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Minority Influence and Shared Information:
Does Argument Status Assist The Minority?

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**MINORITY INFLUENCE AND SHARED INFORMATION:
DOES ARGUMENT STATUS ASSIST THE MINORITY?**

By

Michael E. Winters

A THESIS

Submitted to

Michigan State University

in partial fulfillment of the requirements

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ABSTRACT

MINORITY INFLUENCE AND SHARED INFORMATION: DOES ARGUMENT STATUS ASSIST THE MINORITY?

BY

Michael E. Winters

This study investigated the impact of informing participants that arguments presented by either a minority or majority source either had, or had not, previously been shared with previous audiences. It was hypothesized that the minority faction would achieve greater persuasive ability if arguments were believed to be previously unshared. Subjects were 146 Michigan State University undergraduate students. While this hypothesis was not supported, results indicated interesting trends bearing both on this and related research topics.

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Introduction

The purpose of the proposed experiment is to further explore the area of minority influence. This rich area of study has been of growing interest in the last two decades. Part of this richness stems from the fact that it is a phenomenon which has had many contending theories about causes and instances of occurrence. There has been substantial contention about how powerful an influence a minority can exert, but that such an effect exists no longer seems to be an issue. In the following introduction I first briefly review the classical theory developed by Moscovici. I then begin to explore some of the more recent innovations in this area as related to the work of Trost and her colleagues, as well as that of Maass, Clark, De Dreu and De Vries, Petty and Baker, Chaiken and others. Within this framework I introduce a variable that I believe is essential to further understand the phenomenon of minority influence: the shared or unshared status of the arguments presented to a target audience. Finally, I present an experiment that I believe provides sound integration of this concept into the framework of minority influence research.

Minority influence is an area of social psychological research that has slowly become a focus of interest in the field. By adhering to one of the basic tenets of this area of research, consistency of position, in this case that minorities can have an influence, those who believe in the effects of minorities have brought its study into the mainstream of the discipline. The idea that a consistent minority can have an impact on those who are exposed to its message was first suggested by Moscovici, Lage, and Naffrechoux (1969), as a response to Asch's work on conformity.

The basic argument that they presented was, as Asch had demonstrated, that while majorities could persuade others to conform to its position, the minority should also have an ability to influence others under the right circumstances. Moscovici and his colleagues attempted to create just such circumstances, and by so doing demonstrate the power of the minority. In the laboratory they created a situation where ambiguous stimuli (blue slides) were presented to a group of subjects and confederates. A minority of the confederates consistently claimed the slides were green. When they analyzed the responses of all participants they found that a small percentage of the respondents were persuaded to agree with the minority confederates, and that fully a third of the subjects had agreed with the minority on at least one trial. Based on these results Moscovici and his colleagues claimed that a minority could exert some amount of influence on others.

This original work was followed up by a series of studies that began to explore, and define, the boundaries of minority influence. One of the most important conclusions that Moscovici and his colleagues drew was that the actual process of influence was somehow different from that of the conformity responses typically generated by the majority. The question then became: In what way was minority influence different from that of the majority? Minorities, they theorized, lead to innovation, while majorities force conformity. As we shall see Nemeth, and others, continue to explore the area of minority influence, specifically the results of innovation and novel thought processes, and have found this to be an area of minority influence that is quite complex in its own right. This tendency for minority sources to promote innovation in target audiences was believed by Moscovici to stem from the conflict of

position, or attitude that a minority faction creates in a group situation. This state of conflict contrasts with a unanimous group, which inherently has no such conflict, without which, they argue, innovation cannot occur.

In 1976 Moscovici and Lage began to explore the “cognitive and relational conflict” that they felt was necessary to create an environment suitable for the minority to exert influence. This research also explored two particular details that would become areas of interest themselves in research endeavors soon to follow: 1) the need for a “behaviorally consistent” minority; and the prerequisite that a minority be at least two persons. The consistent minority was an essential ingredient for the development of programs by Nemeth, (Nemeth, Swedlund, and Kanki, 1974) as well as the work of Mungy and his colleagues (Mungy and Papastamou 1980, Mungy 1985). In any event, the possibility of an influential minority, as first explored by Moscovici, has indeed created an interest in the potential power and dynamics of the minority. In fact, there are now many competing theories that have grown from this base which attempt to explore and explain this intriguing phenomenon.

Since Moscovici’s original work research into the phenomenon of minority influence and the variables that are believed to mediate and moderate it are being investigated with growing interest. In the beginning, the work on minority influence was conducted almost exclusively in Europe; but, in the last two decades an increasing amount of research on this phenomenon, and the processes that lie beneath it, has been performed in the United States. There have been two major lines of inquiry in this area, those that have continued to explore the visual-perceptual effects that Moscovici originally uncovered and those that have explored the relationship of the minority

source and its target. Of interest here is the latter area of research, which focuses on the message that the minority uses in its presentation, and the context in which it is delivered to, and processed by, the target audience. Within this problem area, Crano has explored a number of interesting avenues, particularly the use of other individuals as a basis for comparison in the decisions we make. His work has focused in part on how we perceive the nature of the information we are presented with, in other words, the task of interpreting and processing the information in a situation. The essence of his argument (Crano, 1995) is that it is functional for us to perceive cues about the task, or environment, and depending on those cues we might react differently to the same message in different situations. For example, an individual may use perceived aspects of the task, such as the belief that there is (or is not) a true and objective solution to a problem, as a guide in decisions about resolving the issue at hand.

The First Innovations

As interest began to spread, and research increased in this area, some investigators started to return to the original issue that had sparked this inquiry, as well as some of the conditions proposed as essential to minority influence. For example, how, if at all, are majority and minority influence alike? Maass and Clark (1983) explored this area by investigating the way minority and majority messages are processed. They asked the question: Are minority messages processed in the same way as majority messages (therefore a single process model) or, are they processed in a totally different way (indicating a dual process model)? Maass and Clark, as well as others (Moscovici 1980, Nemeth 1986, Kruglanski and Mackie 1990, De Dreu and De Vries 1995), have found evidence that supports the dual process model, but this issue is

still a point of contention today. Alternatively, Latané (1981) offered a theory that advanced two basic ideas. His primary hypothesis posited that the first minority member to state his or her position would have the greatest impact, with each successive person having less of an effect, and his second predication was that because of the diminished impact of the “reinforcement” minority members, there should be no fundamental difference in the way in which minorities influence their targets relative to majorities. His hypotheses were essentially an integration of minority influence with social influence theory, and supported a single process theory. The idea of social influence as a moderator of minority influence is a perspective that Crano and his colleagues would later explore more fully, basing some of their arguments on the work of Latané.

Still others began to explore some of the other influences the minority could potentially exhibit. For instance, Nemeth began investigating how people receiving the minority message think about that message. One outcome of this program was the discovery of what Nemeth and Wachtler (1974,1983) term divergent thinking. What then is divergent thinking? And, how did it influence the way Nemeth’s hypotheses about minorities were developed? First came the realization that after being exposed to minority messages subjects “thought differently” about the issues, even if they resisted the persuasive aspects of the message. As this effect was further considered Nemeth and her colleagues found that individuals exposed to minority messages tend to envision both more, and more diverse solutions to problems. Furthermore, it was shown by Nemeth et al. (1974) that majority sources tend to focus targets more on the direct argument topic, as well as inducing “convergent” thought. This convergent processing

leads targets to not develop as many, or as original thoughts about the relevant topic or topics related to that issue.

