17} = 2.11$).

All conditions are embodied into a post-test only design. Subjects were randomly assigned to one of the four experimental conditions; attack only control, neither/nor control, supportive defense, or refutational defense. All messages in each condition are highly intense.

The conditions were administered through content variations in each of four experimental booklets. The attack-only booklet consisted of a cover page, a 200 word "filler" message about the structure of the State Board of Regents, a 200 word message attacking the maintenance of the university's four year status, a page of three attitude scales purportedly measuring qualitative aspects of the messages, and a page explaining that one's attitude toward related issues can affect one's qualitative judgements. Subjects were then asked to mark their attitude toward the statement: enrollment at FTU should be limited to Juniors and Seniors.

The neither/nor control was identical to the attack-only treatment except that a second "filler" was substituted for the attack message. The supportive defense booklet had a 200 word message supporting the subject's position followed by the attack message; the remainder of the booklet was identical to the other conditions. The refutational defense differed from the supportive booklet only with respect to the first message, which was replaced by a 200 word message stating and refuting the component parts of the attack
message.

The booklets are virtually self-explanatory. The facilitator disguised the experiment as a test of reading comprehension. The booklets, which appear on the outside to be identical, were randomly distributed to the subjects to begin the experiment. To add credibility to the cover, subjects were given 90 seconds to read and underline the important phrases of each message. Subjects then filled out the qualitative scales, followed by the single topical question, answered as per the requirements of social judgment measurement.
RESULTS

Of the 88 initial subjects, 15 responses were rejected on the basis of incomplete or improper marking of the relevant post-test question. One outlying subject was discarded due to his extreme deviance (-4.1 standard deviations from the condition mean). This left 72 usable responses. Mortality was approximately equally distributed among the four conditions.

The data analytical tool for Hypothesis 1 was a 1 X 4 analysis of variance contrasting preferred issue position across the four experimental conditions.

Table 1

ANOVA - Subject's Most Preferred Position

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Treatment</td>
<td>12,644</td>
<td>3</td>
<td>4.2146</td>
<td>.9059</td>
</tr>
<tr>
<td>Within Condition</td>
<td>316.3422</td>
<td>68</td>
<td>4.6520</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>328.9862</td>
<td>71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15
Table 1 reports the magnitude of differences between the experimental conditions. The computed $F$ value less than 1.00 means that there was more variance within each condition than there was between conditions: that any differences between groups could easily occur by chance. With no significant differences between groups, the conclusion is that the experimental manipulations did not induce resistance to persuasion by either Type I or Type II definitions. Examination of the means (Table 2) reveals a rank order which conforms to the requirements for Non-Resistance Type III. Hypothesis I was supported only to the extent that the defense conditions are not significantly below the NN control. However, the most important finding regarding Hypothesis I is that the attack did not significantly reduce the initial belief level. In effect, this precludes a valid test of H1. More will be said about this problem in the discussion section. The boomerang effect did not occur in the supportive defense condition, thereby supporting, to a degree, the "congruent intensities" rationale upon which this hypothesis was formulated.

Hypothesis 2 predicted differences in the magnitude of subject's latitudes of rejection as a function of each experimental condition. A rank ordering was also predicted. The results are tabulated in Table 3.

Again, the resultant $F$ ratio (.9754) suggests that any differences noted between degree of involvement and message treatment
Table 2

Mean Attitude X Experimental Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither/Nor</td>
<td>14.5263</td>
</tr>
<tr>
<td>Refutational</td>
<td>14.25</td>
</tr>
<tr>
<td>Supportive</td>
<td>14.23</td>
</tr>
<tr>
<td>Attack Only</td>
<td>13.6842</td>
</tr>
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</table>

Table 3

ANOVA - Magnitude of Rejection Region by Experimental Condition

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Treatment</td>
<td>38.5749</td>
<td>3</td>
<td>12.8583</td>
<td>.9754</td>
</tr>
<tr>
<td>Within Condition</td>
<td>896.4112</td>
<td>68</td>
<td>13.1825</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>944.9861</td>
<td>71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

