Order Number 9000733

Changes in intergroup stereotypes as a function of frame: Attitudes toward the Russians

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City University of New York, 1989

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CHANGES IN INTERGROUP STEREOTYPES AS A FUNCTION OF FRAME: ATTITUDES TOWARD THE RUSSIANS

by

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A dissertation submitted to the Graduate Faculty in Educational Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, the City University of New York.

1989

This manuscript has been read and accepted for the Graduate Faculty in Educational Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

Changes in Intergroup Stereotypes as a Function of Frame: Attitudes toward the Russians

by

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According to cognitive dissonance literature, attitudes are notably fixed. Frame studies, in contrast, have concluded that cognition is fluid and that opinions are markedly variable. Examination of the literature revealed that while dissonance studies commonly employ interventions which argue against subjects' held ideas, frame studies typically test the effects on opinions of different ways of framing problems. Attribution of the incompatible results to these differences in intervention strategies (termed here information-oriented and rule-oriented, respectively) is precluded, however, by further differences in research formats. While cognitive dissonance studies typically employ a pre-posttest design, frame studies use different groups of subjects across conditions.

In order to allow comparison of the relative efficacy of both information and rule-oriented interventions on attitude change, this study employed a uniform pre-posttest format. The opinions explored were

ideas about the Russians. One scale examining attitudes and another examining perceptions of similarity constituted the dependent variables. Four vignette interventions constituted the independent variables. An information-oriented vignette argued against stereotyped ideas of the Russians as our enemies. There were two rule-oriented vignettes. One introduced a new Us - Them decision rule by juxtaposing the Russians to another, more extreme outgroup, "crazies," like Khomeini and Qadafi, portrayed as far more undesirable (More Extreme Outgroup intervention). The other rule-oriented intervention redrew group boundaries, switching Us-Them from Americans vs Russians to people of the world vs politicians and military (Politicians vs. People intervention). The fourth Vignette discussed the need for international studies programs in college and served as the control.

Comparison of pre and posttest scores revealed a significant change in the Politicians vs People condition for both attitudes ($t=-2.95$, $df=39$, $p<.005$) and perceptions of similarity ($t=-2.77$, $df=39$, $p<.009$). There were no significant differences in any of the other intervention conditions. Significant findings were discussed in terms of the complex semantic environment in which attitudes toward the Russians are constructed. Lack of other predicted findings was discussed in terms of possible methodological shortcomings as well as

theoretical considerations. In addition, the validity of dichotomizing rule-oriented and information-oriented interventions was questioned and a more subtle, complex relationship hypothesized.

Acknowledgements

I would like to acknowledge several people whose help and support made this project possible. First, my sincere gratitude to my advisor, Dr. Sue Rosenberg Zalk, for her interest, clear thinking and generous contributions of time and effort. My appreciation to my committee, Dr. Carol Kahn Tittle and Dr. Alan Gross for their aid. Also, my heartfelt thanks to Dr. Andy Leon, for his patience, reliability and expert counsel regarding the statistical procedures.

To Dr. Ronnie Lesser, my love and gratitude for her encouragment and belief in me. To my parents, Lea and Mel Schoenberg, my thanks for their continued support. And, to Dr. Rita Frankiel, my deep appreciation for her support, intelligence and steadfastness.

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Chapter I

Introduction

The power and perseverance of interpersonal stereotypes and prejudice have long absorbed those curious about the workings of the human psyche. In psychology, research dates back at least five decades to 1933, when Katz and Braly devised an attitude check list to assess the content of ethnic stereotypes. This methodology became the model for virtually all the work conducted on stereotyping in the following years. Although it had its usefulness, reliance on this single paradigm resulted in exploration of a rather narrow range of questions and consequently to stagnation in the field (Hamilton, 1976). Not until the 1960's did social scientists attempt a broader investigation of this issue, addressing how stereotypes develop (Tajfel, 1969), the conditions under which they are used (Taylor, 1981) and their consequences for interpersonal behavior (Wilder, 1981).

In recent years interest has grown in the cognitive processes involved in the ways people perceive and make judgments about each other. This cognitive orientation has infused the study of stereotyping with new vitality (Hamilton, 1981). Whereas in the past it has been considered to be motivationally based (Biassey, 1972;

Comer, 1980; Adorno et al., 1950), an outgrowth of faulty reasoning (Brigham, 1971) or the product of social influences (Chesler, 1976; Myrdal, 1962), a growing body of research supports the view that stereotyping is an unexceptional example of categorizing not fundamentally different from generalizing about or imputing attributes to any group of objects (e.g. Fiske, 1987; Taylor, 1981).

For educational psychologists and other researchers interested in the understanding and modification of stereotyped ideas about groups of people, e.g. racism, this cognitive approach suggests new avenues of analysis and intervention. Over the years various techniques have been employed to alter stereotyped ideas, with mixed success. These have included intergroup contact (Amir, 1976; Cook, 1984), promoting intergroup cooperation (Allport, 1954; Aronson & Gonzalez, 1988; Katz & Zalk, 1978; Sherif et al, 1961), and infusing curricula with examples of outgroup achievement (Katz, 1976). The current stereotyping-as-categorization theory suggests the fruitfulness of interventions aimed at altering the categorization rule. One such rule is perceived similarity (Rokeach, 1968; Wilder, 1981). A cognitive analysis hypothesizes that similarity-dissimilarity is assessed along a given dimension such as socio-economic class. Group boundaries are drawn accordingly, creating

an ingroup and an outgroup. Corresponding stereotypes of each group are then constructed and attributed to group members. If this sequence is correct, it may be possible to affect intergroup perceptions by altering the perceived similarity of the outgroup along the relevant dimension.

Within the past several years, however, the role of perceived similarity as a mediating variable in intergroup hostility has been called into question. While one review of the literature concluded that "if the outgroup can be made to appear more similar to the ingroup, then any discrimination based on perceived differences should be lessened" (Wilder, 1981, p. 245), another review concluded that "similarity-dissimilarity of the outgroup had no effect on degree of ingroup bias" (Brewer, 1979, p. 318).

Interestingly, this controversy can be viewed within the context of a larger theoretical dispute in the literature regarding whether or not it is possible to alter opinions of any sort reliably. On one side of the dispute is an extensive, respected body of cognitive dissonance literature which has demonstrated repeatedly that once formed, opinions are notoriously impervious to modification (Nisbett & Ross, 1980). On the other side of the dispute is the more recent body of frame theory studies which suggest that attitudes are enormously labile

as a function of how subjects construe problems (Einhorn, 1976; Slovic, Fischoff & Lichtenstein, 1977; Tversky & Kahneman, 1981). At first blush it appears that these research findings are mutually contradictory and that if the cognitive dissonance literature is correct, efforts to modify stereotyped attitudes hold little promise. However, more thorough examination reveals that such profoundly discrepant results may be a function of fundamentally different sorts of interventions. If this is so, then examination of the experimental paradigms used by each group should provide useful information regarding the types of interventions that may alter stereotypical ideas.

In order to explore these questions, this study sought first to identify the intervention strategies used in both cognitive dissonance and frame studies. Their relative effectiveness in altering intergroup perceptions was then examined and the role of perceived similarity was assessed. These findings were then applied to an investigation of experimental manipulations of stereotyped attitudes toward the Russians. The rationale for this choice is discussed in greater detail below (see Educational Implications). Suffice it to say here, that this content area is well-suited to a study of stereotyped attitudes for several reasons. Firstly, as few Americans

have had any contact with Russians, their stereotyped attitudes are less likely to be modified by personal experience. Secondly, relations between the two countries have profound international implications.

Toward this end, the relevant literature will now be reviewed.

Literature Review

Cognitive Dissonance Theory: Decisions are fixed

> The human understanding when it has once adopted an opinion, draws all things else to support and agree with it. And although there be a greater number and weight of instances to be found on the other side, yet these it either neglects and despises, or else by some distinction sets aside and rejects, in order that by this great and pernicious predetermination the authority of its former conclusion may remain inviolate. (Francis Bacon, 1620/1960).

The idea that human beings strive to attain states of belief which provide clarity and certainty and preclude confusion and doubt has a long history in philosophy and science. In 1877, Charles Sanders Pierce argued that doubt is so uncomfortable and irritating a state that people engage in personal inquiry solely to attain beliefs which restore a comfortable state of mind. "As soon as a firm belief is reached, we are extremely satisfied,

whether the belief be true or false" (cited in Tedeschi, Schenkler & Bonoma, 1971).

In 1945, Prescott Lecky developed a theory of self-consistency which posited human beings as organized, active, unified organisms seeking to predict and control. Lecky believed that human learning emerged through the conflict between the organization of the individual's values and expectations and new environmental input. The need to maintain consistency in resolving this conflict may lead to distortion or total avoidance of inconsistent stimuli, particularly if they are sufficiently threatening to the self-concept.

> The point is that all of an individual's values are organized into a single system, the preservation of whose integrity is essential...The individual sees the world from his own viewpoint, with himself as the center. Any value entering the system which is inconsistent with the individual's valuation of himself cannot be assimilated; it meets with resistance and is likely...to be rejected. (ps 152 & 153)

Similarly, Kurt Lewin (1947) analyzed the process of decision making in terms of psychological conflict. He noted the tendency of decision makers who have committed themselves to a decision to resist efforts of others to change their minds, a phenomenon he termed the freezing effect. Lewin identified commitment to a group as a factor which heightened the freezing effect. In this conceptualization, attitude change is a process in which

old attitudes are first unfrozen, then they are moved to a new attitude level and refrozen.

Festinger's (1967) statement of cognitive dissonance theory built on these earlier formulations. The major tenet of the theory, in fact the "hallmark of dissonance research, is the resistance to change concept" (Wicklund & Brehm, 1976, p. 225). According to Festinger & Walster

> (o)nce the decision is made and the person is committed to a given course of action, the psychological situation changes decisively...and there is more partiality and bias in the way in which the person views and evaluates the alternatives. (1964, p. 155)

The committed individual no longer weighs incoming information and assesses its impact on the decision. He or she assumes a position of "closedness" (Wicklund & Brehm, 1976, p. 11) which precludes alternative options. Such closedness was also identified by Luchins (1957), part of the Hovland group. He noted what he called Einstellung effects, the tendency of problem solvers to adopt a rigid pattern of task solution and automatically apply it to new problems for which far easier solutions exist. This phenomenon has also been termed "belief perseverance" (Ross, Lepper & Hubbard, 1975) and "cognitive irreversibility" (Lepper, Zanna & Abelson, 1970) and has been studied in relation to a wide range of cognitive activities. Several will be discussed in turn.

1. Visual Discrimination

Bruner and Potter (1964) described a variant of such rigidity in a visual discrimination task. They found that subjects who had been exposed initially to a blurred version of an object were substantially slower in identifying it when it was clearer than were subjects not initially exposed to a blurred version. The authors explained this finding by concluding that subjects maintained their initial interpretation of the objects' identity even after they became doubtful about its validity. This tenacity interfered with subsequent correct identification.

