A STUDY OF THE EFFECT OF INTERACTION AMONG VARIABLES AFFECTING CONFORMITY

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CHAPTER I

INTRODUCTION

The experimental study of conformity is a relatively recent development. Since Sherif's (1935) pioneering autokinetic experiments demonstrating the profound influence the group can have on the perceptions of the individual, many experimental studies have indicated that individual psychological processes are subject to social influences. Asch's experiments (1952, 1956) demonstrate the influence of group norms upon the individual's behavior even when he has clearly defined standards for determining appropriate behavior in the situation. Subsequently, numerous investigations have focused upon identifying those conditions which maximize the occurrence of conforming behavior.

While such studies have identified many of the variables and conditions which are of importance in understanding conformity, they have nonetheless been characterized by certain limitations. Most studies have tended to specify certain isolated variables as associated with tendencies to conform. More recent studies have supported the view that conformity is a complex matter of adjustment which occurs when a host of circumstances are favorable rather than under the influence of a single factor. True interaction, rather than additive action, may exist among these variables to determine the degree of conformity aroused (Blake and Mouton 1961).

Further, most works in the area of conformity tend to view conformity as a mode of behavior with only one motivational base. Recently, however, research notably by Kelman (1958) and Deutsch and Gerard (1955) has shown that there are at least two types of social influence, and conformity to each is motivated by different objectives or purposes.

It is the purpose of this thesis to partially rectify these limitations in research pertaining to conformity. Factors from various critical determinants of the degree to which a person may be influenced, characteristics of the source of influence, and characteristics of the individual on whom pressures are exerted, will be varied simultaneously within the design of a single experiment in order to gain an understanding of the dynamics of conformity.

CHAPTER II

REVIEW OF THE LITERATURE AND HYPOTHESES

Conformity is not to be equated with uniformity or conventionality. Uniformity in bahavior may occur as a result of individuals being exposed to similar conditions or sharing common experiences. However, such uniformities are not necessarily socially induced. Conventionality involves acting in ways which represent established solutions to problems. Although conventionality and uniformity do result partly from conformity, the terms are not synonymous (Kretch, Crutchfield, and Ballachey 1962: 505-506). Conformity involves the yielding of the individual's judgement or action to group pressure arising from a conflict between his own opinion and that maintained by the group (Kretch, Crutchfield, and Ballachey 1962: 529).

Conformity is seen variously as a class of behavior (Walker and Heyns 1962: 4-5) and as a state of mind, either momentary or more enduring (Rokeach 1961). It would appear that both conceptions are involved in conformity. Four factors emerge as requisites for conformity: a norm, standard, or expectation held by another or others (McDavid and Harari 1968: 327; Walker and Heyns 1962: 4-5); the individual's perception of the norm or expectation (Hollander 1958; McDavid and Harari 1968: 327); his decision to adhere to the norm or expectation (McDavid and Harari 1968: 327); and his action or

behavior which corresponds with the expectation or standard (Bass 1961; McDavid and Harari 1968: 327; Walker and Heyns 1962: 4-5). Thus, "conforming behavior is a consequence of an individual's sensitive reaction to group norms or individual expectations of him held by others, combined with his decision to adhere to these norms or expectations (McDavid and Harari 1968: 327)."

Experimental investigation of conformity was instigated in 1935 by Muzafer Sherif in a series of studies of the influence of group attitudes and norms upon the judgements of individuals. Utilizing the perceptual phenomenon of autokinesis, and illusory movement of a stationary point of light in an otherwise totally dark visual field, Sherif collected individual judgements from subjects as to the distance of the "movement" of the light. He found that ranges of responses peculiar to each individual were rapidly established, although there was relatively high variability between judgements made by different subjects. When subjects responded in groups of two and three, variability between the subjects decreased, and the responses of the individuals in each group tended to converge around the norm, regardless of whether these judgements were made with or without prior individual experience. Subjects who made judgements individually after having first worked in a group continued to adhere to the group norm, and thus their individual judgements were less variable than those of the subjects who had initially responded individually and were later placed in a group situation. Sherif felt this pattern of individual norms around the group norm to be an indication of the suggestibility of individual members to the social influence of the entire group (Sherif 1935).

Solomon Asch (1952; 1956) felt that individuals would exercise greater independence of judgement when faced with a less ambiguous, easier task than that employed by Sherif, thus his experiment entailed nonambiguous stimuli. In a group situation, under optimum conditions, the subject was presented a standard line and three comparison lines, one of which was exactly the same length as the standard. He was then instructed to state publicly which of the comparison lines was of the same length as the standard line. Prior to the beginning of the experiment, Asch determined that correct judgements could be made individually with little difficulty. Instead of utilizing ad hoc groups, Asch arranged for trained confederates to make unanimous erroneous judgements prior to the subject's announcement of his judgement. In one of Asch's experiments (1952), only one-fifth of the subjects remained entirely independent; and when those subjects who yielded to majority pressures only one time out of seven trials were included, only forty-two per cent of the group were not appreciably affected by majority pressures. In a subsequent experiment (1956) only one-fourth of the subjects remained entirely independent. The subject as a minority of one against a unanimous majority was often induced to report grossly incorrect judgements, showing the effect of group norms upon the individual's behavior even when he has clearly defined standards for determining appropriate behavior in the situation.

Early investigators of conformity tended to approach social influence and its impact upon behavior without differentiating the various types of social factors which might motivate the socially influenced behavior. Conformity was seen as being due to "group" influence, and conformity to the norms was seen as an end in itself.

Deutsch and Gerard (1955) noted, however, that in many experiments in conformity, including those by Asch and Sherif, the subjects were not functioning as members of a group. They proposed two types of influence which they felt operated to produce conforming behavior: normative social influence and informational social influence. Normative social influence is defined as influence to conform with the positive expectations of another, thus it is a type of social influence which occurs when the individual desires to be in agreement with others and to avoid violating their expectations of him. It may be seen as conforming behavior which is motivated by agreement-seeking with others. Informational social influence is defined as influence to accept information obtained from another as evidence of reality. Thus, conforming behavior due to informational social influence utilizes other people as sources of useful information or guidance. Deutsch and Gerard hold that these two types of social influence are commonly found together.

Kelman (1958) has identified three types of social influence: compliance, identification, and internalization. External conditions which influence one individual to accept the influence of another are emphasized in compliance; compliance occurs when the individual accepts the influence of another in order to achieve a favorable reaction or avoid a negative reaction, not because he believes in its content. Identification occurs when the individual accepts influence of another in order to establish or maintain a satisfying self-defining relationship, thus the process is based on agreement-seeking or identity-seeking. Internalization occurs when the individual accepts influence because the content of the induced behavior is intrinsically

rewarding; thus, it is a process based on information-seeking. Thibaut and Kelly (1959; 242-246) describe three types of social influence that may operate to induce conformity to norms which correspond fairly closely to Kelman's three types of social influence.

French and Raven (1967) delineate five bases of social power an individual may exert over another: (1) reward power, based on an individual's perception that another has the ability to mediate rewards for him; (2) coercive power, based on an individual's perception that another has the ability to mediate punishments for him; (3) legitimate power, based on an individual's perception that another has a legitimate right to prescribe behavior for him; (4) referent power, based on an individual's identification with another; and (5) expert power, based on an individual's perception that another has some special knowledge or expertness. The latter two forms of power, referent power and expert power, involve voluntary acquiesence of one individual to the influence of another. Referent power, based on the individual's wish to be identified with others and to match his behavior to theirs, directly parallels normative social influence, while expert power, based on the individual's perception that another has information or ability that is useful to him closely parallel informational social influence. The two terms also closely approximate Kelman's concepts of identification and internalization.

There appears, then, to be at least two different processes of social influence which induce conforming behavior: influence which involves motivation to seek-agreement with others as an end in itself, and influence which involves motivation to accept the influence of

others, based on its credibility, as a means of obtaining the individual's own objectives.

As experimental investigation into conformity has yielded knowledge of various forms of social influence, three broad categories of factors have been focused upon as determinants of conformity: the personal characteristics of the person who's behavior is being influenced; the characteristics of the person or group exerting influence upon him; and the characteristics of the behavioral activity being influenced.

Characteristics of the Behavioral Activity Influenced

Variables which fall into the category of characteristics of the behavioral activity being influenced are basically task relevant. Task or situational ambiguity, task difficulty, arousal of motivation, and mode of judgement expression are the primary variables in this category.

Asch (1952) felt that the high level of conformity Sherif (1935) found in his autokenetic experiments was due primarily to the highly ambiguous, unstructured experimental situation which necessitated the use of the judgements of others as reference points. He felt that given less ambiguous and well-structured situations in which the individual was expected to be normally able to arrive at a correct judgement, individuals would exercise greater independence of judgement. Yet he found that while the majority of the subjects displayed independent behavior, twenty-seven percent of the subjects yielded to the groups incorrect judgement at least two-thirds of the time.

Nonetheless, many studies have shown that individuals are more likely to conform when the task is ambiguous, unstructured, and difficult than when it is nonambiguous, structured, and easy (Asch 1956; Blake, Helson, and Mouton 1957; Coleman, Blake, and Mouton 1958; Crutchfield 1955; Coffin 1941; Kelly and Lamb 1957; Luchins 1944; Luchins and Luchins 1955; McDavid and Sistrunk 1964; Sistrunk and McDavid 1965). In a study by Sherif and Harvey (1952) it was found that the judgements of autokenetic movement increased in magnitude and variability, and social influences became stronger as "situational uncertainty" was increased. Studies have shown that yielding to social influence is not totally eliminated when task difficulty is decreased (Asch 1956; Blake, Helson and Mouton 1957), but the degree of yielding is decreased (Coleman, Blake, and Mouton 1957). The greater yielding on difficult tasks probably reflects the greater uncertainty the individual feels about his judgement. Deutsch and Gerard's (1955) concept of informational social influence helps to explain the increased conformity with ambiguous stimuli. As the task decreases in ambiguity, conformity which occurs is more likely to be due to normative social influence.