Mean Size of Rejection Region X Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Mean RR Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither/Nor</td>
<td>8.8947</td>
</tr>
<tr>
<td>Attack Only</td>
<td>7.737</td>
</tr>
<tr>
<td>Supportive</td>
<td>7.333</td>
</tr>
<tr>
<td>Refutational</td>
<td>6.938</td>
</tr>
</tbody>
</table>

is no more than a chance occurrence. Thus the differential involvement prediction of Hypothesis 2 was likewise not confirmed. The mean size of the rejection regions, by condition, are presented in Table 4. Even though this observed order could easily occur as a result of random fluctuations in the data, it is interesting to note the order reversal among the defense and attack conditions. The Attack-Only subjects were actually more highly ego-involved than those in either defense condition. Overall, Hypothesis 2 received no support.
DISCUSSION

The total nonefficacy of Hypothesis 2 and the lack of clear support of Hypothesis 1 combine to mandate substantial post-experimental analysis.

Central to any experiment in resistance to persuasion and, in particular, Hypothesis 1 of this experiment, is the requirement for an effective attack message; a counterattitudinal message that can significantly change attitudes toward coincidence with its position. The nonsignificance observed in Table 1 is empirical proof that, in this study, the attack was not effective. This finding was indeed surprising, as the attack was found to be effective in a pilot study. Even more confusing is the disparity between the attitude positions (by condition) professed by the experimental population and the pilot population (which was a sub-sample of the experimental population). Table 5 presents this comparison. The NN attitudes did not differ significantly across populations. A significant difference ($p < .03$) does exist between the attack conditions, with the experimental attack condition being the least effective in causing attitude change. The observation that the experimental AO mean was in fact higher than that of the pilot NN condition further evidences the differences between the
groups. In an attempt to re-assess the effectiveness of the attack message, the AO condition was replicated with another group of subjects \( (n = 21) \). The responses of five subjects were discarded, due to improper marking of the involvement measure, leaving 16 usable responses. The mean for this post hoc AO condition was 11.44 and this is significantly below \( (p < .05) \) the mean of the experimental AO condition.

Table 5

Mean NN, AO Attitude, by Population

<table>
<thead>
<tr>
<th></th>
<th>Pilot</th>
<th>Experiment</th>
<th>( t ) P X E</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN</td>
<td>13.6000</td>
<td>14.5263</td>
<td>NSD</td>
</tr>
<tr>
<td>AO</td>
<td>10.2222</td>
<td>13.6842</td>
<td>( p &lt; .03 )</td>
</tr>
<tr>
<td>( t ) NN X AO</td>
<td>p .025</td>
<td>NSD</td>
<td></td>
</tr>
</tbody>
</table>
Table 6

Mean Attitude Position, by Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Mean</th>
<th>$t$ (X $\text{AO}_{\text{ph}}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO (post hoc)</td>
<td>11.44</td>
<td>-----</td>
</tr>
<tr>
<td>Neither/Nor</td>
<td>14.53</td>
<td>$t = 2.91$; $t(34,.005) = 2.729$</td>
</tr>
<tr>
<td>Refutational</td>
<td>14.25</td>
<td>$t = 2.59$; $t(31,.01) = 2.453$</td>
</tr>
<tr>
<td>Supportive</td>
<td>14.23</td>
<td>$t = 2.65$; $t(32,.01) = 2.449$</td>
</tr>
</tbody>
</table>

The post hoc AO group was substituted for the experimental AO condition and the analysis for Hypothesis 1 was repeated. The rank ordering remained the same as in the initial analysis, in the predicted order. The initial analysis also demonstrated that the neither/nor and defense-attack sequences do not differ significantly from each other (Tables 1 and 2). When the post hoc AO condition is contrasted with these groups, its mean is significantly below each of them (Table 6). By meeting the parameters for Type I resistance, these findings provide post hoc support for Hypothesis 1.