2. Object Preference

The tenacity with which people hold onto ideas was examined in research patterned on a classic study of children's cognitions in the face of dissonance in a toy preference task. (Carlsmith, Ebbesen, Lepper, Zanna, Joncas & Abelson, 1969; Aronson & Carlsmith, 1963). Children were forbidden to play with an attractive toy in two experimental conditions. In the first, the prohibition was bolstered by a severe threat; in the second, only a mild threat was proferred. While children in the severe threat condition continued to rate the toy as highly desirable, children in the low threat condition

derogated it. In the original study, the authors explained this on the basis of cognitive dissonance as follows: The children in the severe threat condition did not experience any dissonance in the situation. They wanted to play with the toy but knew very well why they weren't, i.e. they would be severely punished should they do so. The children in the mild threat situation, in contrast, experienced dissonance. They were in the presence of a very desirable toy which they could not play with, but they did not have a really good reason to abstain. The threatened punishment was too mild to clearly justify their self-denial. Consequently, these children experienced dissonance as their desires were discrepant from their behavior for no clear reason. In order to reconcile this discrepancy, these children performed a cognitive manipulation popularly known as "sour grapes." They devalued the object.

In their follow-up study, Lepper, Zanna and Abelson (1970) added a new dimension to the inquiry. They provided children in the low threat condition with an alternative justification for not playing with the desirable toy. Children were told that "no other children in the same situation played with any toy forbidden by the experimenter." Some children were given this consensual validation explanation initially, others after they had

developed derogatory attitudes. While children given this alternative rationale immediately, adopted it, once derogatory attitudes were formed, children maintained them. The authors concluded that once thought sequences pass beyond a "point of no return," they are irreversible.

3. Evaluation of Ideas

Such thought irreversibility has also been identified in the area of receptivity to and evaluation of new information. Lord, Ross and Lepper (1979) found that individuals discount or dismiss hard empirical evidence that contradicts their initial views, while deriving support from evidence of no greater probativeness that seems consistent with their outlook. The authors found that by biased assimilation, both sides in a debate can use the same set of data to bolster their cases. The tendency to remain impervious to disconfirming evidence characterizes professional groups as well. Kuhn (1962/1970) noted scientists' unwillingness to relinquish a favored paradigm in the face of unsupportive data. Mahoney (1977) showed that professional reviewers of scientific articles evaluated work and made publication recommendations largely according to the degree of consonance between expressed ideas and the reviewer's theoretical positions.

4. Social Cognition

There is extensive evidence from the social cognitive literature that initial understanding mediates the interpretation of new data. Studies have shown that once intentions have been attributed to another, these attributions inform interpretation of the other's behavior as well as one's willingness to reciprocate in actions ranging from kindness (Greenberg & Frisch, 1972; Tesser. Gatewood & Driver, 1968) to hostility (Epstein & Taylor, 1967). In addition, initially attributed intentions are so tenacious that they lead to the preferential recall of related over non-related actions (Zadny & Gerard, 1974).

The intractable nature of opinions about others was studied by Rosenhan (1973). He followed the progress of "pseudo-patients" who presented at psychiatric hospitals with vague, non-conclusive complaints. Other than complain of these symptoms, the confederates, none of whom had psychiatric histories, behaved normally. In all cases patients were admitted to the hospital and usually diagnosed schizophrenic. Once labeled, all their subsequent behavior and much of their past histories were interpreted accordingly as pathological. For example, in the interest of gathering information (and in order of stave off excruciating boredom) pseudopatients took copious notes while on the wards. In no case did staff

ask what they were writing; instead, they construed and recorded the activity as "obsessive writing behavior." It was only other patients who suspected them of being "journalists" or "professors." Once formulated, hospital workers' views were so compelling and adherence to them so complete, that no new information challenged the diagnostic evaluation.

All of the studies described above point to people's unwillingness to change their minds once they have reached a decision. Most dramatic of the studies on belief perseverance is a study by Ross, Lepper & Hubbard (1975). In this study, subjects were randomly evaluated as having performed poorly or well on a task. It was later explained to them that their ratings had been entirely arbitrary and predetermined and in no way reflected their abilities. In spite of this de-briefing, subjects' estimates of past and future performance on a variety of dependent measures were influenced by their initial ostensible feedback. Remarkably, this perseverative tendency permeated the judgments of observers as well as those of participants.

5. Ethnic and Racial Attitudes

Such attitude intransigence has been shown to characterize racial prejudice as well. Cook (1984) found that while structured intergroup interactions did promote

positive cross-ethnic attitudes even among individuals who were highly prejudiced at the outset, effects did not extend to general measures of racial prejudice. He concluded that without the introduction of special "supplementary influences" which promote generalization from positive contacts to positive attitudes, participants' interracial attitudes will remain unaffected. Such special influences include explicit articulation of principles of racial equality and nondiscrimination in association with pleasant out-group experiences. Apparently, lacking such generalization-enhancing direction, there is a strong tendency to view the individuals with whom positive contact was experienced as special exceptions, rather than representatives of their social group. This allows isolation of cognitions about those individuals from prejudiced cognitions about the group.

Other research supports this finding of resistance to change of prejudiced ethnic attitudes. Goldberg, Kestenbaum and Shebar (1987) found that structured interaction between groups of Jewish and Arab paraprofessionals in Jerusalem produced short-term improvement in negative attitudes. Results suggested the need for continued contact in order for improved attitudes to be maintained.

Frame Theory: Decisions Vary as a Function of Frame

In sharp contrast to the findings of cognitive fixedness which emerged from studies on cognitive dissonance, are the findings of frame research, which reflect the fluidity and adaptability of subjects' decision making. Where the former has found rigidity in point of view, the latter has found marked variability in opinion formation according to changing circumstances.

For example, a prototypic frame experiment (Tversky & Kahneman, 1982) involved comparing subjects' judgments of two situations which, although structurally identical, are presented differently. In the first case subjects are asked to imagine that they have purchased two tickets, worth $50, to a Broadway show. Upon arriving at the theater, they realize they have lost the tickets. In the second version, subjects are asked to imagine that they have gone to a Broadway theater planning to purchase $50 worth of tickets to the show. However, upon arrival they realize that they have lost $50. Would they spend another $50 on tickets? Findings indicated that subjects were far more likely to spend the second $50 if they had lost the money than if they had lost the tickets.

Tversky and Kahneman hypothesized that the reason for this was that subjects commonly processed the two situations differently. They proposed that in the lost

ticket instance subjects entered the added $50 expenditure in the cognitive account marked ticket price and were unwilling to spend $100 to see the show. The loss of money, in contrast, is not linked specifically to the original ticket purchase and so does not add to the subjectively figured price. Consequently it mitigates less against a subsequent purchase. The different ways in which the problem was framed elicited different subjectively determined accounting systems or values. It was these values, known as heuristics, which constituted the meaning of the dilemma and so determined the resolution. Thus, the framing of a problem, i.e. the mode of its presentation, exerts a powerful influence on the decision making process.

> We use the term 'decision frame' to refer to the decision maker's conception of the acts, outcomes and contingencies associated with a particular choice. The frame that a decision maker adopts is controlled partly by the formulation of the problem and partly by the norms, habits and personal characteristics of the decision maker. It is often possible to frame a given decision in more than one way. Alternative frames for a decision problem may be compared to alternative perspectives on a visual scene. Veridical perception requires that the perceived relative height of two neighboring mountains, say, should not reverse with changes in vantage point. Similarly, rational choices require that the preference between options should not reverse with changes in frame. Because of imperfections of human perceptions, however, changes of perspective often reverse the relative apparent size of objects and the relative desirability of options. (Tversky & Kahneman, 1981, p. 45)

Thus, while cognitive studies found subjects unwilling to alter their decisions even when it would be appropriate to do so, frame researchers have found that subjects vary their opinions even when it is not appropriate to do so.

Several researchers have investigated the effects of frame on various aspects of decision making. Hornstein, LaKind, Frankel and Manne (1975), for example, found that subjects' exposure to a report of either prosocial or violent behavior on a "newscast" prior to participation in an experiment, differentially affected their expectations about and behavior toward others whom they had never met. Furthermore, these framing conditions informed subjects' ratings on a scale regarding their philosophy of human nature. Thus, even subjects' expressions of deeply held philosophical beliefs were affected by contextual determinants.

In a similar sort of study, Higgins, Rholes and Jones (1977) presented subjects with a list of adjectives which stressed either positive (e.g. adventurous, independent, persistent), or negative (e.g. reckless, conceited, aloof) views of certain behaviors. They were then presented with a brief paragraph describing a young man with risky hobbies and a high opinion of his abilities. Results indicated that subjects' evaluations of this protagonist varied according to the slant of the

adjectives to which they had first been exposed. The experimenters explained the resulting differences in groups as a function of the transient availability of different concepts of personality obtained from framing information.

In another study of the effects of framing information (Zanna & Pack, 1975), female undergraduates described themselves to hypothetical male partners who were either desirable (tall, unattached, Princeton upperclassmen) or undesirable (short Princeton lowerclassmen with steady girlfriends). These male targets were presented as either conventional or nontraditional in their ideals of the perfect woman. Female subjects' self-descriptions on a paper and pencil measure were affected by the ostensible ideology of desirable partners. When the partner was generally undesirable, his sex-role preferences did not affect subjects' self-descriptions. Thus, subjects' responses varied as a function of contextual information regarding the desirability and views of their hypothetical partners.

Looking at framing effects in another domain, Turner and Krauss (1978) observed that people rated confidence in national institutions significantly lower in a survey that prefaced the confidence questions with six items relating to political alienation than in a survey

that did not. Also, Fischhoff, Slovic, Lichtenstein, Read and Combs (1978) found that subjects exposed to a task that highlighted the benefits of various technologies rated the risks associated with those technologies to be more acceptable than did subjects who had been exposed to a task which highlighted their risks.

An area that has been frequently studied in terms of frame effects is subjects' perceptions of risks and gambles of all sorts, e.g. betting, car accidents and seat belt use, likelihood of and precautionary measures taken against floods and death from various causes (Kunreuther et. al., 1978; Slovic, Fischhoff & Lichtenstein, 1980; Tversky & Kahneman, 1982). In an effort to make sense of manifest inconsistencies in subjects' responses in these studies, researchers have sought to identify the operative heuristics, the ways in which the subjects' constructions of problems vary as framing information varies.

Analysis of resultant divergent response patterns suggests that, due to the extraordinary complexity of life in our times, we have available to us a reservoir of ideas, values and concepts of great breadth, scope and detail. Many of these ideas have been distilled into "rules of thumb" which help order information and facilitate decision making. However, because these heuristics have been formulated in diverse circumstances,

they are often contradictory. Their elicitation by varying situational determinants manifests the contradictory beliefs which characterize much of our cognitive lives.