The situation in which social influence upon behavior of the individual occurs may determine the psychological set under which the individual operates. Thibaut and Strickland (1956) delineate two psychological sets that can be taken by an individual in evaluating the judgements, perceptions or attitudes that are communicated to him by other individuals, which are quite similar to the distinction made by Deutsch and Gerard (1955) between normative and informational social influence. In group set, the individual is oriented toward maintaining

or achieving membership in the group. In task set, the individual is oriented toward achieving or maintaining cognitive clarity about his environment.

Group set or task set may be aroused in the individual by situational circumstances. Some stiuations may lead an individual to assume a group set as group unanimity and agreement with others are stressed as important goals to obtain. In such a situation the individual is more readily influenced to conform to group norms Thibaut and Strickland 1956). Other situations may stress independence or achievement of personal excellence as desirable goals, and thus task set may be aroused in the individual. Studies by McDavid and Sistrunk (1964; 1965) have shown that when the situation induces a task set in the individual, the degree of conforming behavior is dependent upon another situational variable, task ambiguity. When the task is relatively easy, well-structured, and unambiguous, the individual is more likely to utilize the perceptions of others to supplement his own perceptual equipment, and is thus more likely to be influenced by others.

Mode of judgement expression is another situational factor which has bearing upon the individual's succumbence to social influence. When the individual makes his response privately and anonymity is assured, conformity decreases as compared to a situation in which the individual makes his response publicly (Argyle 1957; Deutsch and Gerard 1955; Gerard 1964; Mouton, Blake and Olmstead 1956; Thibaut and Strickland 1956). Conformity is not eliminated by private anonymous responses, however. Findings by Dittes and Kelly (1956) suggest that the differences in conformity displayed in private

conditions and public conditions may depend upon the perceived consequences for behavior which does not conform to group norms. Dealing specifically with security and degree of acceptance in the group, they found that for individuals who were not fully accepted by the group, but who saw the possibility of gaining this status, a high degree of conformity was shown in both private and public situations. For those individuals who saw total rejection by the group as a likely possibility, high conformity was shown only under public conditions. Dittes and Kelly suggest that while such an individual may have lost much of his motivation to conform to group standards, as reflected in low private conformity, they may still be concerned about the negative consequences accompanying rejection, and public conformity is seen as a means of forestalling this. Thus, the individual may conform overtly and superficially, but remain uninfluenced in his own judgement.

Characteristics of the Source of Influence

Variables which fall into the category of characteristics of the person or group exerting influence upon the individual include task expertise, personal attraction for the individual, status, size of group majority, degree of unanimity of majority, and degree of discrepancy between source and individual response.

If the source of social influence is perceived by the individual as being outstandingly able or particularly qualified in the behavioral activity which is being influenced, the individual is more likely to accept the influence (Luchins 1944; Cole 1954). If the individual perceives that the others are more accurate than he, he will be more prone to agree with them (Deutsch and Gerard 1955). If the individual

believes that others have been previously successful in the behavioral task, he is more likely to accept their influence (Luchins and Luchins 1955; Rosenberg 1963; Mausner 1954).

It has generally been found that the more attractive the source of influence is to the individual, the greater the influence the source is able to exert upon the individual (Thiabaut and Strickland 1956; Keisler 1963; Lefkowitz, Blake, and Mouton 1955). Keisler (1963) found this relationship to be curvilinear, however, with maximum conformity obtained at moderate levels of attraction. Keisler and Keisler (1969: 66-68) note several factors which contribute to the effect of attraction on acceptance of social influence. Instrumentality of agreeing with attractive others is rooted in two assertions: first, if the individual believes or acts like attractive others, they will like the individual more, and secondly, the individual has in the past been rewarded for acting like attractive others.

Also, changing one's attitudes and opinions so that they are more like attractive others and less like unattractive others enhances one's self view. Moreover, an individual may pay more attention to what attractive others say or do. If an individual has learned to pay attention to some attractive others in the past, then this may lead to a heightened credibility and trustworthiness of more attractive others as communicators in general.

The status of the source of influence may serve to enhance or depress the amount of conformity occurring. A difference in status between the group and the conformist has marked effects on the likelihood of conformity (Raven and French 1958; Lefkowitz, Blake and Mouton 1955; Mausner 1954). Status may be defined as "the worth of

a person as estimated by a group or class of persons. The estimate of worth is determined by the extent to which his attributes or characteristics are perceived to contribute to the shared values and needs of the group or class of persons (Secord and Backman 1964; 294-295)." The group conferring the status may be extremely small or may consist of a total society.

Keisler and Keisler (1969: 71-75) delineate three bases of status. First, status is conferred upon those who provide rewards for the rest of the group, or whose contribution is crucial to the group goal. A second basis of status is the cost incurred by the individual in the realization of group goals. A third basis of status is found in the attitude or possessions of the individual which are viewed positively by the rest of the group. Keisler and Keisler refer to this third basis of status as the investment of the individual.

While it is noted that generally the higher the status of the other, the greater the acceptance by the individual, status may be mediated through some related process, such as attractiveness or increased credibility of the high status source (Keisler and Keisler 1969: 75).

Differences in characteristics of the source of influence relative to the same characteristics of the individual, including age, religion, and sex, have been related to differences in accepting social influence. Age differences between the subject and the source of influence have been shown to be important factors in conformity (Duncker 1938; Jackson and Saltzstein 1958). Greater influence is exerted on children by other children than by adults, and greater influence is exerted by older children on younger children than by younger children on older children. Differences in accepting social influence have been shown to

be related to differences in sex of the subject as compared to sex of the other or others (Luchins and Luchins 1955b) and religion of the subject relative to religion of the source of influence (Bray 1950).

The influence of group norms on the individual is related to the size of the group majority. Asch (1952: 476-477) found that the conformity effect is almost completely eliminated when the judgement of only one confederate precedes the subjects judgement. When the subject's response is preceded by the response of two confederates, the yielding rate is increased. Yielding rate approaches a ceiling with majorities of three persons, and subsequent increases in the size of the group produces no more yielding than does a unanimous majority of three. These findings have been substantiated (Rosenberg 1961).

The degree of unanimity of the majority that expresses or defines a group norm is an important factor in producing conforming behavior. Asch (1952) found that the extent of conformity to a false majority is reduced when an individual making a correct judgement is included in the majority. Blake, Rosenbaum, and Duryea (1955) found a unanimous norm, around which there is virtually no variation, to be more effective in influencing individual behavior than a variable norm, which prescribes the same level of ideal behavior but indicated some variation within the group in adherence to this norm.

The degree of discrepancy between the position of the source of influence and the position the individual would take were he not subjected to social influence is also related to conformity (Asch 1956; Blake, Helson, and Mouton 1957; Olmstead and Blake 1955). Subjects are more likely to conform when the degree of discrepancy is small than when it is large.

Characteristics of the Individual Influenced

Variables included in the category of characteristics of the individual whose behavior is being influenced may relate variously with the individual's prior experience with the task, physiological variables, and personality variables.

The amount and type of prior experience with the task by the individual appears to be an important variable in conformity. While prior experience with the task which is not evaluated as either successful or failure does not appear to affect conformity (Goldberg 1954), prior experience of failure on the task tends to increase the individual's susceptibility to pressures toward conformity, and prior experience of success on the task tends to decrease the individual's susceptibility to pressures toward conformity (Blake, Helson, and Mouton 1957). Also, the greater the degree of experimentally produced anxiety the individual experiences prior to exposure to pressures toward conformity, the less resistance he has to these pressures (Sherif and Harvey 1952).

If prior experience with a task in which a confederate gives false responses utilize ambiguous stimuli, the individual is more likely to conform with the same confederate in subsequent tasks than if the initial task utilizes unambiguous stimuli (Luchins 1944; Luchins and Luchins 1955). Further prior experience which rewards the individual for incorrect responses is more likely to produce conformity in subsequent tasks (Crutchfield 1955; Luchins 1944; Luchins and Luchins 1955).

Physiological characteristics of the individual which have been related to conformity are mainly age and sex, although a few other

variables such as sleep deprivation (Fisher and Rubenstein 1956) have also been explored. Findings of studies in age factors and conformity (Duncker 1938; Luchins and Luchins 1955b; Tuddenham 1961) have shown that children conform more than do adults, and that younger children tend to conform more than older children. As a child grows older, he becomes more self-sufficient, and less dependent upon others for guidance, thus blind, unthinking conformity appears to decrease with age.

There exists an abundance of research evidence that women are more susceptible to pressures to conform than are men (Coleman, Blake, and Mouton 1958; Crutchfield 1955; Tuddenham 1958; Asch 1956). It has been suggested that sex differences in such socially influenced behavior are conditioned outcome of differences between our culturally prescribed roles for the male and female (Kretch, Crutchfield, and Ballachey 1962: 523-525). Research exploring personality and motivational correlates of susceptibility to social influence have generally shown different relationships for males and females, and this has been interpreted as indication that cultural mandates of the feminine role for docility, plasticity, compliance, and submissiveness are of greater significance than relationships between personality factors and conforming behavior in females (Janis and Field 1959; McDavid and Sistrunk 1964; Tuddenham 1961b).

A few experimental studies have revealed no sex differences in conforming behavior; males and females yielded to social influence equally (McDavid and Sistrunk 1964; Sistrunk and McDavid 1965). While McDavid and Sistrunk (1964) found that the patterns of personality correlates of conforming behavior for males and females differed

considerably, a subsequent study (Sistrunk and McDavid 1965) allowed for separation of the variance attributable to motivational factors (need for affiliation and need for achievement) which may in themselves be associated with sex differences. A greater proportion of the variance in conforming behavior was associated with the two motivation measures than with the sex variable.

McDavid (1965) suggested that commonly observed sex differences in conformity behavior might be partially attributable to secondary factors associated with sex differences, especially subjective confidence in the area of judgement under influence. His investigation differentiated task contexts which were more within the domain of male-related activities and sophistication, task contexts which were regarded as essentially feminine, and neutral areas. The typical difference between males and females in level of conformity disappeared when the contents of judgements was so controlled, and further, it was found that females yielded more often than males only on judgements which had been characterized as areas of masculine interest and sophistication. McDavid suggests that the "sex-role" interpretation of sex differences in conforming behavior is a gross over-simplication which ignores the operation of more specific variables, such as subjective confidence in the area of judgement.