As a post-experimental test of Hypothesis 2, the rejection region size for the post hoc AO group ($u = 6.69$) and the experimental groups were compared. The resultant differences were not significant,
Table 7

ANOVA - Magnitude of Acceptance Region by Experimental Condition

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Treatment</td>
<td>31.0400</td>
<td>3</td>
<td>10.3466</td>
<td>2.8049*</td>
</tr>
<tr>
<td>Within Condition</td>
<td>250.835</td>
<td>68</td>
<td>3.6887</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>281.875</td>
<td>71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F(.95;3,68)= 2.75

failing to support the predictions of Hypothesis 2.

While ego-involvement is commonly operationalized as the width of the rejection region, some researchers (Sherif and Hovland, 1961) have used a secondary measure, width of latitude of acceptance, as a measure of involvement. The more involved position would have a smaller latitude of acceptance. An additional post hoc test of Hypothesis 2 was conducted using size of acceptance region as the measure of ego-involvement. Table 7 summarizes this analysis. The significant $F(p < .05)$ suggests that there is some degree of relationship between condition variances in terms of the latitude of acceptance. Three relevant $t$-tests were conducted, using the Scheffe (.05/3) technique.
The results are summarized in Table 8. Once more, Hypothesis 2 fails to receive confirmation, again on two levels. First, the magnitude of differences prediction is not supported due to the significant difference between the Neither/Nor control and each defense condition. Second, the rank order is once again reversed among Defense and Attack conditions. The rank order in Table 8 is the same as in Table 4 and thus the hypothesized rank order did not occur. Hypothesis 2 received no support whatsoever in this experiment.

The failure of Hypothesis 2 is interesting in its heuristic implications. A prediction of no difference would suggest that degree of ego-involvement overrides differences due to defense type when attempting to induce resistance to persuasion. While this does not contradict the Vohs and Garrett (1968) construct, it does imply that the factors of familiarity and involvement are not
equally powerful and that this inequality must be taken into consideration when extrapolating from that particular model.

Additionally, the contention that high ego-involvement is tantamount to possessing high resistance to persuasion (Kiesler, Collins, and Miller, 1969) was not supported by the findings of this study. The fact that there were no significant differences in rejection region size between the experimental and post-experimental groups, even though the attitudinal position of the post hoc A0 group was significantly different from the other groups, conforms to the finding of Burgoon and Miller (1974) that a change in attitude does not necessarily result in a corresponding change in degree of involvement. The new attitude may be just as strongly held as the old one previously was. In terms of inoculation theory, the implication is that the belief bolstering phenomenon produced by exposure to the defense only (Papageorgis and McGuire, 1961) is not accompanied by a parallel increase of ego-involvement. These internal changes would go unnoticed in the design of this study. A paradigm which incorporates repeated measures of involvement across subjects as well as defense-only controls would be necessary to fully explore the relationship between defense type, attitude change, and ego-involvement.

Within the context of this experiment, ego-involvement was a dependent variable. The analysis of variance for the rejection regions (Table 3) can be interpreted to show that width of rejection
region is independent of experimental condition. This independency allows one to construct a post hoc experiment to test the relationship between ego-involvement and attitude toward a salient issue.

Wilmont (1971) underscored this other role of ego-involvement when he observed that "it is also conceivable that ego-involvement is one of the most important independent variables in the speech communication process" (p. 436).

To test Wilmont's (1971) observation within the context of this study, involvement was operationalized as the size of the rejection region. The median was computed to be width = 7. Those with latitudes of rejection of size 6 or less were classified as low involvement (n=33) and those scores of 8 or greater were highly involved (n=32); the 6 subjects who had rejection regions of size 7 were disregarded from the analysis. Table 9 reports the mean attitude position for each of the 2x4 cells. Analysis of these mean scores adds some insight into the relationship between attitude and ego-involvement.

The differences across the neither/nor condition can only be interpreted, due to the limitations of post hoc experimentation, at the most superficial level. As one would expect, highly involved subjects, with regard to a salient topic, tend to take a more extreme position.