> Today we are asked to take responsibility for choosing a mate, a job, a family size, for guiding social policy, and for adopting or rejecting new technologies. Each of these issues confronts us with greater freedom of choice and more lasting consequences than ever before. They take us into situations for which we have never thought through the implications of the values and beliefs acquired in simpler settings. We may be unfamiliar with the terms in which issues are formulated (e.g., social discount rates, miniscule probabilities or mega-deaths). We may have contradictory values (e.g., a desire to avoid catastrophic losses and a realization that we are not more moved by a plane crash with 500 fatalities than by one with 300). We may occupy different roles in life (parents, workers, children) that produce clear-cut, but inconsistent values. We may vacillate between incompatible, but strongly held, positions (e.g., freedom of speech is inviolate, but should be denied to authoritarian movements). We may not even know how to begin thinking about some issues (e.g., the appropriate tradeoff between the opportunity to dye one's hair and a vague, minute increase in the probability of cancer 20 years from now). Our views may undergo predictable changes over time (say, as the hour of decision approaches) and we may not know which view should form the basis of our decision. We may see things differently in theory than in the flesh. We may lack the mental capacity to think through issues reliably and therefore come up with different conclusions each time we consider an issue.
>
> (Fischhoff, Slovic & Lichtenstein, 1980, p. 119)

Frame research seeks out the heuristics which create order out of this complexity and confusion. Its emphasis on context stresses interaction, relativity,

dynamism and the holism-of-experience (Labouvie-Vief & Chandler, 1978; Zimmerman, 1983). In its efforts to tease out the relevant cognitive and stimulus determinants of performance on particular tasks (Estes, 1980), frame studies have addressed previously unexplored patterns, flaws, limitations and quirks of human intellectual functioning. Thus, for example, research has investigated the propensity of decision makers to be distracted by irrelevant aspects of the alternatives which leads to loose predictions about outcomes (Abelson, 1976); the susceptibility of decision makers to be influenced by the packaging and presentation of information (Slovic, Fischhoff & Lichtenstein, 1976); the reliance of decision makers on faulty categories and stereotypes which results in inaccurate perceptions of social and ethnic groups (Hamilton, 1976); and the illusion of control which causes decision makers to over-optimistically estimate outcomes which are actually attributable to chance or luck (Langer, 1975).

Comparison of Theories and Research Strategies

The thrust of the cognitive dissonance research has been an examination of the cognitive tendency toward consistency (Festinger, 1957). A variety of research strategies have been used toward this end. For example,

in the Aronson & Carlsmith (1963) study cited above, children were forbidden to play with an attractive toy under threat of either mild or severe punishment. Subjects' subsequent ratings of the desirability of the toy were analyzed from the point of view of their efforts to render consistent their self-denial with the severity of threat. This methodology, then, explores strategies for reconciling potentially dissonant events.

Another strategy, and one popularly used to explore cognitive consistency, has studied the impact upon subjects' previously established ideas of interventions offering disconfirming evidence. This approach, which characterized the great majority of studies summarized above, has been widely used in the literature. For example, in two of the more recent of these studies cited above, Lord, Ross & Lepper (1979) presented subjects with ostensibly hard empirical data supporting the pro or anti-deterrence effects of capital punishment on crime. Subjects' evaluations of the probity of these arguments varied as a function of their initial positions on capital punishment and, in 23% of the cases, exposure to opposing arguments increased the intensity of subjects' adherence to their original positions. Thus, subjects frequently either dismissed contrary evidence or, through biased assimilation, used it to bolster their own cases.

Similarly, Ross, Lepper and Hubbard (1975) informed subjects that the initial feedback they had received on their performance had been entirely arbitrary and in no way reflected their abilities. Here, too, the de-briefing intervention contradicted subjects' ideas and, remarkable though it seems, did not counteract the impressions of their performance held by either subjects themselves or observers, that had been formed under the feedback condition.

These sorts of interventions can be described as information-oriented because they introduce disconfirming information. They follow the following format: a pre-test establishes subjects' initial opinions; an information-oriented intervention is introduced; a post-test evaluates resultant change. As the above review of the dissonance literature reflects, these sorts of interventions have commonly failed to produce cognitive variability.

In contrast, due to their contextual orientation, frame studies have sought to affect opinions by varying the perspectives or points of view subjects will establish on a problem. Rather than arguing against subjects' opinions these studies have sought to elicit subjects' use of different heuristics or decision rules and consequently to alter their construction and understanding of the

problem. These sorts of interventions can be described as rule-oriented. In contrast to information-oriented interventions, rule-oriented interventions have proven quite successful in producing cognitive variability.

It is noteworthy that the format of frame studies commonly differs from that of cognitive dissonance studies. While information-oriented interventions are typically introduced subsequent to assessment of subjects' initial opinions, rule-oriented interventions typically precede such assessment. Thus, these methodologies are not precisely comparable. Rather than truly measure cognitive change, which implies within-subject cognitive movement, frame studies explore cognitive variability across subjects as a function of context. Despite these methodological differences, the two groups of studies share interest in what may be called a fixedness-fluidity dimension of adherence to opinion.

The current study seeks to make a methodological contribution to the literature by assessing the relative efficacies of information and rule-oriented interventions by use of identical formats. This will be accomplished by pretesting initial attitudes in all subjects and then introducing both information and rule-oriented interventions and post-testing to assess change. The domain to be explored is interpersonal stereotyping.

Research in this area has been well represented in the psychological literature e.g., in its relation to prejudice (Katz & Zalk, 1978). A review of the interpersonal stereotyping literature follows.

Cognitive Aspects of Stereotyping: Categorization

> One of the most common categorizations or differentiations we make is the classification of people into two groups - those who are like us and those which are not. Of course, the particular dimension on which similarity is judged changes from time to time and depends in part on the situational context, but the basic differentiation between 'them' and 'us' seems to be almost irresistable. Although this distinction may not be made deliberately, and the person may not attach more importance to it in his own mind, the result is that people are categorized into an ingroup and an outgroup. (Hamilton, 1976)

People seek to make sense of their worlds (Bruner, 1956). In the myriad of information and stimulation which contemporary life entails, people employ various cognitive strategies to imbue the "great blooming, buzzing confusion" (Lippmann, 1922) with order and form. One of the most basic cognitive functions used toward that end is categorization (Rosch et al., 1976), which simplifies the world, enables generalizations about it and guides expectations and behavior toward it (Wilder, 1981). In the interpersonal realm, categorization has long been acknowledged as a basic component of person perception in general and stereotyping in particular (Allport, 1954).

The earliest studies to systematically explore the

stereotyping-as-categorization assumption were conducted by Tajfel and his associates. In one (Tajfel & Wilkes, 1963), underlying processes of interpersonal stereotyping were explored through use of inanimate objects. Three groups of subjects were presented with a series of eight lines, which differed in length from one another by a common ratio. For one group, the four shorter lines were labeled A and the four longer lines B. For the second and third groups, the lines were either randomly labeled or not labeled at all, respectively. Results indicated that the group which experienced a predictable relationship between the labels and the length of lines both exaggerated the differences between the two groups and minimized the differences within each label considerably more than the control groups. Tajfel (1970) concluded that "the subjective accentuation of differences in relevant dimensions between classes of stimuli and their subjective reduction within each class" (ps. 84-85) characterized cognitive functioning.

The implications of this research for an analysis of inter-group stereotyping are clear. Just as the subjective perception of differences between and similarities within groups of lines is exaggerated, so it is between groups of people. Comparable results were obtained with preschoolers using skin colorings of black,

white and green faces (Katz, 1973); with grade school children viewing faces which varied along several dimensions (Katz, Sohn & Zalk, 1974); with Canadian college students viewing Indian and Canadian discussants (Tajfel, Sheikh & Gardner, 1964); and with American college students viewing black and white or male and female discussants (Taylor et al., 1978). These studies have all suggested that categorization underlies stereotyping and that the "enhancement of contrast" effect identified by Tajfel may have a significant role in the development of negative intergroup attitudes.

A second finding of this literature and one which has received significant attention, is that once people are categorized into groups, one's own group, the ingroup, is commonly favored over other or outgroups (Ferguson & Kelly, 1964). This finding was reported in competitive situations (Sherif et al., 1961) as well as in those devised to minimize any functional conflict of interests. In a series of studies, Tajfel and his colleagues (Billig, 1976; Billig & Tajfel, 1973; Tajfel & Billig, 1974; Tajfel, Billig, Bundy & Flament, 1971) divided subjects into groups on the basis of very trivial criteria, e.g. accuracy in estimating the number of dots in a series or preference for certain paintings. They found that subjects consistently preferred and allocated

more money to same group members even though (a) they achieved no personal gain for it; (b) they may not have known which individuals were involved; (c) there was no other particular reason to do so. In fact, Tajfel (1970) found that the ingroup-outgroup or "us-them" distinction elicited this differential allocation of rewards even among boys who were friends before the study and who therefore might have been expected to maximize profits across the board.

These findings suggest that implicitly competitive conditions may not be required to elicit "us-them" differentiation; the mere existence of group distinction may generate intergroup hostility (Brewer, 1979). Many studies support the idea that simple group categorization on trivial or even imaginary criteria elicits prejudice from group members (Doise et al., 1972; Howard & Rothbart, 1978; Rabbie & Wilkins, 1971; Stephenson, Skinner & Brotherton, 1976). There appear to be certain lower limits to this, however. Rabbie and Horwitz (1969) found that a control condition in which subjects were arbitrarily divided into "blue" or "green" groups with no rationale or further interaction, did not elicit significant evaluative differences in group ratings. However, introduction of a prize into the experiment did result in significant post-award ingroup evaluative bias,

whether the ingroup had won or lost.

These findings indicate that, rather than constituting a rigid, fixed mode of cognition, categorization is fluid and adaptable. The characteristics focused upon vary with variations in the interactional context. These findings raise a critical question: As individuals and groups manifest many attributes available for categorization, under which conditions do particular attributes become salient? When is an individual a woman, a New Yorker, a tennis player, a dog lover? Which situational conditions highlight the object attributes which elicit stereotyped ideas? As contextual variables and their manipulation are the focus of the proposed study, this factor will be discussed in greater detail.

Contextual Factors and Ingroup-Outgroup Stereotyping

> (A) categorization approach implies that the process of stereotyping has a contextual basis. It is clearly not the case that the social perceiver has a stereotype about a social group that he or she evenhandedly attributes to every member of that group with whom he or she interacts. Rather, there appear to be contextual dimensions that facilitate or inhibit the implication of stereotypes to individuals. Thus, although our categorical systems for organizing information about people may be highly structured, our ability to use them is remarkably fluid and dependent on the features of the context in which persons are observed. (Taylor, 1981, p. 110)

The essential contribution of contextual factors in stereotyping is easily demonstrated. For example, a piano is likely to be categorized in one way if it is placed amidst a flute and a drum and another if it is placed amidst a sofa and a coffee table. Likewise, research on "solo status" has suggested that distinctiveness is a contextual factor which increases stereotyped perception (Taylor et al., 1978). Thus, while a black woman in a group of whites is more likely to be seen as black, she may be more likely to be seen as a woman when she is surrounded by men.

Brewer (1979) suggested three other contextual conditions which may promote elicitation of ingroup-outgroup distinctions: competition among groups; status differences among groups and high levels of perceived similarity within groups. Wilder (1981) added both individual difference variables such as focus of attention and cognitive set and group level variables, such as group contact, dissent within an outgroup and the presence of other, more extreme outgroups. Taylor (1981) cites the need for exploration of the relevance of these factors in the real world. As the proposed study will employ two of these factors, perceived similarity and the presence of a more extreme outgroup, both will be discussed in more detail.