While both sex and age are physiological characteristics, it would not be suitable to interpret the differences in conformity as being due to the physiological characteristics themselves; rather, the differences observed may be due to other factors related to the physiological factors, such as cultural role prescriptions, areas of

subjective confidence, and amount and kinds of experience of the individual.

Numerous studies relating various psychological characteristics of an individual with susceptibility to conformity pressures exist in the literature. One such factor is emotional stability. Literature relating emotional stability and conformity reveal various findings. Hoffman (1953) found extreme consistency in conforming to group norms to be associated with neuroticism and chronic anxiety. Crutchfield (1953), on the other hand, found subjects classified as normal showed more conforming tendencies in pressure situations than did subjects classified as neurotic.

It has also been found that individuals who are more susceptible to conformity pressures are more likely to score higher on authoritarian scales (Crutchfield 1955; Malof and Lott 1962; Nadler 1959; Steiner and Johnson 1963). It is possible that this relationship has been artificially inflated as a high score on the F Scale, which is used to measure authoritarianism, is obtained from consistent agreement with items, while low scores are obtained by disagreeing with such items. Consistent agreement may be merely a produce of the individual's tendency to conform (McDavid and Harari 1968: 332).

Less intelligent people tend to be more susceptible to conformity pressures, while more intelligent people are more likely to be resistant to pressures to conform (Crutchfield 1953; Nakamura 1958, Tuddenham 1959). Tuddenham (1961b) found this negative relationship to be the most consistent and striking finding in an extensive study of conformity. Tuddenham noted that this relationship appears to depend upon attitudinal concomitants of intellectual ability rather than ability

per se, as all experimental tasks were well within the capacities of all subjects.

Self-confidence is also related to conformity. The more confident the individual is of his own abilities for acting in a particular situation, the less likely he is to conform to social pressures, while the individual who is uncertain and insecure is less resistant to social pressures (Walker and Heyns 1962: 29; Kelly and Lamb 1957; Tuddenham 1958; Bray 1950). The relationship between self confidence and conformity may serve to explain the relationship between intelligence and conformity. The more intelligent person would likely be more confident of his own judgements having experienced more previous successful decision-making and problem-solving than the less intelligent person.

The intensity of the individual's original motivation and the strength of his commitment to his judgement are important factors in determining the success of conformity pressures. The uncommitted. unmotivated individual will be less likely to resist pressures to conform while the individual who is strongly committed to a specific view or behavior will be less responsive to pressures to conform (Kimbrell and Blake 1958; Gerard 1953). A certain amount of conformity may occur even when strong commitment exists.

Dependency is a significant factor in conformity. Research evidence has shown the dependent person to be more likely to conform to social pressures than the individual who functions independently, without relying on the judgements of others (Kagen and Mussen 1956). Dependency is related to the affiliative strivings of the individual. The specific motivational variable need for social approval is found to be

closely related to conformity (McDavid and Sistrunk 1964; Moeller and Applezweig 1957; Strickland and Crowne 1962). Individuals who are strongly motivated to gain the approval of others or behave in a socially desirable manner are more likely to conform to social pressure.

Need for achievement is also related to the individual's susceptibility to social influence. In a situation which is relatively non-ambiguous and within the capabilities of the individual, the person with a strong need for achievement will not be likely to accept social pressures to conform. In ambiguous situations, the person with a strong need for achievement may not totally trust his own abilities, and thus, be susceptible to social influence (Samelson 1958; Sistrunk and McDavid 1965). The pattern of high need for achievement and low need for affiliation would indicate a predisposition toward non-conformity to social pressure, while the pattern of high need for affiliation and low need for achievement would indicate a predisposition toward conformity to social pressure (Walker and Heyns 1962: 63-66). Often, however, these predictions have been complicated by an interaction between the two needs (Samelson 1958).

Various studies have indicated that the tendency to conform is a general stable characteristic, exhibited on an individual basis in various situations (Asch 1956; Blake, Helson and Mouton 1956; Crutchfield 1955; Ferguson 1944), thus supporting the notion that a "conforming personality" exists. Rosner (1957) found consistency of the yielding response in a study which employed various tasks. Individuals who yielded on early tasks were likely to yield on subsequent tasks when a single task was utilized during a single experimental

session. Further, individuals who yielded on a task during one experimental session were more likely to yield on that task during subsequent experimental sessions. Finally, individuals who yielded on one task were more likely to yield on other tasks. However, studies have shown that personality factors associated with conforming in one type of situation may not be related to conforming in other situations (McDavid and Sistrunk 1964), indicating that factors other than merely personality variables are necessary to determine susceptibility to conformity.

Discussion and Hypotheses

By virtue of the fact that such a diversity of factors have been investigated in attempt to understand conformity, conformity must be regarded as a complex behavior. Evidence that several types of social influence may be identified (Deutsch and Gerard 1955; Kelman 1958; Thibaut and Kelly 1959: 242-246; French and Raven 1967) further support the idea that conformity is not a unitary motivational system within the individual, but rather a complex mode of behavior. As many factors have been identified as important determinants of social conformity, it becomes feasible to view conformity as the product of interactions between these factors, including the personal characteristics of the person who's behavior is being influenced, the characteristics of the person or group exerting influence upon him, and the characteristics of the behavioral activity being influenced. Indeed, in some instances, interaction between various factors has complicated isolation of the effects of one factor on conformity (e.g., Samelson 1958).

In order to explore the dynamics of conformity, three variables or determinants of conformity were chosen to be varied simultaneously within this experimental framework. These three variables, degree of ambiguity of task, expertise of source of influence, and attractiveness of source of influence, were chosen on the basis of their apparent import on conformity as well as their suitability for experimental manipulation. In addition to the three main independent variables, three other factors were chosen as third variables for investigation: sex of the individual; gradepoint average of the individual; and academic classification of the individual. The importance of the sex factor in conformity has previously been discussed. While grade point average is not identical to intelligence, it nonetheless provides a readily accessible, if crude, index of intelligence. The use of academic classification of the individual represents an attempt to explore the developmental, or age-related, aspects of conformity.

In accordance with the findings of previous studies, three hypotheses were proposed in regard to the relationship between degree of conformity and the three independent variables, ambiguity of task, expertise of source of influence, and attractiveness of source of influence.

H_1: Degree of conformity exhibited will be greater when task ambiguity is high than when task ambiguity is low.

Numerous studies have found the degree of conforming behavior to be dependent upon the degree of task ambiguity (Asch 1956; Blake, Helson, and Mouton 1957; Coleman, Blake, and Mouton 1958; Crutchfield 1955; Coffin 1941; Kelly and Lamb 1957; Luchins 1944;

Luchins and Luchins 1955; McDavid and Sistrunk 1964; Sistrunk and McDavid 1965). Individuals are more likely to yield to social influence when the task is ambiguous and less likely to yield to social influence when the task is nonambiguous.

H_2: Degree of conformity exhibited will be greater when attractiveness of the source of influence is high than when attractiveness of the source of influence is low.

The effect of attraction on acceptance of social influence has been investigated in various studies (Thibaut and Strickland 1956; Keisler 1963; Lefkowitz, Blake, and Mouton 1955). Generally findings have indicated that the more attractive the source of influence is to the individual the greater the influence the source is able to exert upon the individual, although Keisler (1963) found this relationship to be curvilinear with maximum conformity obtained at moderate levels of attraction.

H_3: Degree of conformity exhibited will be greater when reputed expertise of the source is high than when reputed expertise of the source is low.

The individual's perception of the source of social influence as being particularly qualified or outstandingly able in the behavior activity which is being influenced has been found to increase the likelihood of acceptance of the influence by the individual. (Luchins 1944; Cole 1954; Luchins and Luchins 1955; Deutsch and Gerard 1955; Rosenberg 1963; Mausner 1954).

In accordance with the idea that interaction among salient factors is important in determining the degree of conformity exhibited by an individual, the following null hypotheses were proposed:

HO_4: There is no relationship between the interaction of ambiguity of the task with attractiveness of the source of influence and the degree of conformity exhibited.

HO_5: There is no relationship between the interaction of ambiguity of the task with reputed expertise of the source of influence and the degree of conformity exhibited.

HO_6: There is no relationship between the interaction of attractiveness of the source of influence with reputed expertise of the source of influence and the degree of conformity exhibited.

HO_7: There is no relationship between the interaction among ambiguity of the task, reputed expertise of the source of influence, and attractiveness of the source of influence, and degree of conformity exhibited.

These four null hypotheses are aimed at determining if interaction between and among the three independent variables are important determinants of conformity.

In addition to the four null hypotheses proposed pertaining to interaction among and between the three independent variables, three additional null hypotheses were proposed:

HO_8 : The introduction of the sex variable will not effect any changes in the main effects of the three independent variables, task ambiguity, source expertise, and source attractiveness, and the effects of interactions between and among these variables, on degree of conformity.

HO_9 : The introduction of the grade point average variable will not effect any changes in the main effects of the three independent variables, task ambiguity, source expertise, and source attractiveness, and the effects of interactions between and among these variables, on degree of conformity.

HO_{10}: The introduction of the academic classification variable will not effect any changes in the main effects of the three independent variables, task ambiguity, source expertise, and source attractiveness, and the effects of interactions between and among these variables, on degree of conformity.

The aim of the eight, ninth, and tenth hypotheses is to determine whether the addition of a third variable into the analysis of variance will in any way alter the main effects of the three independent variables and the effects of interactions between and among these variables on conformity.

CHAPTER III

METHODOLOGY

The methodological approach of this research is, to a great extent, determined by the nature of the problem under investigation. In order to explore the effect of interaction among variables, pressures for conformity must be exerted on individuals under varying conditions of the variables under consideration. Similarly, the statistical techniques employed are dependent upon the nature of the problem and the nature of the data collected. Analysis of variance appears to be the most useful technique available for exploration of effects of interaction. Both the methodological approach and the statistical approach of this research will be discussed in detail.

Methodological Approach

In order to explore the possibility of interaction between or among salient factors being an important determinant of degree of conformity exhibited by an individual, it was necessary to exert pressures for conformity on subjects under varying conditions. The three factors varied experimentally were ambiguity of task, expertise of influence source, and attractiveness of influence source.