Another effect of minority influence that was discovered was that the private opinions of subjects tended to be influenced toward the minority position even when the public response showed conformity with the majority (Maass and Clark, 1984). The reason, it has been argued, for the difference in which opinion is displayed, is based on the idea that the individual may be in some way sympathetic to the minority position, but is concerned with the power of the majority and its ability to sanction them.

Minority Influence and Models of Persuasion

As the domain of minority research expanded, and gathered attention, it slowly began to become integrated with models of persuasion and information processing that were more fully developed, as well as more mainstream. One example of this synthesis is the application of Chaiken's (1980) Systematic-Heuristic model of information processing to the area of minority influence. This processing model states that when processing more carefully, or systematically, individuals process information more deeply and "... have attended to and cognitively elaborated persuasive argumentation..." (Maheswaran and Chaiken, 1991). This depth of processing becomes essential to the argument that minorities can only have an influencing effect when the minority message is carefully scrutinized. Another processing/persuasion model which has been utilized to study minority influence is the Elaboration Likelihood Model (ELM), proposed by Petty and Cacioppo (1986). Similar to Chaiken's Heuristic Systematic model, this is a dual route model of information processing which argues that the "central" route is an effortful, careful mode of processing. Individuals processing via this path will tend to

pay close attention to the argument presented, so in order to persuade (or influence), the arguments used must be recognized as valid. In the case of “peripheral” processing the individual is not as invested in the arguments at hand and therefore not carefully attending to the actual argument content. When processing by this route, nonessential (as related to the argument itself) cues can influence the target, cues such as physical attractiveness, or communicator expertise. This mode of processing could obviously be an issue when considering minority influence, and have direct impact on a minorities’ ability to influence a target audience. If targets (for whatever reason) do not believe an issue to be important they might tend to process peripherally and be more subject to cues of persuasion that might not normally influence them if they were more invested. One possible example of such a persuasive cue would be the faction size of the source. In the “non-invested” example, the salient majority could have an advantage, by a simple cue such as “consensus implies correctness”, or “there is strength in numbers”, or so one could argue based on this theory.

The possibility of the impact of dual process information processing and minority influence has been both reviewed (Maass and Clark 1984, Wood et al., 1992 and De Vries et al. 1995) as well as researched, although the ELM model has been most carefully pursued by Baker and Petty (1994). Alternatively, De Dreu and De Vries (1993a, 1993b) have considered both the ELM and Chaiken’s HSM. I explore some of this last team’s results, and their potential ramifications shortly. This processing/persuasion based research relates to another, important, line of research, that of Trost and her colleagues. We discuss this work more completely later, but the thrust

of this perspective postulates that the task relevance can have an effect on the mode of processing that an individual uses when processing a message from any source.

The State Of Minority Influence Today

What we have seen develop began as a single idea about the power of a small minority and has become an investigation about how we communicate, when we are swayed by one group or another, and how the size of that group contributes to these processes. What has also become evident is that there are still many issues involved in minority influence that have not yet been resolved. Some, as introduced above, involve questions about the ways in which a message is processed. This issue however, leads to another question: What influences the way that we process as related to the faction size of the source of the message? Next we discuss some potential influences on the situation that have only recently been more thoroughly considered, including the type of task that the subject is performing, also, the strength of the arguments being presented. What happens if, for instance, we process elaborately and the message we process is very weak? Finally, and the last topic I discuss in the next section, What happens if new information is brought to bear on an argument? What if the people asked to think about the message from the minority source believe the message is an old argument, versus when they believe the argument to be new and they are the first to hear it? How might this set of circumstances affect the process of persuasion?

During the last ten years there has been a proliferation of research in the area of minority influence. As the question has drawn the attention of more researchers, scientists from different backgrounds have explored this area, and some interesting questions, and hypotheses have developed. One of the outcomes of these developments,

however, is that competing theories have been offered to explain minority influence, theories which make very different predictions about how people behave under similar circumstances. Generally, it is these theoretical differences that have generated some of the most interesting new questions, as well as some of the variables explored in the resulting experiments, in particular, which I intend to address with this project.

Minority Influence and Persuasion Models, Beginning the Integration

DeVries and DeDreu (1995) present a series of arguments which direct attention not to minorities themselves as the key to influence, but to the message and specific external factors related to that communication. DeDreu and DeVries propose that they believe the most effective method with which to explore the minority influence phenomenon is the Heuristic Systematic Model (HSM) of persuasion (Chaiken and Stangor 1986). It is their contention that for the source of a minority message to be successful, the targets must be processing systematically and the minority must have solid arguments. They describe systematic processing as a “comprehensive, analytical orientation to information processing” (DeDreu and DeVries 1995, Eagly and Chaiken, 1993, 326- 327). Others, such as Crano (Gorenflo and Crano, 1989), have suggested that we utilize heuristics in deciding where our attention is focused, and how deeply we process a message. These variant positions may present a clue to an interesting series of events that might need to occur for effective minority influence to take place. De Dreu et. al. suggest, and support the position, that to effectively persuade, the minority must induce systematic processing in its target. The dilemma created here is that if we consider both types of paradigm, that presented by Crano, which relies, at least initially upon heuristics to facilitate processing, and/or the series of events presented by De Dreu

and DeVries', which specifies the necessity of systematic processing, then the target might first recognize the type of task in a heuristic manner, and then based on cues in the situation, process the message itself in a systematic way.

For the above series of events to occur a process such as the one I outline next might have to occur which combines the concepts of both Crano and DeDreu et.al.. First heuristically, an individual recognizes that someone is trying to persuade them. She recognizes that this is a topic of some importance, and that there is a specific correct answer (as if she were on a team solving a team building survival type problem), triggering her to process incoming information systematically. She might also be more likely to use information from others outside her reference group (a minority) because they may provide useful information she does not have, or could use. So she systematically process the message itself, from the minority source. It is within the HSM based paradigm which DeDreu and DeVries work which allows for such a series of events to occur. Since this approach allows for both heuristic and systematic processing to occur as a mixed ratio as opposed to strictly by one route or the other, it could be argued that there are a series of stages in the persuasive attempt. In the beginning processing is more heuristically oriented, then as the message itself is processed, the incoming information is attended to by means of a more systematic pattern. It is as this systematic phase begins when "external factors" such as DeDreu and DeVries consider in their research becomes important. We term these "external factors" because while they are variables that affect influence, they are not part of the task or message itself.