1. Perceived Similarity

One theory postulates that prejudice is a consequence of perceived group differences in beliefs ands values. Milton Rokeach and his associates (1960) developed this idea of assumed belief incongruence from a cognitive consistency framework. That is, others who are assumed to have dissimilar beliefs are rejected and devalued in order to maintain cognitive equilibrium. A large number of studies using subjects of widely differing ages and backgrounds and focusing on racial prejudice have supported this belief similarity theory (Anderson & Cote, 1966; Byrne & Wong, 1962; Insko & Robinson, 1967; Smith, Williams & Willis, 1967; Rokeach & Mezei, 1966; Rokeach, Smith & Evans, 1960). Commonly in these studies subjects were asked to indicate the degree of friendliness or antipathy they felt toward hypothetical stimulus persons who were described by statements such as, "A black boy believes in God," "A white boy believes in God," "A black boy is an atheist." Race was generally manipulated by the single word "black" or "white," while belief similarity was varied by a number of attitude statements. These experiments were criticized for their artificiality and the apparent inequality of the race and belief manipulations (Katz, 1976). Triandis (1961) found that race was more important than belief when the belief system

was manipulated by a single sentence and Byrne and Nelson (1965) found that attraction increased as the number of similarity items increased.

Rokeach and Mezei conducted a series of more naturalistic studies in which race and belief were manipulated more equally. In two of these (Rokeach, 1968), college students engaged in a discussion of controversial issues with mixed-race confederates. In a third study, job applicants at a mental hospital engaged in a discussion of techniques for handling on-the-job problems with mixed-race confederates. In all three studies, subjects' post-discussion ratings of confederates beliefs were based on belief similarity rather than race. Allen and Wilder (1975), on the other hand, found that outgroup belief similarity had little effect on discrimination. Hendrick, Bixenstein and Hawkins (1971) found belief similarity to be more important than race on a social distance questionnaire, but race to outweigh belief on the item, "Would you be willing to have this person date your sister?" Several other studies found race to become the more important criterion of desirable social distance as the intimacy and publicness of the social interaction increased, e.g. marriage (Byrnes & Kiger, 1988; Mezei, 1971; Stein, 1966; Willis & Bulatao, 1967).

In addition to studies of belief similarity, several studies have explored the efforts of intra and intergroup similarity of personality, culture and attitude on intergroup bias. Wilson & Kayatani (1969) grouped Japanese and Caucasian subjects into same-race teams which played a modified Prisoners Dilemma game with either same or different-race opponents. They found that subjects were significantly more cooperative with their teammates and rated them higher than they did their opponents, regardless of opponents' race. Other studies have also found that outgroup bias is not affected by intergroup similarity. Billig and Tajfel (1973) and Brewer and Silver (1978) found that categorization according to group membership rather than similarity between groups, determined intergroup attitudes.

Dion (1973) manipulated intragroup rather than intergroup similarity in another study of behavior in a Prisoners Dilemma game. Dyads in this experiment were told that their partners had either closely matched or discrepant personality profiles. Teams then played an outgroup team consisting of two experimental confederates. High and low-similar dyads manifested equally cooperative intergroup game behavior. However, the high-similar pairs were significantly more cooperative within their dyads than were the low-similar pairs. Evaluative ratings

reflected this same pattern of no difference between high and low-similar dyads across outgroup ratings, but significantly more positive ingroup ratings for high-similar than low-similar dyads.

Thus, a consistent pattern of results supports the hypothesis that the composition of the ingroup is a critical determinant of intergroup bias. That is, explicit similarity within the ingroup increases intergroup bias while dissimilarity within the ingroup decreases intergroup bias. Findings on the effects of outgroup similarity, in contrast, are mixed. Given this, Brewer (1979) has suggested that it may be clear group definition rather than intergroup similarity which is the critical factor in eliciting ingroup-intergroup behaviors.

This conclusion is supported by a long history of studies in psychology of the effects of perceptual set on cognitive performance. Kulpe (cited in Sherif et al., 1961) for example, studied the influence of Aufgabe (task set) on perception. He found that subjects recalled more aspects of stimuli emphasized by Aufgabe than they did about items whose salience was not enhanced. Similarly, when the salience of "groupness" is heightened, subjects may be particularly sensitive to it.

This view received some support from results of an experiment by Hensley and Duval (1976). Subjects'

opinions were presented graphically with those of the other nine participants in a discussion group. Each subject's own opinions were depicted as clustering with those of seven of the other subjects. The opinions of the remaining two subjects were depicted at one of five distances from the majority cluster. Three of these distances were sufficiently large to insure the perception of distinct groupings between these two and the majority cluster. The other two distances were closer to the majority cluster and thus, did not constitute perceptually distinct groups from the majority. Results of ratings of perceived similarity to self and liking of other participants showed an assimilation-contrast effect.

That is, the three significantly different groups were rated less favorably than were the two less distinct groups. This suggests that clear group definition may have been the salient criterion to elicit intergroup bias. Thus, it may be the very fact of being "outsiders," i.e. members of a different group, that caused the effects rather than a perception of the "outsiders" as different from the majority cluster.

The relative roles of perceived similarity of the outgroup vs. the salience of "groupness" (or the possible contributions of both) on intergroup bias were questioned in two other studies which blurred group boundaries.

Commins and Lockwood (1978) crossed dimensions of religion and dot estimation (over and under-estimators) with groups of Catholic and Protestant adolescents in Northern Ireland. Groups consisted of all Catholic subjects, all Protestant subjects and subjects of both religions. Within each of these groups subjects were further subdivided as dot overestimators and dot underestimators. In the Catholic and Protestant conditions, which were homogeneous on the religion dimension, any ingroup favoritism was attributable solely to the dot categorization dimension. In the Mixed condition, in contrast, the religious and dot estimation dimensions overlapped. Thus, some ingroup and outgroup members on the dot estimation task were outgroup and ingroup members respectively, on the religion dimension. Results showed that while subjects in both Protestant and Catholic conditions equally favored the ingroup over the outgroup, subjects in the Mixed condition were somewhat but not significantly, less biased in the allocation of rewards. This supports the idea that the ingroup favoritism is reduced when group boundaries are altered or blurred. What remains unclear, however, is whether the subjects in the Mixed condition were at all affected by the superimposition of the trivial dot estimation category or whether religion remained the salient categorization rule.

If the latter is correct, subjects may have continued to view the outgroup as similar to themselves and may never have viewed themselves as two distinct groups.

2. Presence of Extreme Outgroup

The second contextual factor under examination is the presence of a more extreme outgroup. A study by Thompson, Wilder and Cooper (cited in Wilder, 1981) employed this factor in their manipulation of subjects' perceptions of group boundaries. Subjects were randomly assigned to groups which collectively decided on the appropriate adjudication of a legal case. These groups were paired with outgroups whose beliefs differed from theirs moderately in the first condition and extremely in the second condition. In the third condition there were two outgroups, one which differed moderately and another which differed extremely from the ingroup. The content of the moderately and extremely different arguments were identical across conditions. As hypothesized, subjects were significantly biased against the outgroup in both the moderate and the extreme conditions. In the two-outgroup condition, however, subjects discriminated against the extreme outgroup in allocating awards but did not do so when dividing rewards between the ingroup and the moderate outgroup. Thus, when viewed alone, the moderate-disagreement outgroup was perceived as a bona fide

outgroup, as was the extreme-disagreement group. However, in the context of two additional groups, one of which was more discrepant than the other from the ingroup, boundaries were altered and the moderate-disagreement group was assimilated into the ingroup. Here too, there are two possible explanations for the diminution of bias toward the moderate-disagreement group. The first explanation stresses perceptions of sameness, i.e. that the moderate disagreers were perceived as more similar to the ingroup in the context of a more extreme outgroup. The second highlights perceptions of difference, i.e. that the extreme outgroup was perceived as so different from the ingroup that resulting group boundary lines were constructed to differentiate the ingroup from this group, hence including moderate-disagreers in the ingroup. Put somewhat differently, the first explanation stresses intragroup inclusiveness concerns while the second stresses intergroup exclusiveness concerns.

Summary

In summary, cognitive dissonance studies have typically found subjects' ideas to be notably fixed. A common format in these studies has been to assess subjects' initial ideas and then to test the flexibility of these ideas by introducing disconfirming evidence. In

contrast, frame studies have found subjects' ideas to be quite fluid. The research format in these studies commonly does not pretest subjects' initial ideas. Instead, they frame a given problem in different ways and present these to groups of subjects. As a result, subjects reach different conclusions, a function, researchers have concluded, of their use of different heuristics or decision making rules. Thus, use of incomparable research formats by these two types of studies precludes valid comparison of their incompatible findings.

In addition to their use of different formats the two groups of studies typically employ different sorts of interventions. Introduction of disconfirming evidence is popularly used in cognitive dissonance studies. Reframing the issue is popularly used in frame studies. An example of the difference between these two approaches is that the former might argue against prejudiced ideas while the latter might redraw group boundaries in order to elicit a new ingroup - outgroup categorization rule. For purposes of this study, an intervention which introduces disconfirming evidence will be called information-oriented. In contrast, an intervention which reframes a problem will be called rule-oriented.

Apart from these issues, the literature is

contradictory regarding the role of perceived similarity in intergroup perceptions. A substantial body of literature suggests that categorization plays an important role in stereotyped cognitions and that one determinant of categorization is perceived similarity. Research has strongly supported the hypothesis that perceived similarity of the ingroup is a necessary condition of "Us - Them" dichotomization. However, the role of perceived similarity vis a vis the outgroup remains unclear. That is, do changes in the perceived similarity of the outgroup accompany changes in intergroup bias? Or, is it more accurately a blurring or alteration of intergroup boundaries which results in diminished bias regardless of changes in perceived similarity?

This study examined these issues in the area of attitudes toward the Russians. Changes in these attitudes were explored as a function of type of intervention: information-oriented vs. rule-oriented. Further, changes in perceived similarity of the Russians were explored in relation to attitude change. A discussion of the use of attitudes to the Russians as the content area of the study can be found below (see Educational Implications).

Chapter II

The Study

Statement of the Problem

This study had the following aims:

1. To assess the relative impact on subjects' attitudes toward and perceptions of similarity to the Russians of:

a. interventions which argue against commonly held stereotypes of the Russians. These interventions are called "information-oriented."

b. interventions seeking to elicit subjects' use of categorization rules which redefine ingroup-outgroup from American vs Russians to a new dichotomy. Two interventions designed to alter categorization rules were employed. The first intervention introduces a more extreme outgroup. The second redraws group boundaries so that the ingroup becomes people of the world and the outgroup becomes politicians and military of the world. These interventions are called "rule-oriented."

2. To determine whether changes in attitudes toward the Russians are accompanied by changes in perceptions of their similarity to Americans.

Hypotheses

In order to examine the objectives of the study, the following hypotheses were formulated:

A. Information-oriented interventions have no impact on subjects' attitudes toward the Russians; Rule-oriented interventions result in attitudinal change.

Hypothesis 1

Subjects' attitudes toward the Russians will not become more favorable in the context of an information-oriented intervention which argues that, rather than being our enemies, the Russians are our friends.

Hypothesis 2

Subjects' attitudes toward the Russians will become more favorable in the context of a rule-oriented intervention that redefines the ingroup-outgroup from Americans vs. Russians to Americans and Russians vs. "crazies," by introducing a more extreme outgroup.

Hypothesis 3

Subjects' attitudes toward the Russians will become more favorable in the context of a rule-oriented intervention which redefines the ingroup-outgroup from Americans vs. Russians to people of the world vs. politicians and military of the world.