By dichotomizing the three independent variables -- task ambiguity, source expertise, and source attractiveness -- into high and low categories, eight possible group-task situations were

constructed. These eight experimental group-task situations are presented in Table I.

TABLE I

EXPERIMENTAL GROUP-TASK SITUATIONS

Group-Task Situations	Variable Conditions		
	Task Ambiguity	Source Expertise	Source Attractiveness
1	Low	Low	Low
2	Low	Low	High
3	Low	High	Low
4	Low	High	High
5	High	Low	Low
6	High	Low	High
7	High	High	Low
8	High	High	High

The nature of the task to be influenced is such as to allow for the presentation of both ambiguous and unambiguous tasks to the same experimental group, making it necessary to vary only source attractiveness and source expertise. Thus, only four experimental groups were necessary:

Group One: The source of influence for this group is one which is low in attractiveness and low in expertise.

Group Two: The source of influence for this group is one which is low in attractiveness and high in expertise.

Group Three: The source of influence for this group is one which is high in attractiveness and low in expertise.

Group Four: The source of influence for this group is one which is high in attractiveness and high in expertise.

Each of the four experimental groups was presented with two task situations while pressures toward conformity were applied. The task was the same for each of the four experimental groups, although the attractiveness of the source of influence and the expertise of the source of influence was varied.

Source Expertise

Description of the expertise of the source was accomplished by merely informing the subjects of the accuracy in judgement of the source. Expertise of the source was established by informing the subjects that the source was highly accurate in previous judgements on similar task items. Low expertise of the source was established by informing the subjects that the source was not highly accurate in previous judgements on similar task items.

Source Attractiveness

While it is relatively simple to establish the expertise or lack of expertise of a source, establishing a source as attractive or

unattractive is more complicated. A source which appears to be attractive to one individual might appear to be quite unattractive to another individual. In order to establish sources which would appear consistently attractive and sources which would appear consistently low in attractiveness, 191 students at Oklahoma State University during the spring semester, 1973, were requested to list groups of people, categories of people, or organizations which they felt to be attractive, and to list groups of people, categories of people, or organizations which they felt to be unattractive. The forty-two various responses were then listed and presented to 180 students at Oklahoma State University during the spring semester, 1973, who were requested to rate these on a five-point Likert-type Scale (Extremely Attractive, Moderately Attractive, Neutral in Attractiveness, Moderately Unattractive, Extremely Unattractive).

Although three responses, doctors, lawyers, and civic and volunteer groups, were all consistently seen as being high in attractiveness, it was preferable to use civic and volunteer groups as the highly attractive source because the extensive education acquired by doctors and lawyers would possibly also suggest expertise as well as attractiveness. Less than four percent (3.87%) of the pretest sample viewed civic and volunteer groups as either moderately or extremely unattractive. Only one person in the sample of 180 individuals viewed civic and volunteer groups as extremely unattractive.

Adjudicated juvenile delinquents were most consistently seen as being unattractive. Only five percent of the sample viewed adjudicated juvenile delinquents as being either moderately or extremely attractive. Thus, adjudicated juvenile delinquents were chosen as the source of

influence low in attractiveness, while members of civic and volunteer groups were chosen as the source of influence high in attractiveness.

The distribution of ratings and the mean ratings of attractiveness for each of the forty-two sources considered is presented in Appendix A.

Task Ambiguity

The test utilized in the task situations was comprised of five-choice multiple choice items. A variety of types of test items were represented in the test (found in Appendix B) including vocabulary items (Items 1, 5, 6, 8, 10, 12, 15), verbal analogies (Item 2), arithmetic reasoning (Items 7, 11, 13, 16), number series (Items 4, 9, 14), classification items (Item 3), pattern synthesis (Items 17, 19, 23), movement sequence (Items 20, 22), paper folding (Items 24, 25), and figure classification (Items 18, 21).

Each item in the test was characterized as being high in ambiguity or low in ambiguity. High ambiguity test items were items for which no correct answer was given among the answer alternatives, or items for which more than one answer alternative could conceivably be correct. Following is an example of a test item which is high in ambiguity:

A word meaning nearly the same as BEGINNING is:

a. commencement
b. onset
c. inception
d. embarkment
e. initial

In the above item, any one of the answer alternatives could conceivably

be chosen as the correct answer, for all the answer alternatives are synonyms for the word "beginning."

Low ambiguity test items were items for which one single, correct answer alternative was given. Following is an example of a test item which is low in ambiguity:

Glove is to hand as sock is to :

a. arm
b. shoe
c. leg
d. foot
e. hose

It is readily apparent that answer "d" is the only correct answer given among the response alternatives listed.

As the test items used had never been standardized, it was necessary to conduct pretesting in order to ascertain that the task items were high or low in ambiguity. Therefore, fifty-one students at Oklahoma State University during the fall semester, 1973, were presented with a booklet of twenty-six test items; each item listed five possible answer alternatives. The subjects were asked to indicate the correct response for each item. At least sixty-five percent of the sample had to agree on one specific answer alternative as being the correct answer on each item in order for an item to be classified as low in ambiguity. In order for an item to be classified as high in ambiguity, each possible answer response for the item must have been indicated by less than forty-five percent of the sample as being the correct response.

A second group of fifty-four students at Oklahoma State University during the fall semester, 1973, were presented with the same

booklet of twenty-six items and answer alternatives, and were asked to indicate for each item whether it was factually possible to choose a single correct answer for the item from the alternatives given for the item. In order for an item to be classified as low in ambiguity, at least sixty-five percent of the sample had to indicate that there was a single, correct answer listed among the answer alternatives given. For an item to be classified as high in ambiguity, at least sixty-five percent of that sample had to indicate that there was not a single, correct answer listed among the answer alternatives given.

Six items on the pretest met both criteria for classification as high ambiguity items, and were so classified. Twenty items on the pretest met both criteria for classification as low ambiguity items, and were so classified. A test booklet was prepared from the pretest items (See Appendix B). The booklet consisted of twenty-five items; five of the items were judged to be high in ambiguity by the pretest samples (Items 5, 9, 10, 15, and 21), and the remaining twenty items were judged to be low in ambiguity by the pretest sample.

Collection of the Data

The Test Booklet

The test booklet prepared from the pretest items consisted of ten critical items and fifteen filler items. The ten critical items were of two types. The first class of items consisted of the five items judged to be high in ambiguity by the pretest samples (Items 5, 9, 10, 15, 21). The second class of critical items consisted of five items randomly chosen from the twenty items judged to be low in ambiguity by the

pretest samples (Items 4, 8, 13, 18, 25). A distribution of the responses of the pretest sample to each of the critical items is presented in Table XIII, which may be found in Appendix C. The filler items consisted of the fifteen remaining items judged to be low in ambiguity by the pretest samples. The ten critical items were randomly mixed with the fifteen filler items in the test booklet, which purported to be a twenty-five item "Inventory of General Skills." A cover sheet for the booklet stated that the items in the booklet were to be utilized in the development of educational tests, and that the purpose of current experimentation was to establish baselines of skills.

Application of Majority Pressures

Within the booklet a column labeled "majority response" was added at the right of each page of items, and beside each item, an answer occurred in this column. The obvious application of majority pressures was explained to the subjects only as an indicator of the responses of the first group of subjects tested. The individual administering the test described this "supposed" source of influence in terms of high or low expertise and high or low attractiveness according to the experimental conditions previously identified (See Appendix D). The instructions further commented that this column might or might not be of interest to the subject, and that he was free to look at it or to ignore it, according to his own preference.

The answers to the five critical low ambiguity items found in the "majority response" column are erroneous; that is, they are not the answers judged to be correct by the pretest sample. One of the answer alternatives not judged to be correct by the pretest was

randomly chosen and listed in the "majority response" column for these critical low ambiguity items. The answers to the five critical high ambiguity items found in the "majority response" column were randomly chosen from the remaining answer alternatives after the answer alternative most frequently indicated as the correct response by the pretest sample was eliminated from consideration. The answers to the filler items found in the "majority response" column are answers which were indicated as being the correct response for the item by the pretest sample.

The subject was told to respond to each item, omitting none. If the subject's response matched the majority response on the ten critical items, he was assumed to have conformed on that item. The frequency with which the subject conformed to the contrived majority pressure permitted scores ranging from 0 to 5 for each class of critical items in the inventory. This score was used as indication of the degree of conformity the subject exhibited on the class of critical items for which the score was determined. Thus, each subject had two scores, one score indicating the degree of conformity exhibited when the task items were low in ambiguity, and one score indicating the degree of conformity exhibited when the task items were high in ambiguity. A score of 0 for either class of task items indicates that the individual did not conform on any of the critical items in that class, and thus exhibited a low degree of conformity. A score of 5 for either class of task items indicates that the individual conformed on all five of the critical items in that class, and thus exhibited a high degree of conformity.

An answer sheet was provided for each subject, with provision made for each subject to indicate his sex, his college grade point average, and his academic classification (See Appendix B).

Method of Analysis of Data

The relationship and interaction between the variables was measured and interpreted in testing the hypotheses given in Chapter II. For testing the statistical significance of the hypotheses, the value of the test required to reject an hypothesis was assigned at the .05 level. A three way analysis of variance was employed to examine the main effects of the three independent variables, ambiguity of task, attractiveness of influence source, and expertise of influence source, on the dependent variable, degree of conformity, and to examine the interaction of the independent variables as they affect degree of conformity. A four-way analysis of variance was employed to examine each of the three third variables of sex, academic classification, and college grade point average, in relation to the three independent variables and degree of conformity.

The analyses of variance were computed using the regression procedure of the Systems Analysis System, designed by Anthony James Barr and James Howard Goodnight of North Carolina State University (Service 1972).

The Sample

A sample of 211 Oklahoma State University undergraduate students enrolled in introductory Sociology courses during the fall semester, 1973, were used to test the hypotheses. Since the study

was not descriptive in nature, but rather an explanatory study to investigate the possibility of interactions among salient variables as determinants of conformity, a non-probability sample was deemed adequate. As each subject was subjected to two experimental conditions, there was a total of 422 observations.