Before discussing the external factors De Dreu and De Vries explore, it is important to point out that one of the main outcome variables De Dreu and DeVries(1993) consider are the effects of minority influence on attitudes about focal issues (those topics specifically in the communication), as well as related issues (or topics which are related to the communication but that are not a part of the message). While the influence a minority has is studied in their work, they also explore the effects of a message over a period of time, or how attitudes toward issues that are only tangentially related to the message are affected. One example of an external variable that they have studied, and believe to affect minority influence, is the violation of expectation. The concept of violated expectation is essentially as follows: individuals in general believe that most other people are similar to them, and therefore hold similar views. Since people, typically, tend to make this assumption there is an implicit corollary assumption, i.e., most people tend to believe that they are a part of the majority on any given issue. A frequent hypothesis related to violated expectations and minority influence states that when what we believe to be true about the world is not supported in other words when we believe we hold a majority opinion but are told otherwise we have a tendency to pay more attention to a message. We pay closer attention because we want to understand why there is a discrepancy between what we thought was true and what we are being told is true. Recall that Moscovici hypothesized that conflict occurs when minority factions exist; this occurrence of expectation violation fulfills just such a conflictual role, here at the individual as opposed to group level. Baker and Petty (1994) support this contention. They showed that minority messages were more effective in eliciting private change when arguments

were strong rather than weak, in conditions where the message delivered was unexpectedly counter-attitudinal. This pattern of results speaks to the probability that the violation of expectations tends to promote systematic processing, which in turn heightens awareness of argument quality, and content.

Minorities and Information Processing: Do They Do It Differently?

The effect of the presence of minorities can also be seen in the way in which topics at issue are considered. Take for example, the concept of convergent vs. divergent thinking, first proposed by Nemeth (1986). She and her colleagues hypothesized, and supported the idea, that minorities and majorities tend to generate different styles of conceptualizing of information. Minority dissent, Nemeth, Maass, and others contend, fosters divergent thinking, or thinking that generates many, original, and novel thoughts related to problem solving both for the topic at hand and related issues. Alternatively, majorities foster convergent thinking that focuses on the central issue only, and majorities tend not to create original solutions beyond those that the majority already supports. This difference in thinking is relevant to our interests in that if minorities do indeed foster novel and original solutions in problem solving tasks than they may act as a catalyst to other individuals. If the minority presents quality arguments, they might induce those others (such as a new target audience) to become more likely to accept the position of the minority. Maass and others have addressed this issue of divergent thinking as well as related questions in their work in two different and equally important ways. First, in their research, Maass and Volpato (1995) support the hypotheses that Nemeth had advanced, arguing that in performing problem solving tasks minority sources do indeed promote more, and more original ideas than majority

sources (Nemeth 1986, Nemeth and Kwan, 1987). Importantly, Maass and Volpato also consider, and recognize, that there have been two major camps in researching minority influence. One aggregate is composed of those who study influence in problem solving tasks such as Nemeth, and the other major faction consists of those researchers who have investigated attitudinal change such as Baker and Petty, Maass, Mucchi-Faina, and others. Why is this an important consideration? Because Maass and Volpato acknowledge that there needs to be an investigation of whether or not there is a common set of processes that underly the effects in both paradigms.

Recently Maass et al. (1995) attempted to show differences between minorities and majorities and their ability to persuade on tasks defined as objective and subjective, or, in their terms, knowledge based vs. attitude or opinion based tasks. They found that minorities were persuasive only on attitude based issues, whereas majorities were persuasive on both types of task. This result was further qualified by the fact that subjects who were sure of their position were not at all influenced by a minority source. There may be some question as to how clean a manipulation of objectivity and subjectivity this experiment employed, but at the very least it utilized a method that brought a new approach to this problem.

Trost and her colleagues (Trost and Ybarra, 1995, Trost and Kenrick, 1995, Trost, Maass, and Kenrick, 1992) have also addressed the issue of attitude change fostered by minority and majority sources; and, in doing so they have developed an interesting paradigm. Not only is their approach a useful, and relatively simple method, but it effectively integrates some important aspects of some of the more recent research efforts already mentioned. Trost et al. (1992) found that minorities could indeed be

influential when the message was of low relevance to the target; however, when the personal relevance was high, then the effect was eroded and the minority was unable to persuade the target. The argument they present for this reversal of effect was that under high relevance the increased attention the minority fosters becomes negatively biased due to the high relevance of the issue, in this case being forced to take comprehensive examinations before graduation. This is to say, using their stimuli, an individual will regard the arguments they are about to hear about instituting comprehensive exams, from an already negative position simply because they will be personally affected by them, before even hearing the first argument.

Further research in this area by Trost and Ybarra (1995) showed that personal relevance can have an effect on the ability of a minority to influence others.

Participants were presented first with a survey to obtain general attitudes toward a series of issues related to university policies, one of these issues was the implementation of comprehensive senior examinations. They were then shown a video taped confederate posing as a university official recommending the adoption of this proposal, relevance being manipulated by stating the adoption was to take place in either one or eight years.

Minority or majority status opinion was established by reporting the results of a student poll which had been taken the year before, indicating that 78% supported and 22% did not support the adoption (or the reverse). The main objective of this experiment was to ascertain the effect of the personal relevance of an issue, and strength of the arguments used in support of a position on the processing of influence messages. The issue of argument strength has been fairly consistent in other research domains, where stronger arguments are in general more persuasive when subjects are processing centrally, or

systematically, but Trost and Ybarra find that the quality of arguments from minority sources is only considered when topics are not highly personally relevant. So even though arguments may be recognized as strong, they are not persuasive when originating from a minority source. In addition to answering some of these questions, Trost and her colleagues have developed an interesting methodology, which I will try to adapt to answer some of the same as well as some different questions.

The above experiment showed that the strength of the arguments interacted with the relevance of the message such that in low relevance conditions argument quality from minority sources was attended to, i.e., subjects detected differences in argument quality. However, the majority source was still given preference, and so induced a greater overall change in favorability rating. I would like to take some time to more closely examine the results that Trost and Ybarra report in their 1995 paper for two reasons. First, as I have stated I wish to explore minority influence utilizing, and augmenting Trost and Ybarra's method. Specifically, my experiment is based on three of their variables and as I have mentioned there is one other that I believe to be crucial. The variables in common are source (majority/minority), strength of argument, (I will present only strong arguments), and personal relevance (which will also be high for this experiment); the additional variable will be the shared quality of the arguments (previously shared/unshared). Second I wish to explore an interaction that occurs in the Trost and Ybarra experiment which is of particular interest.

Trost and Ybarra found, as they would predict, that in low relevance minority conditions, strong arguments were more favorably rated than weak arguments (see figure). In the majority condition, there was no statistically reliable argument effect.

This is a reasonable outcome if we allow that the majority serves as a cue, and since there is low relevance the majority would foster peripheral or heuristic processing. On the other hand, a minority source would tend to produce (due to their novel status) generally more systematic style processing (along a dimension, not as dichotomous set of options). This more systematic level of processing should create a greater differentiation between arguments, and thus the recognition of quality differences which Trost and Ybarra observed. In the high personal relevance conditions strong and weak arguments were recognized as such by both majorities and minorities, and so favorability ratings were generally greater for strong arguments.