B. Information-oriented interventions have no impact on subjects' perceptions of similarity to the Russians; rule-oriented interventions enhance perceptions of similarity.

Hypothesis 4

Subjects' perceptions of similarity to the Russians will not increase in the context of an information-oriented intervention which argues that, rather than being our enemies, the Russians are our friends.

Hypothesis 5

Subjects' perceptions of similarity to the Russians will increase in the context of a rule-oriented intervention which redefines the ingroup-outgroup from Americans vs. Russians to Americans and Russians vs "crazies" by introducing a more extreme outgroup.

Hypothesis 6

Subjects' perceptions of similarity to the Russians will increase in the context of a rule-oriented intervention which redefines the ingroup-outgroup from Americans vs. Russians to people of the world vs. politicians and military of the world.

C. There is a positive relationship between perceived similarity and attitudes towards the Russians.

Hypothesis 7

As attitudes toward the Russians become more favorable, perceived similarity increases.

Chapter III

Methodology

The sample consisted of 160 undergraduate college students taking education courses in the New York City metropolitan area. Two thirds of the subjects were females, reflecting the gender imbalance in education programs. Subjects were primarily in their twenties, with a handful of older students. The sample was ethnically diverse.

Instruments

Two dependent variables were employed in this study: a questionnaire assessing attitudes toward the Russians and a questionnaire assessing perceived similarity of the Russians. The independent variable was an intervention technique. There were three experimental conditions and one control group. The intervention techniques consisted of one information-oriented vignette, two rule-oriented vignettes and a control which consisted of an irrelevant vignette. A description of each follows.

1. Dependent Measures

(A) Attitudes Toward the Russians Scale

This instrument, which was constructed for the study was designed to assess subjects' attitudes toward

the Russians. Subjects rated the Russians on such attributes as trustworthiness, sincerity, aggressiveness, argumentativeness and dishonesty and indicated opinions on political policies, e.g. whether we should seek closer relations with the Russians or whether we should view the Russians as enemies. (Appendix 1). The measure consists of 19 items scored by subjects on a 5 point Likert scale (1=strongly agree; 5=strongly disagree). Once scores are recoded for directionality, low scores represent favorable attitudes toward the Russians and high scores represent unfavorable attitudes. Possible range of scores is 19 to 95.

Reliability of this measure was tested using 35 undergraduate college students. They completed the questionnaire on two separate occasions, two to three weeks apart. Scores showed an alpha score for internal consistency of .87 at time one and .89 at time two. A Pearson correlation revealed a test-retest reliability of .82.

(B) Perceived Similarity Scale

The second dependent variable was assessed using a 19 item scale. The scale was constructed for this study. Items tapped perceptions of similarity between Americans and Russians on such issues as hopes for the future, desire for peace and religious adherence (Appendix 2).

As on the Attitudes Toward the Russians Scale, subjects responded to items on a 5 point Likert Scale (1 = perceive as highly similar; 5 = perceive as highly dissimilar). Scores had a possible range of 19 to 95. Thirty one subjects, (different from those used to pilot the first measure) were used to assess the reliability of this scale. Test administrations were two to three weeks apart. Analysis revealed alpha scores of internal consistency of .88 at time one and .89 at time two. A Pearson correlation revealed that test - retest was .88.

One hundred college students were administered both of the dependent measures. The correlation between their scores on the two measures was .73.

2. Independent Measures

Four vignettes constituted the experimental interventions. Three presented views of the Soviet Union (one information-oriented; two rule-oriented) and one, which presented irrelevant material, served as the control.

(A) Information-oriented vignette

The information-oriented vignette argued against stereotyped ideas of the Russians. It did this by suggesting that the Russians would never want to start another war given their huge recent losses in World War II. In addition, it emphasized the common humanness of

all people (Appendix 3).

(B) Rule-oriented vignettes

(a) More Extreme Outgroup

The first of the two rule-oriented vignettes was designed to alter the group categorization rule by juxtaposing the Russians to another, more extreme outgroup, which is portrayed as far more undesirable. This group was presented as the "crazies," like Khomeini or Qadaffi. The vignette stated that this group, not the Russians, pose the real threat to the world's safety. They share none of our values, including respect for human life. Parents send their children on suicide missions and celebrate their deaths. Given this profound difference from our attitudes, the vignette argues, perhaps these people are not rational. Certainly, we cannot depend on them to behave peaceably. In comparison to this group, the Russians seem sane and reasonable and should be our allies in the fight against terrorism (Appendix 4).

This vignette was modeled on the work of Thompson, Wilder and Cooper (cited in Wilder, 1981), described previously. In that study, introduction of a more extreme outgroup caused subjects to rate a less extreme group, previously perceived as a bona fide outgroup, more favorably.

(b) Politicians vs. People

The second of the rule-oriented vignettes also sought to alter the group categorization rule. However, in this case it did so by redrawing group boundaries so that the category "Us-Them" is presented as people vs. the politicians and the military, rather than Americans vs. Russians. This vignette states that it is the politicians and military who really threaten our safety. It is they who do not value life and send the boys of their countries into combat on a whim. In contrast, all the peoples of the world share similar dreams and aspirations: prosperity and the opportunity for a comfortable life for themselves and their families. Thus, it is not the Russians who make co-existence impossible, but power-hungry world leaders (Appendix 5).

This vignette was modeled on the work of Commins and Lockwood (1978) described previously, who superimposed a new categorization rule, dot estimation, on the existing rule, religion.

(C) Control

The fourth vignette served as the control. This vignette discussed the need for international studies programs in colleges, a topic irrelevant to the relationship between the US and the USSR (Appendix 6).

3. Validity of Vignettes

In order to determine that the three vignettes used in the experimental interventions made the intended points and were clearly distinguishable from one another, a pilot was conducted on 135 college students. One third of the students (N=45) read each of the vignettes and then responded to ten questions about the points made by the author. Subjects responded on a 3-point scale: True, Unclear, False. The questions were the same for each group (Appendix 7). The frequencies of subjects' responses for each question appear in Appendix 8. As the differential pattern of responses indicates, subjects understood the main points of each vignette and the three were considered clearly different from one another.

Procedure

The two dependent measures were combined into one scale by randomly interspersing items from each. This was done in order to prevent subjects from developing a response set for either theme. All subjects were pretested on this 38 item dependent measure, a procedure requiring 10 to 15 minutes. Subjects were then randomly assigned to one of the four experimental conditions (i.e. information-oriented, two rule-oriented, control.) Subjects were administered the appropriate vignette two to

three weeks after pretesting. Immediately after reading the vignette, the Attitudes Toward the Russians/Perceived Similarity Scale was readministered. Thus, pre and posttest data were available for all the subjects in all intervention conditions.

Chapter IV

Results

Results are presented as follows: (1) Factor analysis of subjects' pretest responses to Attitude and Perceived Similarity Scales; (2) Results of analyses testing hypotheses.

1. Factor Analysis of Subjects' Pretest Responses to Attitude and Perceived Similarity Scales

Pilot data had demonstrated that the two dependent measures (Attitudes and Perceived Similarity to the Russians) were highly correlated with one another (r=.73). A factor analysis of the scales was therefore desirable in order to ascertain whether they truly reflected different underlying dimensions. The pilot sample (N=100) was inadequate for this purpose according to Bentler's (1976) suggestion that "a good rule of thumb might be that there should be at least five times as many entities as there are variables" (p. 146). Although the sample did not meet this criterion, it was significantly larger (N=160) and a factor analysis of pretest responses was undertaken following data collection.

This analysis revealed two factors on the dependent measures. Although these factors resembled the

original conceptions of the measures, they were not identical to them. Twenty-one items loaded on the first factor and fourteen items loaded on the second factor (Appendix 9). Of the twenty-one items loading on the first factor, sixteen (76.2%) appeared on the original Attitudes toward the Russians Scale. Of the fourteen items loading on the second factor, eleven (78.5%) appeared on the original Perceived Similarity Scale. Three items loaded on neither factor. The dependent measures were revised in accordance with the two factor analytically derived scales. The first scale (Appendix 10) consisted of 21 items (alpha=.92; standardized item alpha=.92). The second scale (Appendix 11) consisted of 14 items (alpha = .82; standardized item alpha=.82). The correlation between the two was .71.

Despite the high correlation between the two scales, a varimax rotated factor matrix (Appendix 9) showed a differential pattern of items loading on each. Further examination of this pattern of item loadings suggested that two distinct factors did indeed constitute the measures. While these might be related, they might also embody different aspects of attitudes toward the Russians and consequently reflect differential patterns of response to the interventions. Further, the literature on the relationship of attitudes and perceived similarity is

contradictory, with some findings supporting and others disputing a close tie between the variables. It was hoped that inclusion of both might shed light on these issues. For these reasons, both scales were retained in the study.

Although the scales were now statistically coherent, there were certain logical anomalies that emerged from the factor analysis. Of the fourteen items on the factor derived Perceived Similarities Scale (Appendix 10), all but three compared some hypothetical characteristic of the Russians' to that characteristic in "us", e.g. "Realize that the Russians want the same things for their children that we do." It was decided to retain the three items that did not fit this pattern ("Assume that the Russians want to co-exist;" "Keep our distance from the Russians;" and "See that the Russians have no integrity") despite this conceptual inconsistency because of the statistical relationship. That is, although our label for the relationship among items on the scale lacked precision, there is commonality. Conversely, four items moved by the factor analysis from the Perceived Similarities Scale to the Attitudes Scale (Appendix 11) included a comparison between the Russians and "us", e.g. "See that, since we're all human, the Russians are more like us than not" and "Recognize that the Russians are about as reasonable as we are." Here too, it was assumed

that a conceptual relationship among items existed despite our lack of precision in identifying it.

It is interesting to note that on the Attitudes scale subjects' pretest scores ranged from 21 to 93 out of a possible range of 21 to 105. The pretest mean was 53.1 and the standard deviation was 15.38. On the Perceived Similarities scale subjects' pretest scores ranged from 14 to 50 out of a possible range of 14 to 70. The pretest mean for this scale was 32.0 and the standard deviation was 9.03. Thus, for both scales, subjects' initial beliefs tended to cluster around a middle-of-the-road position.

2. Results of Analyses

A. Analysis of Attitudes toward the Russians Scale: Comparison of Pre and Posttest Scores for each Intervention[1]

In order to directly test the hypothesized within intervention change, t-tests on pretest and posttest scores were performed for each intervention. Means and standard deviations for pre and posttests appear in Table 1. T-test results appear in Table 2. (Note: A change in

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[1]In order to assure that randomly occurring differences in groups did not disturb initial homogeneity, group pretest means were first compared. No differences were found in initial attitudes ($F=.187, df=3, p<.905$) or initial perceptions of similarity ($F=.207, df=3, p<.891$).

the negative direction constitutes a more favorable attitude). As predicted, the pre-post difference in the Politicians vs. People intervention condition was significant ($t=-2.77$, $df=39$, $p<.009$). Also consistent with predictions, neither the control condition ($t=0.28$, $df=39$, $p<.781$) nor the information-oriented condition ($t=-0.20$, $df=29$, $p<.843$) reflected significant pre-post change. Contrary to prediction, the Extreme Outgroup condition did not show significant attitudinal change ($t=-0.99$, $df=39$, $p<.328$) across administrations. [1]

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[1]To further elaborate findings, an analysis of variance of change scores of attitudes was performed. Differences between groups approached significance ($F=2.43$, $df=3$, $p<.067$) (Appendix 12).