Ninety-nine of the subjects were males, while 112 of the subjects were females. A breakdown of the academic classification of the sample revealed 81 college freshmen, 77 sophomores, 32 juniors, 19 seniors, and 2 unclassified students. The use of the classification variable represented an attempt to explore the developmental aspects of conformity. It has been found that any changes occurring in a college student as a result of his college experiences will occur before or by the end of his freshman year (Kammeyer 1966), therefore, two categories of classification were considered: college freshmen (N = 81) and all others (N = 130).

Of the 211 subjects, 4 had grade point averages below 1.5; 18 had grade point averages between 1.5 and 1.99; 84 had grade point averages between 2.0 and 2.49; 132 had grade point averages between 2.50 and 2.99; 130 had grade point averages between 3.0 and 2.49; and 54 had grade point averages between 3.5 and 4.0.

A grade point average of at least 2.5 in all hours attempted is one of the requirements for students wishing to take the pass-fail option at Oklahoma State University. As it was necessary for analysis to differentiate between a high and low grade point average, and as the sample used in this study was comprised of Oklahoma State University students, this cutting point was used to divide the subjects into a high

grade point average category (N = 158) and a low grade point average category (N = 53).

A frequency distribution of the characteristics of the subjects in each experimental group is shown in Table II. There were 52 subjects in experimental group 1, 57 subjects in experimental group 2, 52 subjects in experimental group 3, and 50 subjects in experimental group 4. Examination of Table II reveals some differences in the characteristics of the subjects in the different experimental groups. There were more freshmen than upperclassmen in Experimental Groups 1 and 4, while there were more upperclassmen than freshmen in Experimental Groups 2 and 3. There were more females than males in Experimental Groups 3 and 4, while in Experimental Group 2, there were more males than females. In Experimental Group 1 there was an equal number of males and females. In each experimental group, there were more subjects with high grade point averages than with low grade point averages. In Experimental Group 2 there were no subjects who were freshmen with low grade point averages; in fact, Experimental Group 2 contained fewer subjects with low grade point averages than any of the other experimental groups, and fewer freshmen subjects than any of the other experimental groups.

TABLE II

FREQUENCY DISTRIBUTION OF SAMPLE CHARACTERISTICS
BY EXPERIMENTAL GROUP

Group No.		Freshmen			Upperclassmen			Total
		Low GPA	High GPA	Subtotal	Low GPA	High GPA	Subtotal	
Experimental Group 1	Males	7	12	19	5	2	7	26
	Females	6	14	20	1	5	6	26
	Subtotal	13	26	39	6	7	13	52
Experimental Group 2	Males	0	2	2	5	24	29	31
	Females	0	2	2	4	20	24	26
	Subtotal	0	4	4	9	44	53	57
Experimental Group 3	Males	2	1	3	6	13	19	22
	Females	3	1	4	0	26	26	30
	Subtotal	5	2	7	6	39	45	52
Experimental Group 4	Males	8	7	15	0	5	5	20
	Females	4	12	16	2	12	14	30
	Subtotal	12	19	31	2	17	19	50
Total		30	51	81	23	107	130	211

CHAPTER IV

RESULTS

The data used in the analysis of the hypotheses are the conformity scores of the subjects. The results of analysis of variance of the data are presented in table form, as are the mean scores. The ten hypotheses of this study are examined in reference to this data.

The first three hypotheses are concerned with the relationship between the three independent variables, ambiguity of task, expertise of influence source, attractiveness of influence source, and the degree of conformity. While each of the first three hypotheses is directional, the null hypothesis, that no relationship exists between each variable and degree of conformity, was tested. If this null hypothesis was supported by the data, the directional hypothesis was rejected, but if the null hypothesis was not supported by the data, the directional hypothesis was accepted. The data pertinent to these hypotheses may be found in Tables III and IV.

TABLE III

MEAN CONFORMITY SCORES IN THE DIFFERENT VARIABLE TREATMENTS

Variable	N	Mean Conformity Score
Expertise of source of influence		
Low	218	1.43578
High	204	1.58333
	422	
Attractiveness of source of influence		
Low	208	1.40865
High	214	1.60280
	422	
Ambiguity of task		
Low	211	1.8957
High	211	1.82464
	422	
College classification of subject		
Low	162	1.74691
High	260	1.35769
	422	
College gradepoint average of subject		
Low	106	1.80188
High	316	1.40825
	422	
Sex of subject		
Male	198	1.43434
Female	224	1.57143
	422	
Overall Mean	422	1.50711

TABLE IV

ANALYSIS OF VARIANCE IN CONFORMITY SCORES AMONG THE FACTORS EXPERTISE OF SOURCE OF INFLUENCE, ATTRACTIVENESS OF SOURCE OF INFLUENCE, AND AMBIGUITY OF TASK

Source	Degrees of Freedom	F Value	Probability
Expertise	1	1.67993	0.1957
Attractiveness	1	3.43758	0.0644
Abmiguity	1	30.71193	0.0001+
Expertise*Attractiveness	1	13.86227	0.0002+
Expertise*Ambiguity	1	0.44565	0.5048
Ambiguity*Attractiveness	1	0.16028	0.6891
Expertise*Attractiveness*Ambiguity	1	0.85117	0.3568
N = 422		R-Square = 0.10891	

+ indicates that the F value is statistically significant at the .05 level

H_1: Degree of conformity exhibited will be greater when task ambiguity is high than when task ambiguity is low.

The first hypothesis is supported by the data. The mean conformity score when task ambiguity was low is 1.18957, while the mean conformity score when task ambiguity was high is 1.82464, as seen in Table III. Analysis of variance indicates that this difference is statistically significant ($p < .05$) when the effects of attractiveness

of influence source, expertise of influence source, and all possible interactions of the three independent variables are controlled, as Table IV indicates. This finding is in accordance with the findings of previous studies (e.g., Asch 1956); individuals are more likely to yield to social influence when the task is ambiguous than when the task is nonambiguous.

The relationship between attractiveness of influence source and degree of conformity is the focus of the second hypothesis.

H_2: Degree of conformity exhibited will be greater when attractiveness of the source of influence is high than when attractiveness of the source of influence is low.

The data in Table III indicates that the mean conformity score when attractiveness of the influence source was low is 1.40865, while the mean conformity score when attractiveness of the influence source was high is 1.60280. Although this difference was in the predicted direction, it is not statistically significant, as indicated in Table IV ($p > .05$), when the effects of task ambiguity and expertise of source of influence and all possible interactions of the three independent variables are controlled. Generally, other studies have shown attractiveness of influence source to have a significant effect on acceptance of social influence (e.g., Thibaut and Strickland 1956).

The relationship between the third independent variable of this study, expertise of influence source, and conformity is investigated by the third hypothesis.

H_3: Degree of conformity exhibited will be greater when reputed expertise of the source is high than when reputed expertise of the source is low.

When the effects of task ambiguity, source attractiveness, and all possible interaction of the three independent variables are controlled, expertise of the source of social influence is not significantly related to degree of conformity ($p > .05$), as Table IV indicates. The mean conformity score when expertise of the source of influence was low is 1.4357, and the mean conformity score when expertise of the source of influence was high is 1.58333. Thus, the direction of the difference was as predicted in the third hypothesis, but it is not statistically substantiated. Other studies have found expertise of source of influence to be significantly related to likelihood of acceptance of social influence (e.g., Mausner 1954), however.

Of the three independent variables -- task ambiguity, attractiveness of influence source, and expertise of influence source -- only the main effects of task ambiguity significantly affected degree of conformity. However, while the main effects of attractiveness of influence source and expertise of influence source were not statistically significant, the differences in conformity for each variable were in the predicted direction.

The fourth through the seventh hypotheses are null hypotheses concerned with investigating whether interaction among the independent variables may be important in determining the degree of conformity which occurs.

HO_4: There is no relationship between the interaction of ambiguity of the task with attractiveness of the source of influence and the degree of conformity exhibited.

HO_5: There is no relationship between the interaction of ambiguity of the task with reputed expertise of the source of influence and the degree of conformity exhibited.

HO_6: There is no relationship between the interaction of attractiveness of the source of influence with reputed expertise of the source of influence and the degree of conformity exhibited.

HO_7: There is no relationship between the interaction among ambiguity of the task, reputed expertise of the source of influence, and attractiveness of the source of influence, and degree of conformity exhibited.

In essence, hypotheses four through seven are aimed at determining if interaction between and among the three independent variables, task ambiguity, attractiveness of influence source, and expertise of influence source are important determinants of conformity.

Examination of Table IV reveals that only the effects of interaction between expertise and attractiveness (Hypothesis 6) are statistically significant ($p < .05$) when the main effects of task ambiguity, expertise of influence source, and attractiveness of influence source and all other possible interactions between and among the three independent variables are controlled. Thus, while neither

expertise of influence source nor attractiveness of influence source independently affects the degree of conformity significantly, the effect of the interaction between these two variables on the degree of conformity is statistically substantiated. The data in Table V indicates that the effect of expertise tends to supplement the effect of attractiveness on the degree of conformity. When attractiveness is high, high expertise adds to the effect of attractiveness on conformity, while low expertise subtracts from the effect of attractiveness on conformity. When attractiveness is low, high expertise subtracts from the effect of attractiveness on conformity while low expertise adds to the effect of attractiveness on conformity. Thus, the sixth hypothesis is rejected.

In contract to the interaction effect of attractiveness of influence source and expertise of influence source, the other possible interactions among the three independent variables do not significantly affect degree of conformity, as seen in Table IV. The fourth and fifth hypotheses are concerned with interaction of task ambiguity with the other two independent variables: the fourth hypothesis pertains to interaction of ambiguity of task with attractiveness of the influence source, while the fifth hypothesis pertains to interaction of ambiguity of task with expertise of influence source. When the main effects of the three independent variables and the effects of all other possible interactions between and among the three independent variables on conformity are controlled, the effect of interaction between ambiguity of task and attractiveness of the influence source on degree of conformity is not significant ($p > .05$), nor is the effect of interaction between task ambiguity and expertise of the influence source on degree of conformity statistically significant ($p > .05$). Thus both null

hypotheses may be tentatively accepted. While the main effects of ambiguity of task significantly affect degree of conformity, ambiguity of task does not appear to be operating in interaction with either attractiveness of influence source or expertise of influence source.