The result that I find most intriguing however, occurred in the differences in the relationships between the strong arguments for both minority and majority sources, under high relevance. One would expect systematic processing for both sources and equal influence due to consistent argument strength. Trost and Ybarra's results show otherwise, their results show a strong trend ($p < .07$) for subjects to rate arguments from the minority to be less favorable than from the majority. Trost and Ybarra find a tendency to discount the minority position, even when arguments are strong, as well as highly relevant.

It is my argument that the minority status of the source is having an attenuating effect on the arguments, but not simply because they are a minority, the arguments are the same strong arguments, when attended to they should be recognized as such. Why? I argue that the status of knowledge (or assumptions) about the arguments themselves could be causing this effect.

My argument is as follows: If a target listens to a strong argument from a minority source, when in the low relevance condition, the novelty (or conflict) of the minority caused systematic processing and the strength of the argument is recognized, noted, and responded to, in this case by a favorable rating, which is as favorable as a comparable majority argument. However in the high relevance condition, they are more heavily invested, as such they are not only motivated to examine the arguments carefully, but to discount them if possible. I believe that such discounting tendencies lead the target person to not only consider the argument for its' content, but also to consider non-argument related facts. One such "fact" may be that these apparently strong arguments have not won most people over. This consideration leads to the cognition/question "Has this argument been heard by everybody?" If the target believes this to be the case, it may very well lead them to the conclusion that, as strong as this argument may appear to be, if only a minority of people agree with it, there must be stronger counter arguments available,(of which I am presently not aware, perhaps). If however, subjects believed that the arguments they are about to be presented were never available to those previously polled, then they could not make this attribution and therefore should be as strongly influenced as when there is a majority source.

It seems strange, almost counter-intuitive, that there are circumstances in which a strong, cogent argument is unable to influence the targets of persuasion. If one perceives, and rationally considers arguments about an issue, and if these arguments are sound, when would they be persuasive, regardless of the source? Certainly, one can recognize the validity of a set of arguments and not be persuaded; for example when the arguments imply a severely negative outcome for the person who is the target of the

persuasion (as in some of the high relevance conditions mentioned above). Given that an example like this exists, and if we ignore that circumstance, what other conditions would lead a person to consider such arguments and not be persuaded, and under what circumstances would this not occur? The preceding review of recent experimentation has shown that there have been both inconsistent predictions and results as to when an argument or situation involving a minority source will fail or succeed to sway a target. However I also believe that many of the necessary keys are present, we just need to address attributions which may have been inadvertently supplied to subjects. What I will attempt to show with the following experiment is that in combination with the above discussed factors, there is a specific influence which needs to be considered, whether the subjects believe the arguments have been shared with others who have already been polled.

Most of the work done in this area has focused on the effects relative to indirect or latent changes, for example, those which are not related either to the issue in a persuasive communication. It is my hypothesis that direct but private influence for the issue at hand, when individuals are privately polled can be demonstrated. The existence of such an effect, is drawn from, and based upon the theories discussed to this point. I have reviewed the experimentally explored effects of variables such as the potential effect of the relevance of the issue being presented to the subject, the strength of those arguments, and, of course, the minority status of the source. In considering the work which has been done in this area, some interesting contradictions of prediction have come to light.

The Issues and the Arguments: What Do People Believe About Them?

The issues considered, or presented, as manipulations in experiments on the influence of minorities are often “hot topic” issues of the day. We need to be aware that since the issues we choose for the manipulations in studies like this are topics which are often well known, that the very popularity, or “spotlighted” quality of these issues will probably mean that our subjects have at least a passing familiarity with the issues. For example, Maass and Clark have used gay rights issues, DeDreu and DeVries the issue of admission of foreign immigrants, and Trost and Ybarra comprehensive senior examinations. Again, these are not simple issues that are novel to the participants, but complex issues which if not deeply contemplated by subjects, are at least familiar to them. Since it is probably the case that these individuals are familiar with the issues, it is also reasonable to infer that they are aware that differing opinions exist relative to these topics. If we allow that the subjects have at least some knowledge of the issues, then it would be reasonable to assume that when they are exposed to our persuasive communication they may draw conclusions, based on the cognitions they already have, which in turn can influence the processing of our message. Trost and Ybarra (1995) found that minority sources, under high personal relevance were processed systematically, and subjects agreed with strong proposals and rejected weak ones, but still were not willing to side with the minority. Closing the “escape hatch” of the shared/unshared quality of the arguments may be necessary, I believe, in order to produce conversion (in Moscovici’s terms) by the minority. This will only be the case when the arguments presented are strong arguments; weak arguments (regardless of novelty), should not carry much persuasive weight.

Essentially then, when presented with what they believe to be previously unshared arguments subjects who are asked to consider strong arguments which they believe to be of high personal relevance, a minority source should be equally successful in its attempt to persuade as the majority in similar conditions.

Trost and her collaborators tend to focus their research on the relevance of the task to the person considering it. Their main prediction, and result, has been for a general lack of minority influence for personally relevant tasks. To summarize, they would argue that under a low relevance condition that the only minority impact will be that the arguments will be scrutinized and recognized as weak or strong. On this I would agree. However, and again, I believe that supplying the additional knowledge that a series of strong arguments that have not previously been shared may be the missing requirement for the participants to be swayed by strong minority messages. Finally I would like to address a relevant, but nonsignificant, trend from Trost's work with both Ybarra(1995), and Maass and Kenrick(1992). In each of these experiments subjects who were exposed to arguments that were, strong, highly relevant, and which originated from a majority source tended to be more influential. This combination of factors is of great interest to the current research. The reason for this interest is that the addition of information about the history of the argument, in other words whether the arguments have been shared previously with others, may either support the nonsignificance of this trend, show that there is no trend when the participants have more knowledge, or that more specific knowledge about argument shared status will support this trend and exhibit statistical significance.

Issues of Operationalization and Definition in Minority Influence

One of the first issues that must be addressed, and one that has been identified by others as an area of misunderstanding, is the definition and use of terminology across minority influence research paradigms. For this project the terms minority and majority refer strictly to group size, the group with the larger contingent being the majority and the smaller in number being the minority. Crano (1995), and others (Worchel et al., 1995, Mucchi-Faina, 1995) have expressed the position that the term minority (as well as other terms) can, under different scenarios, be applied in different ways. For the purpose of this study, we will only consider the case of simple numerical division between minority and majority.

Before I give a detailed description of the method and design I will briefly preview, and summarize the methodology. The variables I manipulated were essentially the same as Trost and Ybarra (1995); first, source, (either majority or minority); these were represented as being 78 and 22% respectively, of individuals who participated in a (bogus) previous poll called the STATE (Senior Tests for A Traditional Education) Poll. The “new” variable was the shared quality of the arguments that the subjects read. With this variable I informed the subjects that the participants of the first state poll either were or were not familiar with the arguments that are about to be presented. In the unshared condition the subjects were told that the arguments were received since the last poll was administered, and so this is the first time MSU students have seen them. The arguments used are those used by Trost and her colleagues (1992, 1995), and developed by Petty and Cacioppo (1986).