Table 1

Means, Standard Deviations and Range of Pre and Posttest Scores of Attitudes Toward the Russians, Reported by Condition

Pretest

Group	Low Score	Mean	High Score	S.D.
Control	25	52.00	93	15.77
Information-oriented	29	53.80	84	16.35
Extreme Outgroup	21	52.43	83	14.87
Politicians vs. People	29	54.18	89	14.42

Posttest

Group	Low Score	Mean	High Score	S.D.
Control	25	52.45	93	17.43
Information Oriented	25	53.38	88	17.17
Extreme Outgroup	21	51.33	88	15.46
Politicians vs. People	23	48.40	80	14.43

Table 2

T-Tests on Pre and Posttest Scores of Attitudes toward the Russians for each Intervention

Group	T	df	p
Control	0.28	39	0.781
Information-oriented	-0.20	39	0.843
Extreme Outgroup	-0.99	39	0.328
Politicians vs. People	-2.77	39	0.009

Negative values indicate a change toward more favorable attitudes.

B. Analysis of Perceived Similarity of the Russians Scale: Comparison of Pre and Posttest Scores for Each Intervention

In order to directly test the hypothesized within intervention change, t-tests on pre and posttest scores were performed for each intervention. Means and standard deviations for pre and posttests appear in Table 3. T-test results appear in Table 4. (Note: A change in the negative direction constitutes a more similar perception.) As predicted, the pre-post difference in the Politicians vs. People intervention was significant ($t=-2.95$, $df=39$, $p<.005$), reflecting a significant change in subjects' perceptions of similarity of the Russians in the context of this intervention. Also consistent with predictions, the information-oriented intervention and the control intervention failed to result in significant changes ($t=-0.22$, $df=39$, $p<.826$ and $t=0.90$, $df=39$, $p<.374$, respectively). Contrary to prediction, the Extreme Outgroup intervention failed to elicit significant change in subjects' perceptions of similarity of the Russians ($t=0.68$, $df=39$, $p<.499$).[1]

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[1]To further elaborate findings, an analysis of variance of change scores of perceptions of similarity was performed. Differences between groups was significant ($F=3.22$, $df=3$, $p<.024$) (Appendix 13).

Table 3

Means, Standard Deviations and Range of Pre and Posttest Scores of Perceived Similarity of the Russians, Reported by Condition

Pretest

Group	Low Score	Mean	High Score	S.D.
Control	16	31.93	50	8.72
Information-oriented	17	32.33	55	8.72
Extreme Outgroup	14	31.20	52	9.27
Politicians vs. People	19	32.73	54	9.40

Posttest

Group	Low Score	Mean	High Score	S.D.
Control	15	32.75	62	8.72
Information Oriented	14	32.05	52	9.59
Extreme Outgroup	14	31.68	54	8.51
Politicians vs. People	14	29.60	48	8.50

Table 4

T-Tests of Pre and Posttest Scores of Perceived Similarity of the Russians for each Intervention

Group	T	df	p
Control	0.90	39	0.374
Information-oriented	-0.22	39	0.826
Extreme Outgroup	0.68	39	0.499
Politicians vs. People	-2.95	39	0.005

Negative values indicate a change toward more favorable attitudes.

C. Analysis of Relationship between Scales

In order to test the hypothesis that perceptions of similarity increase as attitudes become more favorable, a Pearson correlation was performed (Table 5). As can be noted, correlations were consistently high, both across scales and across time. The correlation between scales increased from time one (r=.71) to time two (r=.88). This cannot be construed as providing support for the hypothesized relationship, however. Instead, this high correlation supports the likelihood that the two dependent measures are aspects of the same dimension. (See Discussion)

Table 5

Pearson Correlation Coefficients of Attitude toward and Perceived Similarity of the Russians Across Administrations

	Time 1		Time 2	
	Attitudes	Similarity	Attitudes	Similarity
Attitudes Time 1	1.00	.71	.74	.65
Similarity	.71	1.00	.69	.75
Attitudes Time 2	.74	.69	1.00	.88
Similarity	.65	.75	.88	1.00

Chapter V

Discussion

Experimental Considerations

Overall, results lend conditional support to the basic hypotheses that stereotyped attitudes are amenable to contextual intervention but not to interventions that argue against subjects' held ideas. The rule-oriented "Politicians vs. People" intervention resulted in significant changes both in subjects' attitudes toward the Russians ($t=-2.77$, $df=39$, $p<.009$) and in their perceptions of similarity of the Russians ($t=-2.95$, $df=39$, $p<.005$). In addition, as predicted, the information-oriented intervention made no significant impact on subjects' attitudes to the Russians ($t=-0.20$, $df=39$, $p<.843$) or on their perceptions of similarity of the Russians ($t=-0.22$, $df=39$, $p<.826$). However, contrary to prediction, the rule-oriented vignette that introduced a More Extreme Outgroup did not engender significant changes in either attitudes toward the Russians ($t=-0.99$, $df=39$, $p<.328$) or perceptions of similarity of them ($t=0.68$, $df=39$, $p<.499$).

Hypotheses were formulated in terms of attitude change. Therefore, difference scores were the focus of investigation. The literature notes that use of difference scores as the dependent variable entails the

possibility of a regression artifact. This predicts that from the baseline to another point groups will change toward the population mean, even without treatment (Campbell & Stanley, 1963, p. 23). As Fleiss (1986) has commented, however, randomization and use of a control group mitigate against this possibility and support the conclusion that differences are attributable to effects of treatment.

A further issue which warrants discussion is the high inter-correlation between the dependent measures (r=.71 at time one and r=.88 at time two), which suggests that they may not represent clearly differentiable dimensions (Table 5). In fact, the correlation between the two scales at time two (r=.88) exceeded the correlation of each scale with itself across administrations (Attitudes r=.74: Perceived Similarity r=.75). In addition, several items loaded almost equally on both factors, e.g. "Seek closer relations with the Russians" (Attitudes=.37, Similarity=.35) and "Keep our distance from the Russians" (Attitudes=.43, Similarity=.45). Other items also loaded on both factors, albeit not so equally, e.g. "Look at the Russians as dishonest" (Attitudes=.66, Similarity=.33) and "Recognize that the Russians are about as reasonable as we are" (Attitudes=.60, Similarity=.32). Given this, it appears

that the two dependent measures may represent related aspects of a single attitudinal dimension rather than distinct, independent dimensions. Thus, while conclusions regarding the effects of interventions on attitudes can be drawn from the results, these conclusions cannot justifiably differentiate attitudes from perceptions of similarity.

Other questions regarding the independent variables need also be considered, to wit the failure of the Extreme Outgroup intervention to elicit predicted results. Pilot work demonstrated that the main idea of each vignette was clear to subjects and that each was clearly differentiable from the others. However, it may be that in order to promote heuristic change, vignettes require greater detail, power or other stylistic characteristic. Further research is required to determine whether style plays a role in intervention effectiveness.

Theoretical Considerations

Rather than being a stylistic problem, the failure of the Extreme Outgroup intervention may have its basis in considerations of a more theoretical nature. A brief discussion of the recent work on attitude formation may shed light on this. Fiske and Pavelchak (1986) have suggested two modes of generating evaluative responses to

stimuli: piece-meal based (data-based) and category based (theory-driven). Stereotypes are by definition category-based. One of the factors Fiske and Pavelchak note which contributes to category-based processing is task complexity, an argument consistent with the general hypothesis that stereotyping is a cognitive strategy for organization and simplification. In the case of attitudes toward the Russians, the complexity of the evaluative task is compounded by various attendant considerations.

> Stereotypes (about different nationalities) are not simple abstractions from personal experience; rather, they have been 'learned' verbally and non-verbally in a linguistic or cultural community over a period of time...The symbols of nationality such as 'Japanese' or 'American' are labels added to objects or actions to elicit appropriate corresponding reactions in the individuals. Their lexical meaning is clear, but their connotative of affective meaning is implicit and may vary according to the semantic environment in which they are presented. (Tanaka, 1972, p. 119-120).

Thus, attitudes change in accordance with circumstances, called semantic environments above and which we have called contexts. In the case of the Russians, attitudes are woven into a semantic fabric of thirty-five years of cold-war animosity in which ideological polarization has been infinitely compounded by the threat of a nuclear exchange. Attitudes to the Russians then, may differ from attitudes toward other national groups with whom no nuclear risk is associated. These considerations may have affected subjects' receptivity to the Extreme Outgroup

intervention. Perhaps they failed to adopt the new categorization rule because terrorists (who have no nuclear weapons) and Russians (who do) are not considered comparable. If this is true, then all rule-oriented interventions may not be equally compelling. They may themselves be determined by the semantic environment, that is, context-bound.

Put somewhat differently, it may be that the content of the intervention informs subjects' receptivity. Perhaps subjects do not uncritically adopt new categorization schemes, but evaluate each on the merit of its argument in the given context. Thus, an initial assumption of this study, that rule-oriented interventions affect attitude change while information-oriented interventions do not, is thrown into question. Further examination supports the idea that in fact, the relationship between the two strategies is more complex than it first appeared. For example, we cannot with certainty attribute the success of the Politicians vs. People intervention to its ability to alter subjects' categorization rule rather than to the information it imparted. Instead, this intervention may have been successful because it presented ideas that subjects already believed. Furthermore, use oif the term "Russians" to identify the target group may have

unintentionally influenced subjects' responses. Research has indicated that Americans tend to think of the Russian people in the context of the stimulus "Russian," while they think of the Russian government in the context of the stimulus "Soviet Union." Since certain items clearly referred to government, subjects may have alternated between ideas about people and ideas about government in their responses. The Politicians vs. People intervention may have been successful in promoting change because it enabled dfifferentiation of these two groups, about whom ideas typically differ.

Thus, rather than constituting independent intervention strategies, the effectiveness of an intervention may be a subtle function of both informational and contextual aspects. Further complication emerges from the observation that informational vignettes may themselves be particular sorts of contextual interventions, since the information they present creates a context just as rule-oriented interventions do. Thus, a complex set of concerns informs the simple and absolute judgments which constitute stereotypes. Rather than responding automatically and uncritically, individuals may engage in a complex evaluation process in which the different aspects of presented arguments are weighed and assessed. It will

remain for further research to tease out the factors which inform the success of interventions in affecting attitudes and to determine their relative contributions.