TABLE V

MEAN CONFORMITY SCORES BY ATTRACTIVENESS OF SOURCE OF INFLUENCE AND EXPERTISE OF SOURCE OF INFLUENCE

Attractiveness	Expertise		Marginal Means
	Low	High	
High	1.3333 (N = 114)	1.9100 (N = 100)	1.6028 (N = 214)
Low	1.5481 (N = 104)	1.2692 (N = 104)	1.4087 (N = 208)
Marginal Means	1.4357 (N = 218)	1.5833 (N = 204)	N = 422

The seventh hypothesis is concerned with interaction among the three independent variables, ambiguity of task, attractiveness of influence source, and expertise of influence source. Examination of Table IV reveals that when the main effects of the independent variables and the effects of all possible interactions between the

independent variables are controlled, interaction among the independent variables does not significantly affect degree of conformity ($p > .05$).

The analysis of variance test indicates that the main effects of ambiguity of task significantly affects degree of conformity when the main effects of attractiveness of influence source and expertise of influence source and the effects of all possible interaction between and among the independent variables are controlled. Ambiguity of task does not appear to be operating in interaction with either attractiveness of influence source or expertise of influence source but rather appears to be operating independently on degree of conformity. Neither attractiveness of influence source nor expertise of influence source appear to significantly affect degree of conformity when the main effects of the other independent variables and the effects of all possible interactions between and among the independent variables are controlled. However, the effect of interaction between expertise of influence source and attractiveness of influence source does significantly affect degree of conformity when all main effects of the independent variables and the effects of all other possible interactions between and among these variables are controlled, with the effect of expertise of the influence source tending to supplement the effect of attractiveness of influence source on the degree of conformity. Further, the three independent variables do not operate in interaction among themselves to effect conformity, when the main effects of these variables and the effects of possible interactions between these variables are controlled.

The aim of the eighth through the tenth hypotheses is to determine whether the addition of a control variable into the analysis of variance will in any way affect the main effects of the three independent variables and the effects of interactions between and among these variables on conformity. Three additional variables, sex of the individual, college grade point average of the individual, and academic classification of the individual, are considered.

HO_8: The introduction of the sex variable will not effect any changes in the main effects of the three independent variables, task ambiguity, source expertise, and source attractiveness, and the effects of interactions between and among these variables, on degree of conformity.

This hypothesis focuses on investigating possible changes which may be produced in the main effects of the three independent variables, task ambiguity, expertise of the influence source, and attractiveness of the influence source, and the effects of all possible interactions between and among these variables on the degree of conformity when the effects of the sex of the individual are controlled.

As seen in Table VI, controlling for the effects of the sex of the individual does not change the main effects of the three independent variables on degree of conformity. The main effects of task ambiguity significantly affects degree of conformity ($p < .05$) when the main effects of the independent variables as well as the sex variable and the effects of all possible interactions between and among these four variables on degree of conformity are controlled. Neither expertise

TABLE VI

ANALYSIS OF VARIANCE IN CONFORMITY SCORES AMONG THE FACTORS EXPERTISE OF SOURCE OF INFLUENCE, ATTRACTIVENESS OF SOURCE OF INFLUENCE, AMBIGUITY OF TASK, AND SEX OF SUBJECT

Source	Degrees of Freedom	F Value	Probability
Expertise	1	1.51120	0.2197
Attractiveness	1	3.63479	0.0573
Ambiguity	1	28.22682	0.0001+
Sex	1	0.73959	0.3903
Expertise*Attractiveness	1	12.95040	0.0004+
Expertise*Ambiguity	1	0.69085	0.4064
Expertise*Sex	1	1.35285	0.2455
Attractiveness*Ambiguity	1	0.31540	0.5747
Attractiveness*Sex	1	0.65180	0.4199
Ambiguity*Sex	1	0.99474	0.3192
Expertise*Attractiveness*Ambiguity	1	0.54889	0.4592
Expertise*Attractiveness*Sex	1	0.51744	0.4723
Expertise*Ambiguity*Sex	1	0.47301	0.4920
Attractiveness*Ambiguity*Sex	1	0.56122	0.4542
Expertise*Attractiveness*Ambiguity*Sex	1	0.87606	0.3498

N = 422 R-Square = 0.12245

+ indicates that the F value is statistically significant at the .05 level

of the influence source ($p > .05$) nor attractiveness of the influence source ($p > .05$) significantly affect the degree of conformity when the main effects of the other independent variables and the sex variable as well as the effects of all possible interactions between and among the four variables under consideration are controlled. Controlling for the main effects of the independent variables and the effects of all possible interactions between and among the four variables under consideration on conformity reveals that the sex of the individual does not significantly affect degree of conformity ($p > .05$), a finding which is inconsistent with the findings of various other studies (e.g., Coleman, Blake, and Mouton 1958).

The sex variables does not interact with any of the three independent variables to produce changes in degree of conformity. When the main effects of the four variables and the effects of all other possible interactions between and among these variables are controlled, the sex variable is not interacting with expertise of influence source to significantly affect degree of conformity ($p > .05$), nor is the sex variable interacting with attractiveness of the influence source ($p > .05$) or ambiguity of task ($p > .05$) to significantly affect degree of conformity.

Examination of Table VI also reveals that the additional control for the sex variable does not change the effects of the interactions between the three independent variables on degree of conformity. When the main effects of the four variables under consideration and the effects of all other possible interactions between and among these variables, the effects of the interaction between expertise of influence source and attractiveness of influence source still significantly affect

degree of conformity ($p < .05$). The additional control for sex does not change the effects of either interaction between ambiguity of task and expertise of influence source on degree of conformity ($p > .05$), or the effects of interaction between ambiguity of task and attractiveness of influence source on degree of conformity ($p > .05$).

The sex variable is not interacting with expertise of influence source and attractiveness of influence source ($p > .05$) to significantly affect degree of conformity when the main effects of the four variables under consideration and the effects of all other possible interactions between and among these four variables are controlled. The sex variable is not interacting with task ambiguity and expertise of the influence source to significantly affect degree of conformity ($p > .05$), nor is it interacting with task ambiguity and attractiveness of the influence source on degree of conformity when the main effects of the four variables and the effects of all other possible interactions between and among the four variables are controlled ($p > .05$).

Additional control for the sex variable does not affect the effect of interaction between task ambiguity, attractiveness of influence source, and expertise of influence source on degree of conformity ($p > .05$), nor does the sex variable interact with the three independent variables to significantly affect degree of conformity ($p > .05$).

Thus, the eighth hypothesis may be accepted, for the introduction of the sex variable into the analysis of variance did not produce changes in the main effects of the three independent variables nor the effects of interactions between and among these variables on degree of conformity.

The ninth hypothesis is aimed at investigation of changes which may be produced in the main effects of the three independent variables

and the effects of all possible interactions between and among these variables on the degree of conformity when the effects of the college grade point average (GPA) of the individual are controlled.

HO_9: The introduction of the grade point average variable will not effect any changes in the main effects of the three independent variables, task ambiguity, source expertise, and source attractiveness, and the effects of interactions between and among these variables, on degree of conformity.

Examination of Table VII reveals that additional controlling for the effects of GPA does not change the main effects of degree of ambiguity of task or expertise of influence source on degree of conformity. The main effect of task ambiguity on conformity remains significant ($p < .05$) when the GPA variable is introduced into the analysis of variance. Similarly, the main effects of expertise of influence source on degree of conformity remain statistically insignificant ($p > .05$). However, the main effects of attractiveness of influence source on degree of conformity become statistically significant when control for the effects of GPA is added ($p < .05$). Further, the main effects of GPA on conformity are significant ($p < .05$) when the main effects of the three independent variables and the effects of all possible interactions between and among the four variables under consideration are controlled. Examination of Table VIII reveals that when only GPA and attractiveness of influence source are considered, high GPA subtracts from the effect of attractiveness of influence soutce on degree of conformity, while low GPA

TABLE VII

ANALYSIS OF VARIANCE IN CONFORMITY SCORES AMONG THE FACTORS EXPERTISE OF SOURCE OF INFLUENCE, ATTRACTIVENESS OF SOURCE OF INFLUENCE, AMBIGUITY OF TASK AND COLLEGE GRADE POINT AVERAGE OF SUBJECT

Source	Degrees of Freedom	F Value	Probability
Expertise	1	0.45003	0.5027
Attractiveness	1	7.78879	0.0055+
Ambiguity	1	21.20648	0.0001+
GPA	1	6.07543	0.0141+
Expertise*Attractiveness	1	12.86961	0.0004+
Expertise*Ambiguity	1	0.63419	0.4263
Expertise*GPA	1	0.41232	0.5212
Attractiveness*Ambiguity	1	0.02225	0.8815
Attractiveness*GPA	1	3.59445	0.0587
Ambiguity*GPA	1	0.00020	0.9886
Expertise*Attractiveness*Ambiguity	1	1.28143	0.2602
Expertise*Attractiveness*GPA	1	2.54569	0.1114
Expertise*Ambiguity*GPA	1	0.26743	0.6053
Attractiveness*Ambiguity*GPA	1	0.04598	0.8303
Expertise*Attractiveness*Ambiguity*GPA	1	0.59520	0.4409

N = 422 R-Square = 0.13894

+ indicates that the F value is statistically significant at the .05 level

TABLE VIII

MEAN CONFORMITY SCORES BY ATTRACTIVENESS OF SOURCE OF INFLUENCE, CONTROLLING FOR GRADE POINT AVERAGE OF THE INDIVIDUAL

GPA	Attractiveness		Marginal Means
	High	Low	
Low	2.1521 (N = 46)	1.5333 (N = 60)	1.8019 (N = 106)
High	1.4646 (N = 168)	1.3980 (N = 148)	1.4083 (N = 316)
Marginal Means	1.6028 (N = 214)	1.4087 (N = 208)	N = 422

adds to the effect of attractiveness of influence source on degree of conformity. GPA is not interacting significantly with any of the three independent variables to affect degree of conformity. When the main effects of the four variables under consideration and the effects of all other possible interactions between and among these variables on degree of conformity are controlled, GPA does not interact with ambiguity of the task ($p > .05$) to significantly affect degree of conformity, nor does GPA interact with expertise of influence source ($p > .05$), or attractiveness of influence source ($p > .05$) to significantly affect conformity, although statistical significance is

approached by the effects of interaction between attractiveness of influence source and GPA.