Method

Design

The experiment was a 2 (majority / minority) x 2 (Argument status: shared / unshared) between subjects design.

Subjects

Subjects are 146 male and female students from Michigan State University.

Subjects received partial credit towards fulfillment of course requirements.

Procedure

Subjects were told that they were present to take part in a survey which is part of a new university initiative to bring MSU into the next century. They were further informed that the object of this part of the program was to gather student input for the committee in charge of this project. Supposedly, this committee was a combined faculty/student group that was formed to investigate the feasibility, and student reaction to, the institution of comprehensive examinations here at MSU. Comprehensive Exams were described as a series of exams taken at the end of the senior year in the student's major area. The stated goal of the survey they were to participate in was to gather information about issues that the school administration believed to be relevant to keeping MSU one of the top schools in the nation for the next century. Subjects were told that they would complete a brief general survey and then be presented with one of the issues in a more specific presentation.

Subjects were then presented with the booklet containing survey/testing materials. Each booklet was constructed so that the first page that subjects came to was entitled "MSU 2000 - General Opinion Survey". This general survey consisted of an eight item survey requiring subjects to rate the importance of various topics which could affect the student body. Topics on this survey will include: the addition of the new law

school, more funding for remedial courses, stricter admissions requirements, comprehensive examinations for seniors, more medical research, limitation of enrollment, smaller class sizes, and greater stress on "core courses". Subjects had to rate these issues on a series of dimensions for favorability, with ratings ranging from 1 (not at all favorable) to 9 (very favorable). For personal support of the issue for example, "How much do you support the implementation of senior comprehensive exams?" 1 (not at all) to 9 (strongly support), or "How much do you support the implementation of more remedial courses?" or "Do you support more funding for medical research?". This survey served as an initial rating of favorability towards comprehensive exams, as well as a basic measure of how strongly subjects supported such an initiative. Here, because of the apparently broad nature of the survey, I was able to ask directly for an individual's support/favorability reactions because similar questions were asked for all potential policy topics.

The next section of the survey booklet contained the critical manipulation. To begin this segment students were reminded by the experimenter that the following section contained specific arguments about one of the issues from the survey they just completed. The issue however, as in Trost and Ybarra (1995), was always that of comprehensive examinations and whether or not they should be instituted at MSU.

Independent variables

Minority vs. Majority influence. The text which followed the instructions was either presented as a minority or majority source. The majority source condition will claimed that 78% of MSU students polled in the earlier STATE survey were in favor of the idea of instituting senior comprehensive examinations and 22% of students polled

were against it. In contrast, the minority source condition stated that 22% supported the idea of instituting senior comprehensive examinations and 78% of students polled were against the adoption of such a policy.

Shared vs. Unshared arguments. I used this variable to determine if there are processes occurring in which subjects reject arguments from the minority source because they conclude that when strong arguments are being presented even stronger counter arguments must exist; otherwise others would have been swayed by the original arguments, for the shared condition . Subjects were informed that either the arguments they are about to read are arguments which were shown to the previously polled MSU students, during the first “MSU 2000” poll. These students’ poll results, from last year, have been used to establish the current majority / minority positions, in cooperation with the committee, which is pursuing the task of gathering information necessary to explore having comprehensive exams instituted at MSU (shared). Alternatively, other subjects were told that they were being presented with a set of new arguments which the committee charged with investigating the institution of comprehensive examinations for seniors have recently collected. The participants in this condition were told that the previously polled students had no arguments to consider, that they were just asked for their opinions. Finally, it was explained that they will be reading the position paper that the committee has compiled to present its’ case, and that they are the first to read this position paper. (unshared).

Arguments. The argument presented were based on arguments used by Trost and Ybarra (1995) which were originally developed by Petty and Cacioppo (1986). The arguments develop a position represented as the policy statement of the committee.

This statement contained four arguments why MSU students should consider supporting the implementation of comprehensive examinations. The four arguments used in the present study were: 1) Students like the idea, they are excused from course finals in their senior year so that they can study for comprehensive exams in their major area, which is presumably of more interest to them, 2) schools which have comprehensive exams produce students who tend to score higher on national standardized tests, 3) Students at schools with comprehensive exams rate their teachers more positively, presumably because departments place more emphasis on high quality and stimulating teaching, and 4) schools with comprehensive exams have more available scholarships from individuals and corporations.

Dependent Measures. The primary dependent measure which was recorded on a scantron form, and consisted of a series of appraisals focusing on comprehensive exams. As in Trost et al. (1992), the essential inquiry was "How favorable are you towards adopting comprehensive senior exams?" Responses were on a nine point Likert type scale and compared to the initial rating from the pre-test. This measure was originally intended to be measured directly in the post experimental survey, but due to a survey construction error had to be measured with a multi-item measure. The end result of the multi-item approach were two alternate measures, one consisting of five survey items and one which consisted of three of the items. These measures are described in detail below. Additional measures included the cognitive appraisal measures used by Trost et al. (1992, 1995).

I also explored the impact of arguments with questions such as: "How would you rate the quality of the arguments just presented?" and, "How strong do you feel the

arguments just presented were?". "How personally relevant are these arguments for you?" "Do you believe after considering these arguments that this issue can be resolved simply, or with much and careful debate?", (responses on this item would be on a scale of 1 (simply) to 9 (with much debate)) "Do you believe all arguments and counter arguments were presented here?", Do you believe the arguments presented here are the best possible arguments?, "How convincing would you rate these arguments as being?", "How confident are you that you could defend your position based on these arguments?", "How confident are you that a single answer could be demonstrated for this issue?" Distractor questions were also included, these probes asked questions such as: "How much do you feel such exams would affect perceptions of the university?" or, "Would such exams have effected your choice of university?" and, "Do you believe such exams affect the image of a university in a positive or negative way?".

Results

Manipulation Checks

A check of differences in attitude favorability toward senior comprehensive examinations was tested using a 2 (source status) X 2 (argument status) ANOVA with the initial attitude measure from the first survey as the dependent variable, indicated that there were no significant differences in favorability ratings previous to experimental manipulation.

Manipulation checks indicated that participants were able to differentiate between the source status of the communication. Subjects were asked to respond to the question: "What percent of students in the previous poll were in favor of senior comprehensive exams?". The responses were examined using a 2 (source status) X 2

(argument status) ANOVA in order to test the percent of subjects who recognized source status, yielding an $F(1, 141) = 1043.70, p < .001$. All subjects in the majority condition recognized that majority status, with 98% of participants indicating the majority status as between 70 and 80 %, the actual percentage of the majority was 78. In the minority condition 95% of participants recognized the minority as the source of the arguments, 76% of whom were precisely accurate in reporting the minority source as being 22%. Five participants in the minority condition incorrectly identified arguments as originating from a majority source.

For the argument status treatment, participants who were informed that the arguments they would read had been shown to others during a previous poll correctly identified the shared status of the arguments 61% of the time. Alternatively, in the unshared condition, where subjects were told that the arguments had not been shown to anyone else, 90% correctly identified the arguments as unshared. The ability of the subjects to recognize this manipulation was checked by means of a single question which asked “ Were students polled last year first shown the committee’s report before being polled?”