The findings for the attack-only condition are directionally consistent with the existing body of research. McGinnies (1973)


Table 9

<table>
<thead>
<tr>
<th>Mean Attitude by Involvement and Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Neither/Nor</td>
</tr>
<tr>
<td>Refutational</td>
</tr>
<tr>
<td>Supportive</td>
</tr>
<tr>
<td>Attack Only</td>
</tr>
</tbody>
</table>

found that the less involved subjects were more readily persuaded than highly involved subjects. Ambler (1973) also observed that involvement did not result in increased selectivity. Isaac's (1973) finding that, within an inoculation methodology, there was less attitude derogation in the attack-only subjects demonstrates that highly involved subjects were not affected as much by the attacking message. Examination of the difference in mean attitude between NN and AO in each involvement condition revealed that the low involvement subjects (-.71) did experience more attitude change than did their more involved counterparts (-.43). Further analysis demonstrated that the magnitude of the difference between the AO conditions in this experiment narrowly missed significance (\( p < .055 \)) and is directionally consistent with the implied hypothesis.

The means for the defense strategies across involvement levels
Table 10

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense Condition</td>
<td>.346</td>
<td>1</td>
<td>.346</td>
<td>.229</td>
</tr>
<tr>
<td>Ego-Involvement</td>
<td>1.11</td>
<td>1</td>
<td>1.11</td>
<td>.735</td>
</tr>
<tr>
<td>AxB Interaction</td>
<td>.18</td>
<td>1</td>
<td>.18</td>
<td>.119</td>
</tr>
<tr>
<td>Residual</td>
<td>39.20</td>
<td>26</td>
<td>1.51</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40.836</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

imply an interaction effect. A 2x2 ANOVA was conducted and the results are incorporated into Table 10.

Since all F values are less than 1.00, there were no main or interaction effects, and any differences between the 2x2 cells are a function of chance variation. It is noteworthy to observe again that any "resistance - keyed" analysis would not be valid due to the failure of the attack message to induce attitude change of sufficient magnitude to allow inoculation effects to manifest themselves. Throughout this milieu of hypothetical nonsupport, the rationale and justification for the hypotheses have never been challenged. Thus, the experimental hypotheses were not supported
not because of faulty theoretical construction, but because of an ineffective experimental manipulation. A replication with a stronger attack message is the necessary next step in the examination of the relationship between ego involvement, topic salience, and resistance to persuasion.

Further insight into the real world complications and complexities of inducing resistance to persuasive appeals can be gleaned from varying each of the operational "givens" of this study - topic salience and language intensity. Questions regarding any type of differential involvement across various types of topics can only be answered by measuring ego involvement (and its resistance implications) while systematically varying topic salience through levels such as controversial, salient, and noncontroversial (truisms).

How these messages are presented, i.e. language intensity, could play a critical role in the ability to induce or overcome resistance. The works of Burgoon and Chase (1973) and Burgoon and King (1974) as well as the "matching" construct presented here need to be expanded and refined through more stringent and pervasive methodologies which could encompass all possible combinations of language intensity of the appeal (low, moderate, high) and type of appeal (refutational defense, supportive defense, attack).

The results of the present study also suggest that a set of
criteria can be established to determine topic salience. The fact that the degree of ego-involvement remained fairly constant across the different attitudinal positions on this salient topic can be interpreted to demonstrate that degree of topic salience may be related to degree of ego-involvement. Perhaps the involvement configuration associated with a salient topic is different from that associated with controversial topics or truisms. This question likewise provides fertile ground for additional research.

Applications of inoculation theory, in general, are readily apparent in one's everyday environment. Salesmen, advertisers, and political candidates use the resistance paradigm, perhaps unknowingly, in their quest for product purchases or votes. Their message contains the basic elements of the defensive strategies; supportive when reviewing the product's (or candidate's) merits, refutational when challenging the opposition's allegations.