Further examination of Table VII reveals that the addition of control for GPA does not change the significance of the effects of the interactions between the three independent variables on degree of conformity. When the main effects of the four variables and the effects of all other possible interactions between and among these variables are controlled, the effects of the interaction between expertise of influence source and attractiveness of influence source still significantly affects conformity ($p < .05$), while the effect of interaction between task ambiguity and expertise of influence source ($p > .05$) and the effect of interaction between task ambiguity and attractiveness of influence source ($p > .05$) on degree of conformity still are not statistically significant.

GPA is not interacting with expertise of influence source and attractiveness of influence source ($p > .05$) to significantly affect degree of conformity when the main effects of the four variables under consideration as well as the effects of all other possible interactions between and among these variables are controlled, is it interacting with task ambiguity and attractiveness of influence source ($p > .05$) nor with task ambiguity and expertise of influence source ($p > .05$) to significantly affect degree of conformity. Additional control for GPA does not affect the effect of interaction between task ambiguity, attractiveness of influence source, and expertise of influence source ($p > .05$), nor is it interacting with these variables ($p > .05$) to affect degree of conformity.

The ninth hypothesis may then be partially rejected, for the addition of the GPA variable into the analysis of variance did produce a change in the main effect of attractiveness of influence source, although it did not produce changes in the main effects of the other independent variables nor changes in the effects of interactions between and among these variables on degree of conformity. It should be noted that a change in only one of the seven relationships may well be a chance occurrence, although the significance of the main effect of GPA would indicate that it is likely a real effect.

The tenth hypothesis focuses on possible changes which may be produced in the main effects of task ambiguity, expertise of influence source, and attractiveness of influence source, and the effects of all possible interactions between and among these variables on the degree of conformity when the effects of academic classification of the individual are controlled.

HO_{10}: The introduction of the academic classification variable will not effect any changes in the main effects of the three independent variables and the effects of interactions between and among these variables on conformity.

Examination of Table IX reveals that controlling for the effects of classification does not change the main effects of the three independent variables on degree of conformity. The main effects of task ambiguity on conformity remains significant ($p < .05$) when the additional variable of classification is introduced into the analysis of variance. Neither expertise of the influence source ($p > .05$) nor attractiveness

TABLE IX

ANALYSIS OF VARIANCE IN CONFORMITY SCORES AMONG THE FACTORS EXPERTISE OF SOURCE OF INFLUENCE, ATTRACTIVENESS OF SOURCE OF INFLUENCE, AMBIGUITY OF TASK, AND COLLEGE CLASSIFICATION OF SUBJECT

Source	Degrees of Freedom	F Value	Probability
Expertise	1	0.00014	0.9905
Attractiveness	1	3.67372	0.0560
Ambiguity	1	17.87381	0.0001+
Classification	1	1.25976	0.2624
Expertise*Attractiveness	1	4.96346	0.0264+
Expertise*Ambiguity	1	0.08246	0.7741
Expertise*Classification	1	0.03416	0.8535
Attractiveness*Ambiguity	1	0.08637	0.7690
Attractiveness*Classification	1	2.95393	0.0864
Ambiguity*Classification	1	0.17888	0.6726
Expertise*Attractiveness*Ambiguity	1	0.07235	0.7881
Expertise*Attractiveness*Classification	1	1.24225	0.2657
Expertise*Ambiguity*Classification	1	0.00662	0.9352
Attractiveness*Ambiguity*Classification	1	0.16083	0.6886
Expertise*Attractiveness*Ambiguity* Classification	1	0.26493	0.6070
N = 422	R-Square = 0.12761		

+ indicates that the F value is statistically significant at the .05 level

of the influence source ($p > .05$) significantly affect the degree of conformity when the main effects of the other variables under consideration and the effects of all possible interactions between and among the four variables are controlled. The classification variable does not significantly affect conformity ($p > .05$) when the main effects of the three independent variables and all possible interactions between and among the four variables under consideration are controlled.

Classification does not interact with any of the three independent variables to produce changes in degree of conformity. When the main effects of the four variables and the effects of all other possible interactions between and among these variables are controlled, academic classification of the individual does not interact with ambiguity of the task ($p > .05$) to significantly affect degree of conformity, nor does classification interact with expertise of the influence source ($p > .05$) or attractiveness of the influence source ($p > .05$) to significantly affect degree of conformity.

Table IX also reveals that the addition of the control for academic classification of the individual does not change the significance of the effects of the interactions between the three independent variables on degree of conformity. When the main effects of the four variables and the effects of all other possible interactions between and among these variables on degree of conformity are controlled, the effect of the interaction between expertise of the influence source and attractiveness of the influence source still significantly affects degree of conformity ($p < .05$), while the effect of interaction between task ambiguity and expertise of influence source ($p > .05$), and the effect of interaction between task ambiguity and attractiveness of influence

source ($p > .05$) on degree of conformity still are not statistically significant.

Academic classification of the individual is not interacting with expertise of influence source and attractiveness of influence source ($p > .05$) to significantly affect degree of conformity when the main effects of the four variables considered and the effects of all other possible interactions between and among these four variables are controlled. Academic classification is not interacting with task ambiguity and expertise of the source of influence to significantly affect degree of conformity ($p > .05$) nor is it interacting with task ambiguity and attractiveness of influence source on degree of conformity ($p > .05$) when the main effects of the four variables and the effects of all other possible interactions between and among the four variables are controlled.

Additional control for the academic classification variable did not alter the effect of interaction between task ambiguity, attractiveness of influence source, and expertise of influence source ($p > .05$) on degree of conformity, and the academic classification variable was not interacting with the three independent variables to affect degree of conformity ($p > .05$).

Introduction of the academic classification variable into the analysis of variance did not produce changes in the main effects of the three independent variables nor the effects of interactions between and among these variables on degree of conformity; thus, the tenth hypothesis may be accepted.

Of the three factors introduced into the analysis of variance of the three independent variables, task ambiguity, expertise of influence

source, and attractiveness of influence source, only the college grade point average of the individual affected significant changes in the main effects of these variables or in the effects of interactions among and between these variables; no such changes were effected by introduction of the sex variable or the academic classification variable.

Additional control for GPA revealed attractiveness of influence source to significantly affect degree of conformity; GPA appeared to supplement the effect of attractiveness of influence source on degree of conformity, particularly when GPA was low. No significant changes in effects of interactions among and between the independent variables were identified by independently introducing the factors of academic classification, sex, or GPA into the analysis of variance of the three independent variables.

CHAPTER V

SUMMARY, FURTHER CONSIDERATIONS AND CONCLUSIONS

Purpose of Study

The individual in society is in continuous interaction with other individuals in society, and with various groups in society. As such, the individual is constantly subjected to pressures to act in certain ways. Not only is the individual's behavior modified by his interaction with others, but pressures from mass media also alter his behavior. Conformity is a basic aspect of human behavior, and as such, an understanding of the dynamics of conformity is of basic interest to the social scientist.

Numerous studies have focused upon various aspects of conformity. Most investigations of conformity have tended to specify certain isolated variables as associated with tendencies to conform. This study sought to explore the effects of interaction among the variables task ambiguity, expertise of influence source, and attractiveness of influence source upon conformity.

Methods and Procedures

An experimental framework which allowed for simultaneous variation of degree of task ambiguity, attractiveness of source of

influence, and expertise of source of influence, was employed in this research in order to explore the effects of the interaction between and among these variables on conformity.

The data for this study were obtained from a sample of 211 students in introductory sociology classes at Oklahoma State University. The method of collecting the data involved administration of a set of test items to the sample while majority pressures were being applied. The test booklet, which purported to be an "Inventory of General Skills" was comprised of test items of the nature found on general intelligence tests. The test booklet consisted of five critical items which were judged by pretest samples to be highly ambiguous and five critical items which were judged by pretest samples to be low in ambiguity, as well as fifteen filler items. The test was administered under four experimental conditions. The source of influence for the first experimental group (N = 52) was one which was low in attractiveness and low in expertise. The source of influence for the second experimental group (N = 57) was one which was low in attractiveness and high in expertise, while the source of influence for the third experimental group (N = 52) was high in attractiveness and low in expertise. The source of influence for the fourth experimental group was high in both attractiveness and expertise (N = 50).

The frequency with which the subject conformed to the contrived majority pressure was used as the conformity score of the subject. Each subject had two conformity scores: one for low ambiguity task items and one for high ambiguity task items. Thus, a total of 422 observations were recorded.

An analysis of variance procedure was used to determine the main effects and the effects of possible interaction between and among the three independent variables on conformity. Three additional variables, academic classification of the individual, sex of the individual, and college grade point average of the individual, were independently inserted into the analysis of variance procedure to determine whether the addition of a control variable into the analysis would in any way affect the main effects and the effects of possible interaction between and among the dependent variables. For testing statistical significance, the confidence level for rejecting the null hypotheses was assigned at the .05 level.

Summary of Results and Discussion

A central thesis of this study has been that interaction may exist among variables which influence the degree of conformity aroused. Ten hypotheses were tested in this investigation in order to explore this possibility.

The first three hypotheses dealt with the relationship between the three independent variables, task ambiguity, expertise of influence source, and attractiveness of influence source, and the degree of conformity occurring. These hypotheses predicted that degree of conformity exhibited would be greater when the condition of each independent variable was high than when the condition of each independent variable was low. Of the three variables, only the main effects of task ambiguity was found to be significantly related to degree of conformity. With respect to the first hypothesis it may be concluded

that a greater degree of conformity is exhibited by individuals when task ambiguity is high than when task ambiguity is low.

The main effects of expertise of influence source and the main effects of attractiveness of influence source were not found to be significantly related to degree of conformity, although in both instances the direction of the difference was as predicted, as was seen in Table I. Other studies have found both attractiveness of influence source (e. g., Thibaut and Strickland 1956) and expertise of influence source (e. g., Mausner 1954) to be significantly related to likelihood of acceptance of social influence.