Overall Favorability

The items from the second attitude survey were factor analyzed to determine if an aggregate of items having face validity for general favorability rating would arise for use as a single dependent measure. Five items were shown to load heavily on the first factor, these items included, 1) how convincing the arguments were to the participants, 2) the strength of the arguments, 3) how personally relevant the arguments were to the students, 4) the quality of the arguments, and 5) how the participants felt the image of

the university would be affected by comprehensive examinations. Each of these items loaded on the first factor at .60 or above, and given the context, cluster thematically about the concept of favorability toward comprehensive examinations. These five items were subjected to a further analysis to assess how closely they held together in the absence of the eight other items. This analysis yielded loadings of greater than .84 for the items concerning quality, strength of argument as well as how convincing the arguments were, as rated by the participants. The effect on image and personal relevance loaded at .59 and .53 respectively. Based on these results two alternative dependent measures were constructed, one using the average of all five items, the other using the three items which loaded the highest on the secondary factor analysis. All analyses were run with each of these alternative dependent measures.

The dependent measures were first used to test a 2 (source status) X 2 (argument status) ANCOVA with the initial favorability item from the first survey as covariate, in order to account for any differences in ratings which might be due to the initial beliefs that subjects held toward comprehensive examinations. The ANCOVA was a necessary analysis due to the lack of a direct measure of attitude change on the second survey. The covariate, with one degree of freedom in each instance, was statistically significant both for the three item measure ($t = 4.509$, $p = .00$), and the five item measure ($t = 5.154$, $p = .00$), indicating that there was a significant association between the critical item on the first survey and the three and five item dependent measures. Future research modeled after this study should include such a direct measure of attitude change in order to provide greater insight into any underlying phenomena. The overall analysis yielded a significant effect only for source status, F

(1,141) = 4.38, $p = .038$ with the three item dependent measure. This result (figure 1) indicated that, in general, participants held more favorable attitudes toward comprehensive senior examinations when the majority was the source of the message ($\underline{M} = 5.29$) than when the source was a minority ($\underline{M} = 5.17$) with shared arguments, when unshared the majority rating increases ($\underline{M} = 5.51$) and the minority drops ($\underline{M} = 4.76$). When the same analysis was run using the five item dependent measure the analysis failed to achieve significance, even for the source status with an $F(1,141) = 2.01$, $p = .158$. These ratings were recorded on a scale which extended from 1 to 9 with a rating of nine indicating positive, and 5 being a neutral score; the means reported are the adjusted means. For the five item measure (figure 2) the means for the shared condition are majority $\underline{M} = 5.20$, and minority $\underline{M} = 5.69$, and in the unshared condition majority $\underline{M} = 5.53$, and minority $\underline{M} = 5.00$. The interaction term in this analysis was not significant at $F(1,141) = 1.14$, $p = .288$. While this was not a significant interaction the mean directions reported above point to the possibility of an interesting crossover effect.

All arguments presented were those which had been shown by previous research (Trost and Ybarra, 1995) to be strong and valid. Additionally, the scenario in which the information was communicated was structured to make the issue of comprehensive examinations highly personally relevant, in other words to convince the students participating that they would be impacted by the introduction of comprehensive exams. One of the more interesting aspects of minority influence research is that there are frequently effects of the presence of a minority source other than conversion, or attitude change. For example Nemeth (1983) showed that the presence of a minority fosters, as

addressed earlier, divergent thought processes. It has also been shown that differences can be detected in subjects ability to perceive variation in the strength of arguments (Trost and Ybarra, 1995). Since opinions about the strength of the arguments presented were collected analyses were conducted to determine if subjects who heard the same arguments, but from different sources would attribute greater strength to one source or the other. To test this possibility an ANOVA was used to analyze the perception of how strong the arguments were as presented, and to test for different perceptions of the argument strength depending on the source of the arguments.. This analysis yielded a marginal main effect for message source $F(1,145) = 3.77, p = .054$. When the arguments were stated as originating from a majority source the adjusted mean strength rating was 5.41, however when the same arguments were attributed to a minority source the adjusted mean strength rating was 4.85. I also chose to test for any perceived differences the personal relevance of the communication to see if the source or shared status of the arguments would add any weight to the “immediacy” of the issue. Personal relevance however did not appear to be differentially affected by source status, as no statistical differences were found for this measure $F(1,145) = .28, p = .597$.

Internal analyses were also conducted to examine any effects which might have surfaced for a restricted sample of those subjects for whom the shared/unshared manipulation was clearly effective. Analyses were performed excluding the 37 students who did not comprehend the manipulation of shared status to asses the interaction of source and argument status. While still not achieving significance the results of the analysis were slightly stronger. For the restricted sample, the five item dependent measure yielded an $F(1,104) = 2.18, p = .142$, and for the three item measure $F(1,104)$

= 1.74, $p = .190$. Analyzed with five items (figure 5) the mean favorability ratings for the shared treatment were 5.21 in the majority and 5.54 for the minority, and for the unshared treatment 5.69 for the majority and 5.00 for the minority. Again the reversal of the direction is evident. The pattern also holds for the three item analysis (figure 6) with mean favorability ratings for the shared treatment were 5.32 from a majority source and 5.49 for a minority, and for the unshared treatment 5.55 for the majority and 4.74 for a minority source. While the shared condition again was statistically nonsignificant, the trend in those treatment condition is in the opposite direction. While this is not overwhelming evidence of a minority effect, it does point in the direction of interesting questions for future research, when some current findings are taken into consideration. Other research, for example Trost and Ybarra (1995) had manipulations where participants were not given information about the shared quality of the arguments they were presented, and in that case the arguments were substantively the same as the arguments used in this study. It is interesting to note that the subjects in that study tended to rate arguments more favorably if they came from a majority, which is the same trend this study shows for the participants who were told that the arguments were unshared. This speaks to an interesting assumption that participants might be making about the arguments they are presented with in a persuasive communication, that assumption being that unless told otherwise they assume that they are the first to be presented with a set of arguments. It should be noted again that this is only a trend in this study, but it does pose an interesting question to be pursued in future research.

Cognitive Response Measures

A simple analysis of variance model was tested to explore the possibility that, as in other minority influence research, the source status can influence the number of thoughts generated about the focal issue after hearing a persuasive message. The number of thoughts generated ranged from nine individuals who did not list any thoughts to one participant who listed fourteen. Overall those exposed to a majority source generated 236 thoughts, 116 positive and 120 which were negative as classified by the subjects. For those exposed to a minority source 244 thoughts were generated overall, with 119 positive thoughts and 125 which were classified as negative. There were no significant differences between minority and majority sources for number of thoughts generated. A further analysis was conducted to determine if there were differences in the number of positive or negative thoughts generated. Two 2 (Majority/Minority) X 2 (Shared/Unshared) ANOVA were conducted to test for any influence of either source or argument status first for positive thoughts, and then for negative thoughts, with neither analysis resulting in significant findings. The ratio of positive thoughts to total thoughts generated was also tested, again the results did not indicate a significant effect either for source or argument status.