Field studies (Bither, Dolich and Nell, 1971; Sawyer, 1973) demonstrate that resistance techniques are being used presently in business and advertising, but these studies are limited in their ability to assess the actual effectiveness of the defense types under consideration. It now becomes the responsibility of the theorist to establish a set of relevant parameters from which, through experimentation and testing, would evolve a prescriptive guide for practical application. The transition from the "theoretical" world to the "applied" world is confounded by the emergence of a
myriad of noncontrolled variables. For example, the findings of the present study tend to suggest that both defense types are equally effective if they are intense, the attack is intense, and the issue is salient. Questions of application now arise. How can the inoculating salesman know what intensity his competitor's attack will be, or even how intensely he must argue to overcome the resistance instilled by another competitor? How can a politician possibly know which of his proposed policies represent salient issues? Are the issues equally salient for all members of his audience, or are they controversial for some?

These questions pose a challenge to the theorist. Some, like topic classification, may be answered by the development of the involvement configuration presented earlier; others may involve massive theoretical reformulation. Whatever the outcome, it does not alter the fact that the continued exploration of inoculation theory allows both the pragmatists and theorists help each other learn more about ourselves.
Hypothesis 1 received only partial support, achieving only Type-III resistance in this experiment. Substitution of a post hoc attack-only condition, which evidenced a stronger reaction to the attack message, added additional support to Hypothesis 1 by conforming to the requirements of Type I resistance.

The ego-involvement predictions of Hypothesis 2 were not supported. Experimentally, involvement was operationalized as rejection region size, and neither the rank order nor magnitude of differences predictions were substantiated. A post hoc analysis was carried out operationalizing involvement as width of acceptance region but again, no support could be garnered for Hypothesis 2.

A post-experimental test using ego-involvement as an independent variable acknowledged differential amounts of attitude change between involvement groups. Those subjects who were highly involved ascribed to a more extreme position and changed less, after exposure to the attacking message, than did their less involved counterparts.
APPENDIX A

Experimental Booklet Cover Page

FTU Reading Comprehension Test
Form B

Instructions:
The Communication Department has been commissioned to develop new techniques to measure reading comprehension of students. You will be asked to read several messages and underline the most important phrases in each message. Each selection to be read will be timed, so please stop reading when "STOP" appears at the end of the message. Please do not begin reading the next selection until asked to do so.

You may begin at the administrator's signal.

*This is the code number for the supportive defense, refutational = R1073A, A0=A10640, and NN=N1063N.
APPENDIX B

Supportive Defense Message

Limiting enrollment to only juniors and seniors would be a very bad policy for FTU. A policy of limitation would seriously hurt the image of the university, as well as its academic standing.

An important stage in the development of any university is the degree to which a mutual identification exists between the institution and the community. The primary factor needed to achieve this goal is the existence of an alumni-spirit within the community. Attendance at a four year institution facilitates this spirit, if for no other reason than the fact that most alumni spent about four years there, and that institution represents the bulk of the graduate's academic training. It is virtually impossible to instill this degree of identification between student and school in a system which mandates an institutional change every two years.

Such a policy as limitation would have a terrible effect upon the level of scholarship at FTU. Students would be admitted to upper division courses with only the very bad background that a junior college can provide. Thus admission can only be a guess based upon very bad evidence.

STOP

33
APPENDIX C

Refutational Defense Message

Limiting enrollment to only juniors and seniors would be a very bad policy for FTU. Those favoring limitation usually contend that it would be beneficial from an economic standpoint and would also facilitate better student-faculty communication.

The university receives state funding on a class by class basis. But an increase in the number of upper division classes would not compensate for the loss of lower division classes because more money is received per "lower" class than per "upper". Highly specialized classes not only cost more but do not return to the student a proportional increase in education. Thus, funds are not used efficiently and results in an "education loss" to the students, who pay more for less knowledge.

The students would be hurt socially if this limitation policy is adopted. The smaller, more specialized classes by their very nature institutionalize intense competition; cooperation then becomes a sign of inferiority. Participation in student activities would decrease, since there would be no "school spirit", social activities would disintegrate. The highly competitive atmosphere would act as a barrier to keep special interest groups from forming. This
divisiveness will further separate students from themselves and from the faculty, resulting in a decrease in overall interaction.