Another current issue in the literature on stereotyping which is relevant to this study is the perceived variability of group members with respect to stereotyped attributes (Linville, 1982; Linville & Jones, 1981). Because they generate category-based judgments, stereotypes convey the central tendency of the category on the attribute dimension under consideration (Park & Hastie, 1987). By conveying a central tendency, stereotypes contain virtually no information on variability. Thus, for example, Park and Rothbart (1982) found that while both male and female subjects agreed on characteristics stereotypically male and female, i.e. the central tendency of each group on stereotypic dimensions, their perception of variability around those dimensions differed. Outgroup members rated others as more homogeneous and less variable with respect to stereotypic attitudes (e.g. aggression) than they rated their own group. Some research has found that information regarding an individual's variability from stereotypic expectation has overridden impressions of the group (Locksley, Borgida, Brekke & Hepburn, 1980; Locksley, Hepburn & Ortiz, 1980). The Politicians vs. People intervention in

the present study may be similarly viewed. That is, this intervention proposed that people differ from their governments. The proposition introduces variable data into theory-ridden subjective assessments, enabling individuation of the group "Russians" into people and governments and consequently differentiation of base rates of their behavior. Thus, the Politicians vs. People intervention may have presented a context in which implicit beliefs about people and governments, which are homogenized as stereotypes, could be explicitly articulated.

One other consideration warrants attention in trying to identify why the Politicians vs. People intervention promoted attitude change while the Extreme Outgroup intervention did not. This is that the former stressed our similarity with the Russian people while the latter stressed our differences from "crazy terrorists." This raises the possibility that, as discussed at the outset, enhancement of similarity may play a role in attitude formation. Unfortunately, given the limitations of the study, it is impossible to evaluate any possible impact of this variable.

In conclusion, it should be mentioned that testing for this study, which occurred in 1987, preceded the influx of favorable publicity that attended Mikhail

Gorbachev's promotion of glasnost, his softening of the Soviet position on issues such as nuclear arms control and the war in Afghanistan and his own personal popularity. It would be interesting to reexamine the issue of stereotyped attitudes toward the Russians and the efficacy of experimental changes in these attitudes as time goes on.

Chapter VI

Educational Implications

The study of intergroup stereotyping and prejudice is useful to educational psychologists on several levels. First, enhancement of social competence in order to strengthen democratic functioning has been a goal of our educational institutions since their inception (Dewey, 1970). The topic of intergroup perceptions and cognitions has figured prominently in educators' efforts to prepare students to participate in an interracial and international society and to assume their civil responsibilities (Educational Policies Commission of the National Educational Association, 1970). This study supplements an extensive existing literature on stereotyping by focusing on attitudes toward Russians, an outgroup much less frequently studied than blacks. Analysis of perceptions of Russians has the advantage of allowing control for personal exposure. That is, few Americans have actually ever met a Russian, so the content, form and malleability of their beliefs are uncontaminated by differences in personal experiences. Further, intergroup attitudes are an especially pressing topic for educational psychologists in New York at present due to the large recent influx of Asian immigrants.

Interest in inter-group perceptions of these newly arrived groups will undoubtedly stimulate new research in this area.

Second, attitudes toward Russians are an important topic in their own right. The quantity of attention paid to relations with the Russians by public policy makers (Adelman, 1984/85; Schultz, 1985) as well as the connection for Americans between these relations and nuclear issues attests to this. In addition, public opinion polls reflect public concern with relations with the Soviet Union due to their impact on defense spending and their effect on the likelihood of nuclear war (Yankelovich & Kagan, 1981). Yet, despite the scope and complexity of the issue, there has been little "sustained scholarly focus on the public's view of a response to the imperatives of the nuclear age" (Fiske, Fischhoff & Milburn, 1983, p. 8).

Recently scholarly attention has begin to reverse this trend. At the 1985 American Psychological Association Convention in Los Angeles, for example, a mini-convention on the theme of psychology and the nuclear threat was officially incorporated into the program. In the past few years psychologists have begun to apply their theoretical and empirical techniques to a range of questions centered on nuclear issues, e.g., students'

feelings of helplessness in a world they view as out of control (Snow & Goodman, 1984); their lack of belief in the influence of individuals or groups on public policy (Goodman, Mack, Beardless & Snow, 1983); their concern about the threat of nuclear war (Beardslee & Mack, 1982). In fact, a recent study (Bachman, cited in Snow & Goodman, 1984) sampling 15,000 youngsters per year between 1976 and 1982 in 48 states found a steady rise in the percentage of those who worried about the nuclear threat and also a steadily increasing trend for both boys and girls to agree or mostly agree (from 23% to 35% and 20% to 36%) with the statement, "nuclear or biological annihilation will probably be the fate of all mankind within my lifetime." The data as a whole indicate that youngsters from all classes and of various ethnic and racial backgrounds are concerned. And, more than half of a large group of adolescents in Southern California surveyed thought that a nuclear war between the U.S. and the U.S.S.R. would occur in their lifetime (Goldenring & Doctor, 1981).

In addition to research, several curriculum development projects have been undertaken which will not only provide information about nuclear weapons, but will also enable young people to develop a realistic sense of hope and responsibility for the future (Alexander & Wagner, 1986; Educators for Social Responsibility, 1982,

1985). The pressing need for this work was highlighted by Beardslee and Mack (1982), who found that adults' passivity in the face of this destructive potential tends to foster a sense of powerlessness and cynical resignation in the young. They concluded that equipping students with the tools for realistic thinking about nuclear issues, in contrast, promotes a future-oriented, competent-feeling generation of youth who are more likely to deal effectively with the problem.

Further, the study has metatheoretical interest. Cognitive dissonance theory has generated perhaps hundreds of studies which generally supported an hypothesis of cognitive stasis and rigidity. Frame theory, in contrast, has begun to generate another body of research which supports an hypothesis of cognitive flexibility and adaptability. This study sought to illuminate the methodological approaches which contributed to such divergent results by exploring the role of experimental procedure in experimental outcomes (Carterette & Friedman, 1974; Rosenthal, 1969; Upshaw, 1974). Sensitivity to nuances of the experimental situation may shed light on McGuire's (1969) claim that much of the history of science is the process by which one scientist's artifact becomes another's main effect.

The finding that shifting people's perspectives

may affect their construction of a problem and consequently their ideas about it, while arguing against these ideas makes little impression, may prove useful to educators in at least two ways. First, for those concerned with reducing stereotyping and prejudice, it suggests the sorts of interventions that do and do not hold promise.

Second, it points to the complex patterning of people's cognitions about others. Recognition of this complexity may affect all levels of social science curriculum, from grade-school social studies to college-level international relations. It suggests that, in addition to teaching facts about other countries, it is important to provide students with the opportunity to openly discuss their attitudes toward other groups. In this way students may become aware that, rather than expressing absolute truth, stereotypes are relative, and that those who look like enemies in one context may look like friends in another. This would correspond to the relativity of the attitudes of subjects in this study, who rated Russians significantly more favorably in certain contexts than in others.

This has wide applicability to a myriad of educational issues. For example, although mothers and teachers are often considered natural allies who share

common goals, there are circumstances in which this alliance is shattered and a relationship of enmity ensues (Lightfoot, 1977). Or, a traditionally charged relationship, such as that between teachers and administrators can at times become one of solidarity; this occurred during the 1970's, when the introduction of local school boards threatened the sovereignty of the educational establishment. Recently, Gornick (1987) described how even education itself can be transformed from longed-for dream to a dreaded enemy. Her mother, who had always envisioned her daughter as a college student, was terrified at the transformation City College had wrought:

> ...[W]hat drove her, and divided us, was me thinking. She hadn't understood that going to school meant I would start thinking: coherently and out loud. She was taken by violent surprise...I had never before spoken a work she didn't know. Or made a sentence whose logic she couldn't follow. Or attempted an opinion that grew out of an abstraction. It made her crazy. (p. 108)

Currently there has been a resurgence of the belief that books themselves can be the enemy. Thus, analysis of the conditions in which enemies become friends and vice versa can shed light on a variety of relations relevant to education. It can elucidate circumstances in which bussed in children, for example, might be regarded more favorably by children in the host school. Or, for

that matter, how children in the host school might be looked upon more favorably by bussed in children. Possible applications are numerous. Of particular value is the focus, for participants, on the role of their own subjectivity in their thinking.

Appendix 1

ATTITUDES TOWARD THE RUSSIANS

Strongly Agree	Somewhat Agree	Don't Know	Somewhat Disagree	Strongly Disagree
1	2	3	4	5

Please rate each of the following items on the five-point scale above.

Rating

We should:

____ 1. See the Russians as our friends.

____ 2. Consider the Russians to be malevolent.

____ 3. Look at the Russians as rational.

____ 4. See that, as a group, the Russians are an extremely argumentative people.

____ 5. View the Russians as bad.

____ 6. Seek closer relations with the Russians.

____ 7. View the Russians as trustworthy.

____ 8. See the Russians as an aggressive people.

____ 9. View the Russians as truthful.

____ 10. View the Russians as enemies.

____ 11. Consider the Russians a sincere people.

____ 12. See that the Russians have no integrity.

____ 13. Look at the Russians as dishonest.

____ 14. Look at the Russians as a peace-loving people.

____ 15. Assume that the Russians want to co-exist.

____ 16. Figure that the Russians are pretty crazy.

____ 17. Keep our distance from the Russians.

____ 18. Never trust the Russians.

____ 19. Consider the Russians to be benevolent.

Appendix 2

PERCEIVED SIMILARITY OF THE RUSSIANS

Strongly Agree	Somewhat Agree	Don't Know	Somewhat Disagree	Strongly Disagree
1	2	3	4	5

Please rate each of the following items on the five-point scale above.

Rating

We should:

____ 1. See that, since we're all human, the Russians are more like us than not.

____ 2. Assume that the Russians are less interested in material possessions than we are.

____ 3. Realize that the Russians want the same things for their children that we do.

____ 4. Recognize that the Russians are about as responsible as we are.

____ 5. Figure that the Russians are probably as moral a people as we are.

____ 6. Figure out that the Russians want much the same out of life that we do.

____ 7. Understand that the Russians' hopes for the future are about as different from ours as they can be.

____ 8. Realize that the Russians are a much more

suspicious people than we are.

____ 9. Realize that the Russians' relations with their families are pretty much like ours.

____ 10. Recognize that the Russians are harder workers than Americans are.

____ 11. See that, since the Russians are so different from us, we'll never be able to make sense of them.

____ 12. Assume that the Russians are stricter with their children than we are.

____ 13. Understand that the Russians enjoy many of the same activities that we do.

____ 14 See that, like Americans, Russians are a religious people.

____ 15. Assume that the Russians' fears are similar to our own.

____ 16. Realize that the Russians' view of the world is as different from ours as it can be.

____ 17. See the Russians as much more paranoid than we are.

____ 18. Recognize that the Russians are much more hostile than we are.

____ 19. Assume that the Russians desire peace as much as we do.

Appendix 3

Information-oriented Vignette

Many Americans feel that the Russians are very different from us. While we want peace, they are aggressive and expansionistic and therefore, untrustworthy. They would stop at nothing to convert the world to communism. In terms of the international situation however, we should recognize that the Russians to not pose a real threat. While it is true that their system of government differs from ours, they share the basic human values. For instance, they believe in the sanctity of human life, at least the lives of their own people. The Russians lost twenty million people in World War II. Death touched almost all Russian families. With such huge losses so recent in their history, the Russians would never take the chance of starting another war. They would have nothing to gain and too much to lose.

All the peoples of the world really want and care about the same things: peace, prosperity, a comfortable life for themselves and their families. It should be possible for us to co-exist with the Russians. We should think about these things when we try to figure out who our friends are in the world.