General Discussion

The most basic argument in minority influence since the research of Moscovici introduced this field of research has focused on the idea that if a minority is consistent in its position, and able to persuade a few others, that as long as they factually support their position, they can influence people in a deeper, more thorough and effective way than a majority. To this day the goal of many researchers studying minority influence has been to show under what conditions this phenomenon can occur. This research

proposed to investigate further the influence a minority source can have on those who hear its message. The basic hypothesis which I attempted to support empirically was that if those listening to a minority communication were acting under the belief that the arguments they were about to hear had not been shared before then they would be in a frame of mind which would be more easily persuaded by a minority source. This mental orientation hypothesis was based in part on the idea that people prefer to process information in a casual way, since it takes effort to process systematically, and so we want to conserve mental energy whenever possible.

To draw an analogy, imagine the attempt to avoid mental effort as a hallway filled with a series of doors, where each door is an opportunity to escape from the effort of systematic processing. As information is processed we try different doors to avoid attending closely to a message. For example, one door might “test” whether or not the source is credible. If the response is “No”, then we can discount the message and not pay as close attention. If, however, the answer is “Yes”, then we must either listen to the message carefully or find another door by which to “escape”. With this research I have attempted to close and lock some of the doors that might be used for just such an escape so that those listening to the persuasive message would be forced to process systematically, and in so doing increase the likelihood of being persuaded by the message. This experiment had specific conditions which were intended to assist the minority source, the message presented by both minority and majority consisted of exactly the same arguments. As mentioned, all of the arguments had been shown to be strong in previous research (Petty and Cacioppo, 1986, Trost et. al., 1992), and personal relevance was manipulated to be high for all subjects so that the participants would be

more likely to believe that it was in their interest to pay attention to the message. It was hypothesized that the minority could be at least as persuasive as the majority, because some of the main cues to routes of escape would not be available. If this were the case then the systematic processing which minorities foster as demonstrated by researchers such as Nemeth, Trost, and their colleagues, could be focused directly on the focal message.

While the participants in this experiment were able to distinguish whether the source of the communication they heard was from a minority or majority source, I believe that this information needed to be even more clearly communicated. Possibly most important was that participants who heard the “shared” communication were only able to identify the message as having been heard 61% of the time, while this was enough to indicate that statistically the manipulation was effective, in more detailed analysis of the dependent measures if a participant did not correctly identify the shared status of the communication they heard, their data were not included in the analysis. This caused the resulting analyses to be short by 37 cases, spread across the four conditions. The manipulation which was not completely effective may in turn have effected the outcome of these more specific analyses. Another issue which most certainly effected the clarity with which these results can be viewed is the lack of a specific post test attitude measure. Instead of being able to do a straight-forward analysis of attitude change after exposure to the communication, I was forced to use an aggregate dependent measure. The use of a single attitude measure which directly assessed change would have been more appropriate, and ultimately more useful for interpretation because it would have allowed for an analysis of direct change.

Additionally, the use of an aggregate measure may contain more error, both systematic and random. The aggregate measure, while having face validity in terms of beliefs surrounding the issue of comprehensive examinations, was not, a direct and focused measure. There is however a positive aspect to the use of this measure. Since the measurement of attitude is not simple, the use of multiple items to measure a person's attitude may help paint a more accurate albeit broad picture of his or her belief structure.

There were however some interesting outcomes which did not achieve statistical significance in this experiment, but which warrant mention. The favorability of how the message is perceived appears to have been influenced by the interaction of source status and argument status. Although the trend is not significant with either analysis ($p = .261$ for the three item measure and $p = .288$ for the five item dependent measure), when the participants believed the communication contained arguments which had been heard by others the mean favorability, adjusted for the covariate, for the three item measure, was 3.28 when originating from a majority, and 3.69 from a minority source for the three item dependent measure. However, when the arguments were presented as containing information which had not been previously shared the mean favorability from a majority source was 3.57, while from a minority source it was rated 3.41 (figure 3). This crossover trend also surfaced with the five item dependent measure (figure 4), with majority source ratings for shared information at 5.28 and for a minority source at 5.31, while for unshared information the means were the same 5.53 for the majority and 4.99 for the minority.

In general then what does this mean for minority influence research? It seems to indicate that the source of a message is still an important, and not fully explained key

to how a message is processed, and that the “history” of a message may influence that process. Having a majority source does seem to add weight to the strength of an argument, although how much and exactly why still is not completely clear. It may very well be that a heuristic such as “there is safety in numbers” applies as well in processing routines as it does in unsettling situations. It is also possible that a message which is of high personal relevance induces just such a fear based response, or at the very least a response which is based in being disturbed or unsettled with the message that is presented. Unfortunately the hypothesized minority influence did not surface in this experiment, however there are indications that there may be an effect of minority influence where I did not expect to find it. It may be that a minority can have its strongest effect in situations where the message is attributed to a minority source, and the information which has been shared before, not, as predicted, when information is “unshared”. It is also possible that there are cues which Moscovici himself would highlight. Such an example might be that by stating that the information has been shared before, and even though the message has only minority support, that minority is sticking with those previously shared arguments. By reiterating the same message they appear to be consistent in their position and are therefore are attended to more carefully. Thus, it may be then, that the condition which I assumed might undermine the potency of the minority source (the awareness that a communication had been heard previously by another group) has quite the opposite effect. It may not be consistency, per se, but consistency in the face of strong opposition which gives the minority particular power. This question deserves more direct examination in a study which eliminates some of the methodological weaknesses of the present study (e.g., includes both pre- and post-

message attitude measures) and clarifies and bolsters the shared/in shared manipulation.

In particular, if it is repeated unsuccessful advocacy that is the source of a minority's special power, one might simply manipulate the source's apparent awareness of the target group's repeated rejection of her/his message.

APPENDICIES

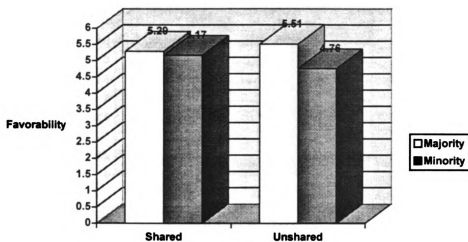


Figure 1
Source Status Effect on Attitudes Toward
Senior Exams - Three Item Measure

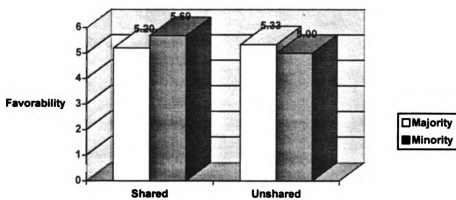


Figure 2
Source Status Effect on Attitudes Toward
Senior Exams - Five Item Measure