STOP
"Filler" Message for No Defense (NN, AO) Conditions

Recent controversy about the nature and functions at the Board of Regents brought one point to the forefront. The Board of Regents must be restructured.

The most important change to be considered is in determining who will be on the BOR. Presently, the BOR members are appointed and not elected. Such a policy inherently promotes political favoritism to the extent that the BOR does not represent the very people they, in theory, serve. By having members elected on staggered terms, the Board of Regents could not only maintain a degree of continuity across time intervals, but also would be more responsive to the changing needs and moods of the people in the state. This continuing input could only serve to improve the performance of the BOR.

Responsiveness by the BOR could be further facilitated through restructuring to allow more student input, at the very least, or even some measure of control, by extending the voting privilege to the student representative(s). The educational institutions themselves would be better served if the BOR expanded its committee structure to include committees of educators from each institution with the power to lobby for the needs of the University or College.
they represent.
APPENDIX E

Attack Message

Limiting enrollment to only juniors and seniors would be a very good policy for FTU. It would be a beneficial move from an economic standpoint, as well as facilitating better student-faculty communication.

The university receives state funding on a class by class basis. An increase in the number of upper division classes would compensate for the loss of lower division classes, and thus no money would be lost as a result. The real advantage lies in the fact that students get "more for their money" in specialized, upper level classes. This more efficient usage of funds results in more and better educational opportunities for the students.

The students would also benefit socially by adopting this policy. The smaller, more specialized classes would promote much more cooperation and interaction than larger, more general classes. There would be an increase in the participation in student activities simply because more special interest groups will form, allowing for more involvement. This increase in special interest groups will promote better student-faculty communication by allowing more non-classroom interaction between them to occur.

STOP
APPENDIX F

"Filler" Message for No Attack (NN) Condition

Many allegations have been leveled, in recent months, at the Board of Regents. An objective analysis of these misguided attacks strongly demonstrates that the BOR does not need restructuring to function effectively.

There is much controversy concerning how those who compromise the BOR should be selected. The argument for elected members has a popular, grass-roots type justification, but such a selection process would turn the BOR into a powerless, lame-duck organization with no power to protect and/or serve the educational needs of the state. By appointing members, the BOR is insured of having the expertise necessary to effectively govern our system of education. The BOR members, by virtue of the very fact that they are removed from the political pressures of the populace, can make decisions without succumbing to the demands of various political factions.

The BOR has already taken measures designed to maximise responsiveness. The committee system allows for much university input and serves as a forum for all universities in the State University System. Student members already sit on the BOR, and their input is having a definite impact on final policy.
The BOR does not need restructuring to fulfill its necessary functions.

STOP
APPENDIX G

Qualitative "Filler" Questions

In an attempt to assess the effectiveness of this technique, we are asking you to rate the following aspects of the messages you read by placing an "X" on the point of the scale for each question which best represents how you feel.

1. These messages were very easy to read.
   agree: _:_:_:_:_:_:_:_:_:_:_:_:_:_:_:_:disagree

2. These messages were very easy to understand.
   agree: _:_:_:_:_:_:_:_:_:_:_:_:_:_:_:_:disagree

3. The arguments presented in the messages were logical.
   agree: _:_:_:_:_:_:_:_:_:_:_:_:_:_:_:_:disagree
Finally, it has been shown that an individual's personal opinion about a topic may affect his feeling toward related messages. Please answer the final question so as to reflect your opinion, regardless of whether you agree or disagree with the messages that you read. Your job here is to answer the following question in a way which most accurately describes your own attitude. Mark the scale by first placing an "X" at the point on the scale that best represents your attitude. Then place an "A" on any other position(s) that you feel are also acceptable to you, place an "N" at those point(s) at which you feel neutral, and finally, place an "R" at those position(s) which you reject as totally unacceptable. Please mark each of the 15 possible positions.

Enrollment at FTU should be limited to Juniors and Seniors.
agree: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ disagree

References


Burgoon, M., & King, L. The mediation of resistance to persuasion strategies by language variables and active-passive participation. Human Communication Research, 1974, 1, 30-41.