Appendix 4

Rule-Oriented: More Extreme Outgroup

Many Americans feel that the Russians are very different from us. While we want peace, they are aggressive and expansionistic and therefore, untrustworthy. They would stop at nothing to convert the world to communism. In terms of the international situation, however, we should recognize that it is not the Russians who pose the real threat. It is "crazies" like Khomeni or Qadaffi and their terrorist followers who are the danger. They do not value life, not even their own lives or the lives of their people. They volunteer for suicide missions and rather than mourn their deaths, their families celebrate them. People who don't believe in the sanctity of human life don't share any of our basic values. Their attitude toward life is so strange and different from ours that they don't even seem rational. When you come right down to it, if they don't care about the human losses that would result, what's to stop them from starting a major war?

The different peoples of the world are really not all alike. It's the crazy terrorists who make co-existence impossible. Compared to them the Russians seem same and reasonable and should really be our allies in the

fight against terrorism. These are the things we should think about when we try to figure out who our friends are in the world.

Appendix 5

Rule-Oriented: Politicians vs. People

Many Americans feel that the Russians are very different from us. While we want peace, they are aggressive and expansionistic and therefore, untrustworthy. They would stop at nothing to convert the world to communism. In terms of the international situation, however, we should recognize that it is not the Russians who pose the real threat. It's the politicians and military of the world who really threaten our safety. They do not really value life, probably not even the lives of their own people. Although they talk about peace, they're quick to send the boys of their country into combat on a whim. They don't believe in the sanctity of human life. All they really believe in is power. It must make them feel important.

The politicians and military men are the ones who start wars. The peoples of all countries really want and care about the same things, regardless of their nationalities or the philosophy of their government. They want prosperity and the chance to make a comfortable life for themselves and their families. It's not the Russians who make co-existence impossible; it's the leaders of the world who get into power struggles and ego trips. We should think about that when we try to figure out who our friends are in the world.

Appendix 6

Control Vignette

As travel networks and telecommunications systems have developed and modernized, the world has truly grown smaller. As a consequence, many large corporations have opened headquarters all over the world. For students interested in pursuing careers in such large corporations, the traditional business course of study may no longer be sufficient. In addition to expecting students to master such subjects as accounting and marketing, large firms may require that they be familiar with the languages and customs of foreign countries as well. Many colleges have responded to this development by enlarging their course offerings in international studies. These schools now offer a variety of languages, including Russian, Japanese, Hebrew and Arabic, as well as more traditional romance languages. They also offer courses in the history and politics of many of the countries with which we do business.

Appendix 7

Ratings of Clarity and Distinguishing of three Experimental Vignettes

Please use this scale in reference to points the author is making.

True	Unclear	False
1	2	3

Rating

____ 1. The author believes that the Russians make coexistence impossible.

____ 2. The author believes that a balance of trade will promote world peace.

____ 3. The author considers the Russians to be fundamentally like us.

____ 4. The author believes that it is terrorists who pose the real threat.

____ 5. The author believes that the Russians want war.

____ 6. The author believes that the peoples of the world all really want the same things.

____ 7. The author considers improved international communication to be the key to peace.

____ 8. The author states that the danger to international security lies with the military and politicians of the world.

____ 9. The author thinks that the Russians are more our friends than our enemies.

____ 10. The author believes that the international exchange of cultural activities such as dance and theater promotes peace.

Appendix 8

Pilot Frequencies of Ratings of Clarity and Distinguishability of Three Experimental Vignettes[1]

Vignette #I: Information-oriented Vignette

#II: Rule-oriented; More Extreme Outgroup

#III: People vs. Politicians

Question 1 - The author believes that the Russians make co-existence impossible.

Prediction: Subjects will respond False for all conditions.

	I	II	III
True	2		4
Unclear		2	1
False	14	13	10

[1]Column sums may vary slightly as subjects occasionally omitted items.

Question 2 - The author believes that a balance of trade will promote world peace.

Prediction: Subjects will respond Unclear or False for all conditions.

	I	II	III
True	2		1
Unclear	9	8	9
False	5	6	5

Question 3 - The author considers the Russians to be fundamentally like us.

Prediction: Subjects will respond True for all conditions.

	I	II	III
True	13	11	11
Unclear		1	
False	3	3	4

Question 4 - The author believes that it is terrorists who pose the real threat.

Predictions: Subjects will respond True for Condition II. They will respond False for Conditions I and III. (Note: In Condition III, subjects apparently considered politicans and military to be terrorists, accounting for the 6 True responses.)

	I	II	III
True	5	15	6
Unclear	3		1
False	8		8

Question 5 - The author believes that the Russians want war.

Prediction: Subjects will respond False for all conditions.

	I	II	III
True			3
Unclear	3	4	1
False	13	11	11

Question 6 - The author believes that the peoples of the world all really want the same things.

Predictions: Subjects will respond True for conditions I and III. They will respond False for condition II (Note: False responses for Condition III were opposite of prediction. Consideration suggests that this was a poor question as it does not reflect what author stated.)

	I	II	III
True	13	3	10
Unclear	1	2	2
False	2	10	13

Question 7 - The author considers improved international communication to be the key to peace.

Prediction: Subjects will respond Unclear for all conditions.

	I	II	III
True	7	6	5
Unclear	6	9	10
False	3		2

Question 8 - The author states that the danger to international security lies with the military and politicians of the world.

Predictions: Subjects will respond True for Condition III. They will respond Unclear or False for Conditions I and II.

	I	II	III
True	2	2	13
Unclear	8	8	2
False	6	5	2

Question 9 - The author thinks that the Russians are more our friends than our enemies.

Prediction: Subjects will respond True for all conditions. (Note: The preponderance of unclear responses is apparently due to a bad match between this question and the vignettes, which say merely that the Russians are not our enemies, not that they are our friends.)

	I	II	III
True	3	9	6
Unclear	10	5	7
False	3	1	4

Question 10 - The author believes that the international exchange of cultural activities such as dance and theater promotes peace.

Prediction: Subjects will respond Unclear or False for all conditions.

	I	II	III
True	3		4
Unclear	5	6	9
False	8	9	4

Appendix 9

Varimax Rotated Factor Matrix for Combined Scales

	Item	Factor 1	Factor 2
1.	See the Russians as our friends	.66	
2.	Consider the Russians malevolent	.47	
3.	Since we're all human, the Russians, are more like us than not	.49	
4.	Assume the Russians are less interested in material possessions than we		.38
5.	Look at the Russians as rational	.63	
6.	As a group, the Russians are an extremely argumentive people.	.48	
7.	View the Russians as bad	.61	.30
8.	Seek closer relations with the Russians	.37	.35
9.	The Russians want the same things for their children that we do		.46
10.	View the Russians as trustworthy	.80	
11.	See the Russinas as an aggressive people	.48	
12.	The Russians are about as reasonable as we are	.60	.32
13.	The Russians are probably as moral a people as we are	.58	.38
14.	View the Russians as truthful	.77	
15.	View the Russians as enemies	.59	
16.	Consider the Russians a sincere people	.64	
17.	Figure the Russians want much the same out of life as we do	.31	.43

18. See that the Russians have no integrity		.47
19. Understand the Russians hopes for the future are about as different from ours as they can be	.42	.36
20. Look at the Russians as dishonest	.66	.33
21. Realize the Russians are a much more suspicious people than we are		.35
22. Realize the Russians' relations with their families are pretty much like ours		.68
23. Recognize that the Russians are harder workers than Americans are		
24. Recognize that the Russians are so different from us, we'll never be able to make sense of them		.56
25. Look at the Russians as a peace-loving people	.50	.45
26. Assume that the Russians are stricter with their children than we are.		
27. Understand that the Russians enjoy many of the same activities that we do.		.71
28. Assume that the Russians want to co-exist		.59
29 See that, like Americans, Russians are a religious people		
30. Figure that the Russians are pretty crazy	.40	.33
31. Keep our distance from the Russians	.43	.45
32. Never trust the Russians	.55	.47
33. Assume that Russians' fears are similar to our own		.44
34. Consider the Russians benovolent	.45	

35. Realize that the Russians' view of the the world is as different from ours as it can be		.46
36. See the Russians as much more paranoid than we		.46
37. Recognize the Russians are much more hostile than we are	.51	.38
38. Assume the Russians desire peace as much as we do	.34	.52

Note: Values less than .30 are omitted

Appendix 10

Factor Derived Scale 1: Attitudes Towards the Russians

Strongly Agree	Somewhat Agree	Don't Know	Somewhat Agree	Strongly Agree
1	2	3	4	5

Please rate each of the following items on the five-point scale above.

Rating	We should:
_____	1. See the Russians as our friends.
_____	2. Consider the Russians to be malevolent.
_____	3. See that, since we're all human, the Russians more like us than not.
_____	4. Look at the Russians as rational.
_____	5. See that, as a group, the Russians are an extremely argumentive people.
_____	6. View the Russians as bad.
_____	7. Seek closer relations with the Russians.
_____	8. View the Russians as trustworthy.
_____	9. See the Russians as an aggressive people.
_____	10. Recognize that the Russians are about as reasonable as we are.
_____	11. Figure that the Russians are as moral a people as we are.
_____	12. View the Russians as truthful.
_____	13. View the Russians as enemies.
_____	14. Consider the Russians a sincere people.
_____	15. Understand that the Russians' hopes for the future are about as different from ours as they can be.
_____	16. Look at the Russians as dishonest.

_____ 17. Look at the Russians as a peace-loving people.

_____ 18. Figure that the Russians are pretty crazy.

_____ 19. Never trust the Russians.

_____ 20. Consider the Russians to be benevolent.

_____ 21. Recognize that the Russians are much more hostile than we are.

Appendix 11

Factor Derived Scale 1: Perceived Similarity of the Russians

Strongly Agree	Somewhat Agree	Don't Know	Somewhat Agree	Strongly Agree
1	2	3	4	5

Please rate each of the following items on the five-point scale above.

Rating We should:

_____ 1. Assume that the Russians are less interested in material possesions than we are.

_____ 2. Realize that the Russians want the same things for their children that we do.

_____ 3. Figure out that the Russians want much the same out of life that we do.

_____ 4. See that the Russians have no integrity

_____ 5. Realize that the Russians are a much more suspicious people than we are

_____ 6. Realize that the Russians' relations with their families are pretty much like ours.

_____ 7. See that, since the Russians are so different from us, we'll never be able to make sense of them.

_____ 8. Understand that the Russians enjoy many of the same activities that we do.

_____ 9. Assume that the Russians want to co-exist.

_____ 10. Keep our distance from the Russians.

_____ 11. Assume that the Russians' fears are similar to our own.

_____ 12. Realize that the Russians' view of the world is as different from ours as it can be.

_____ 13. See the Russians as more paranoid than we are.

_____ 14. Assume that the Russians desire peace as much as we do.

Appendix 12

Univariate Analysis of Variance of Change Scores between Pre and Posttest Attitudes toward the Russians

Source	SS	df	MS	F	p
Between Groups	928.5250	3	309.5083	2.4341	.0670
Within	19836.2500	156	127.1554		

Appendix 13

Univariate Analysis of Variance of Change Scores Between Pre and Posttest Perceptions of Similarity of the Russians

Source	SS	df	MS	F	p
Between Groups	385.8000	3	128.6000	3.2211	.0244
Within Groups	6228.1000	156	39.9237		

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