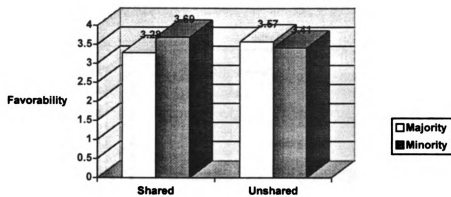


Figure 3
Source X Argument Status
Interaction Trend (ns)
Three Item Measure

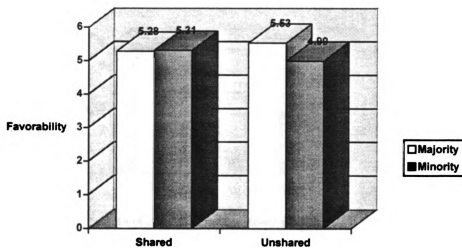


Figure 4
Source X Argument Status
Interaction Trend (ns)
Five Item Measure

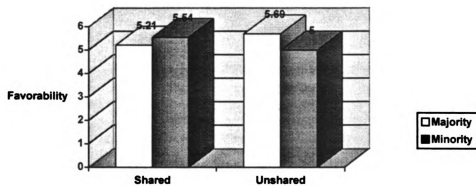


Figure 5
Source Status - Effect on Attitude Towards
Senior Exams - Restricted Sample
(Five Item)

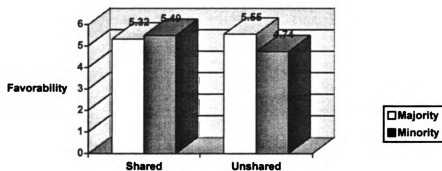


Figure 6
Source Status - Effect on Attitude Towards
Senior Exams Restricted Sample
(Three Item)

LIST OF REFERENCES

List of References

Baker, S.M., and Petty, R.E., (1994). Majority and Minority Influence: Source position imbalance as a determinant of message scrutiny. *Journal of Personality and Social Psychology*, 67, 5 - 19.

Chaiken, S., (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology* 39, 752 - 766.

Chaiken, S., and Stangor, C. (1987) Attitudes and attitude change. *Annual Review of Psychology*, 38, 575 - 630.

Crano, W.D. (1995) Context, Comparison, and Change: Methodological and theoretical contribution to a theory of minority (and majority) influence. In: Moscovici, S.,

Mucchi-Faina, A., and Maass, A. (Eds.). *Minority Influence*. Nelson Hall, Chicago.

De Dreu, C.K.W., De Vries, N.,K. (1993a) Numerical support, information processing and attitude change. *European Journal of Social Psychology*, 23 647 - 662.

De Dreu, C.K.W., De Vries, N.,K. (1993b) Differential Processing and attitude change following majority versus minority arguments. *British Journal of Social Psychology*.

De Dreu, C. K.W., De Vries, N. K., Gordijn, E., Schuurman, M. (1995) Majority and Minority Influence: A dual role interpretation. In press.

Eagly, A.H., and Chaiken, S. (1993) The psychology of Attitudes Fortworth, Texas: Harcourt Brace Javonovich.

Gorenflo, D.W., and Crano, W. D. (1989). Judgmental subjectivity/objectivity and locus of choice in social comparison. *Journal of Personality and Social Psychology*, 57, 605 - 614.

Kruglanski, A.W., and Mackie, D.M. (1990). Majority and minority influence: A judgmental process analysis. In W. Stroebe and M. Hewstone(Eds.), *European Review of Social Psychology*, vol.1 Chichester, Eng.: Wiley.

Latané, B. and Wolf, S. (1981). The social Impact of majorities and minorities. *Psychological Review*. 88, 438 - 453.

Maass, A., and Clark, R.D. III, (1983). Internalization vs. compliance: Differential processes underlying minority influence and conformity. *European journal of Social Psychology* 13, 197 - 215.

Maass, A., and Clark, R.D. III, (1984). The hidden impact of minorities: Fifteen years of minority influence research. *Psychological Bulletin* 95, 428 - 450.

Maass, A., and Volpato, C. (1995). Theoretical perspectives on minority influence: Conversion versus divergence? In: Moscovici, S., Mucchi-Faina, A., and Maass, A. (Eds.). *Minority Influence*. Nelson Hall, Chicago.

Maheswaran, D., and Chaiken, S. (1991). Promoting systematic processing in low motivation settings: Effects of incongruent information on processing and judgment. *Journal of Personality and Social Psychology*. 61, 13 - 25.

Moscovici, S., Lage, E., and, Naffrechoux, M. (1969). Influence of a consistent minority on the responses of a majority in a color perception task. *Sociometry* 32, 365 - 380.

Moscovici, S. (1980). Toward a theory of conversion behavior. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*. vol. 13, 209 - 239; New York, Academic Press.

Mucchi-Faina, A. (1995). Minority influence effects: Assimilation and differentiation. In: Moscovici, S., Mucchi-Faina, A., and Maass, A. (Eds.). *Minority Influence*. Nelson Hall, Chicago.

Mungy, G. (1985). Direct and indirect influence in the Asch paradigm: effects of "valid" or "denied" information. *European Journal of Social Psychology*, 15, 457 - 461.

Mungy, G., and Papastamou, S. (1980). When rigidity does not fail: Individuation and psychologization as resistances to the diffusion of minority innovations. *European Journal of Social Psychology*, 10, 43 - 61.

Nemeth, C.J. (1986) Differential contributions of majority and minority influence. *Psychological Review* 93, 23 - 32.

Nemeth, C.J., and Kwan, J. (1987). Minority influence, divergent thinking, and detection of correct solutions. *Journal of Applied Social Psychology*. 17, 786 - 797.

Nemeth, C.J., Swedlund, M., and Kanki, B. (1974). Patterning of the minority's response and their influence on the majority. *European Journal of Social Psychology*. 4, 53 - 64.

Nemeth, C.J., and Wachtler, J.(1974). Creating the perceptions of consistency and confidence: A necessary condition for minority influence. *Sociometry*, 37, 529 - 540.

Nemeth, C.J., and Wachtler, J.(1983). Creative problem solving as a result of majority versus minority influence. *European Journal of Social Psychology* 13, 45 - 55.

Petty, R.E., and Cacioppo, J.T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*. vol. 13, 209 - 239; New York, Academic Press.

Trost, M.R., Maass, A., and Kenrick, D.T. (1992). Minority influence: Personal relevance biases cognitive processes and reverses private acceptance. *Journal of Experimental Social Psychology*, 28, 234 - 254.

Trost, M.R., and Kenrick, D.T. (1995). Ego involvement in the minority influence paradigm: The double edge sword of minority advocacy. In: Moscovici, S., Mucchi-Faina, A., and Maass, A. (Eds.). *Minority Influence*. Nelson Hall, Chicago.

Trost, M.R., and Ybarra, O.J. (1995) Thinking about minority advocacies: Social influence and social avoidance. Arizona State University, Tempe.

Wood, W., Lundgren, S., Ouellette, J.A., Busceme, S., and Blackstone, T. (1994). Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, 115, 323 - 345.

Worchel, S., Grossman, M., and Coutant, D. (1995) Minority influence in group context: How group factors affect when the minority will be influential. In: Moscovici, S., Mucchi-Faina, A., and Maass, A. (Eds.). *Minority Influence*. Nelson Hall, Chicago.

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