One possible explanation for this discrepancy between the findings of other studies and the findings of this investigation resides in the fact that while other studies have primarily focused upon the effects of variation of individual variables, three variables were varied simultaneously in this investigation. Thus, the effects of a variable may be found to be significantly related to degree of conformity when only that one variable is relevant to the study, but when additional variables are controlled and the attention of the individuals being influenced is directed at more than one variable simultaneously, the individual impact of any single variable may be weakened.

Further, mode of judgement expression has bearing on the individual's yielding to conformity pressures. In this study, the individual made his response privately and anonymously, a situation which decreases amount of conformity occurring, as compared to a situation in which the individual makes his response publicly (Gerard 1964). Similarly, it could have had a weakening effect on the impact of the variables considered.

The possibility also exists that the attractiveness of the influence source and the expertise of the influence source were not actually manipulated by the experimenter in this study. That is, the subject may have failed to perceive pressure from these sources and thus, task ambiguity may have been the only variable operating in some instances.

The researcher felt that by focusing on the effects of the interaction of variables upon conformity, as well as the effects of the variables themselves, a greater understanding of the processes of conformity could be gained, as well as a more realistic understanding of these processes. Conformity is a complex behavior in response to complex situational and personal stimuli. Therefore, the remainder of the hypotheses dealt with the interaction of the independent variables and the effects of relevant third variables.

The next four hypotheses, Hypothesis Four through Hypothesis Seven, were proposed in order to investigate interaction of the independent variables. When an analysis of variance procedure was applied to the data, only the effect of interaction between expertise of influence source and attractiveness of influence source significantly affected degree of conformity. All other dual interaction effects in this analysis were not statistically significant, and the triple interaction effect in this analysis was not statistically significant.

Thus, task ambiguity was found to be operating independently to significantly affect degree of conformity while attractiveness of influence source and expertise of influence source were not found to be operating independently to significantly affect degree of conformity, but the interaction between the two variables was significant.

This interaction effect between expertise of influence source and attractiveness of influence source was not operating in the direction which would be expected. When source attractiveness was high, high expertise added to the effect of attractiveness on conformity. Thus, the condition of high source attractiveness and high source expertise was more conducive to conformity than the experimental situation of high source attractiveness and low source expertise, as would be expected. However, when source attractiveness was low, individuals conformed more when source expertise was low than when source expertise was high. Logically, it would be expected that a condition of low source expertise and low source attractiveness would be less conducive to the occurrence of conformity than a stiuation in which source expertise is high while source attractiveness is low. This was not found in this investigation however. The experimental condition of low source attractiveness with high source expertise was found to be the least conducive situation for occurrence of conformity.

In the event that certain characteristics of the subjects in the high source expertise-low source attractiveness experimental condition were found to differ greatly from the characteristics of the subjects in the low source expertise-low source attractiveness experimental condition, these could be used to partially explain why the subjects exposed to the former condition tended to conform less than the subjects exposed to the latter experimental condition. Several characteristics of the influenced person have been found to be related to degree of conformity. Such characteristics may include need for achievement, need for affiliation, emotional stability, level of intelligence, or confidence in one's own abilities. It is possible that

the characteristics of the subjects in the low source attractiveness-high source expertise situation were such as to be less susceptibility to social influence, relative to the susceptibility of the subjects in the low source attractiveness-low source expertise situation; however, this cannot be examined in this study.

Added to the idea of differing sample characteristics, the concept of differential motivation towards conformity, as proposed by Deutsch and Gerard (1955) could also be used to explain these findings. These personal attributes may interact with the social situation the individual confronts to determine his susceptibility to social influence. The conceptual distinction between normative social influence and informational social influence as two differently motivated processes which may produce conforming behavior suggests that the personality factors associated with conforming behavior in one type of social situation may not be associated with conforming behavior in other situations. Indeed there may be specific personality variables which predispose individuals towards one or the other motivation process. Conformity exhibited under experimental conditions characterized high source expertise would be behavior which is a means of obtaining information, achieving cognitive structure or understanding, or gaining closure or solution in a problem solving situation, especially if task ambiguity is high or source attractiveness low. Conformity exhibited under experimental conditions characterized by low source expertise would probably be behavior which involves conforming for sake of conforming, especially if task ambiguity is low or source attractiveness high. It might be expected that regard for the ability of the source of influence would be more important than one's personal attraction to

the source in the case of informational social influence, but that personal attraction would be more important than regard for the influencer's ability in the case of normative social influence. If the characteristics of the subjects in the low source attractiveness-high source expertise situation were such as to predispose them towards the normative social influence motivation processes, it is possible that the subjects were not influenced by the high expertise of the influence source.

It is also possible that the incongruence between the attractiveness of influence source and the reputed expertise of influence source may have led the subjects in the low attractiveness-high expertise situation to discount the reputed expertise of the influence source.

Testing of Hypotheses 1 through 7 has shown all three independent variables to be significantly affecting degree of conformity. Degree of task ambiguity is directly related to degree of conformity regardless of source expertise or source attractiveness. Source expertise and source attractiveness are related to conformity only in relationship with each other. Task ambiguity appears to be the most important of the three variables in its effect on degree of conformity. Examination of Table X reveals that greater amounts of conformity appeard in conditions characterized by high task ambiguity (Ranks 1-3) with the exception of the low source attractiveness-high source expertise-high task ambiguity situation (Rank 5) in which less conformity occurred on the average than in the high source attractiveness-high source expertise-low task ambiguity situation.

TABLE X

MEAN CONFORMITY SCORES IN THE DIFFERENT EXPERIMENTAL GROUP TREATMENTS

Experimental	Group-Task Situation			N	Mean Conformity Score	Rank
	Attractiveness	Expertise	Ambiguity			
1	Low	Low	High	52	1.9808	2
	Low	Low	Low	52	1.1154	6
2	High	Low	High	57	1.6140	3
	High	Low	Low	57	1.0526	7
3	Low	High	High	52	1.5192	5
	Low	High	Low	52	1.0192	8
4	High	High	High	50	2.2200	1
	High	High	Low	50	1.6000	4
		Total 422				

Three additional variables were separately entered into the analysis of variance procedure, sex of the individual, college grade point average of the individual (GPA), and academic classification of the individual, in hopes of gaining further understanding of conforming behavior. Of the three control variables, only the main effects of GPA were found to be significantly related to degree of conformity occurring: students with low grade point averages conformed on the average more than students with high grade point averages. This relationship may in part be due to the fact that individuals who have received positive feedback on past judgements are more likely to learn to trust their own judgements and abilities than are people who have not received positive feedback on past judgements, and people who are confident in their own judgement in a situation are more resistant to pressures to conform than are people who are uncertain and insecure (Kelly and Lamb 1957).

Although the difference was not statistically significant, on the average females did conform more than males, and freshmen did conform more than upper classmen. The directional findings in relation to the sex variable are in accordance with the findings of many other studies (e.g., Coleman, Blake, and Mouton 1958). Again, the possible explanation for this discrepancy in significance between the findings of other studies and the findings of this investigation resides in the fact that while other studies have primarily focused upon the effects of variation of individual variables, three variables were varied simultaneously in this investigation and the effects of three additional variables were separately controlled, possibly weakening the individual impact of any single variable.

The academic classification variable was brought into the analysis in an attempt to explore the developmental aspects of conformity. Various studies have shown the factor of age to be related to conformity (e.g., Tuddenham 1961). As an individual grows older, he tends to become more self-sufficient and less dependent upon others for guidance due to increased confidence in self. Similarly, as the beginning college student who is entering a new and relatively different environment learns the appropriate roles and norms, he becomes less dependent upon others for guidance as to what behavior is appropriate. Thus, it would be expected that a college freshman would not have developed as much confidence in self on the average as the upper classman, who has had prior experience in the college environment. The direction of the findings of this investigation were consistent with this idea: freshmen tended to conform more on the average than upper classmen, although this difference was not statistically significant. The lack of statistical significance may be at least partially accounted for by the fact that freshmen have had some previous experience and success with this type of test or they would not be in college.

Of the three additional control variables, only GPA significantly affected either the main effects or the effects of interaction of the three independent variables on degree of conformity. When the GPA variable was introduced into the analysis of variance, the main effects of task ambiguity on conformity remain significant ($p < .05$), while the main effects of source expertise on conformity remained statistically insignificant. However, when control for the effects of GPA was added, the main effects of attractiveness of influence source

became statistically significant ($p < .05$). High GPA subtracted from the effects of attractiveness of influence source while low GPA added to the effects of attractiveness of influence source. Indeed, statistical significance was approached by the effects of interaction between attractiveness of influence source and GPA ($p > .05$), as was seen in Table X. No other interactions were affected or produced by controlling for GPA.

A high GPA possibly signifies that an individual has experienced prior success in taking tests and examinations and has developed more confidence in his own judgements and abilities than individuals with low GPAs. Thus, individuals with a high GPA would possibly tend to be less dependent upon others in making judgements than individuals with low GPAs. Therefore, it is possible that the attractiveness of the influence source is of greater importance to the individual with a low GPA, and thus, the effect of low attractiveness of influence source on degree of conformity would be greater than for an individual with a high GPA, as would the effects of high attractiveness of influence source.

The effects of GPA on conformity, both by itself and in interaction with attractiveness of influence, are of special significance when one considers the fact that as the subjects in this study were college students, even a low grade point average on the college level may indicate abilities above the average of the general population.

Conclusions

Conformity is a complex matter of adjustment which occurs when a host of circumstances are favorable, and this research was

designed to investigate the interactions between factors which affect conformity. The results of this investigation reveal that interaction between factors is occurring to affect degree of conforming behavior exhibited, but not all variables which affect conformity are operating in interaction with other variables. Conformity is not a simple phenomenon, and the utility and practical purpose of conforming behavior may differ from one situation to another.

Vast amounts of literature have identified numerous components of conforming behavior. Only six factors were considered in this research: task ambiguity, attractiveness of influence source, and expertise of influence source were considered as independent variables, while sex of the individual influenced, academic classification of the individual influenced, and college grade point average of the individual influenced were considered as third variables. While the directions of the difference of conforming behavior for each variable condition were consistent with the literature, the differences were statistically significant only in relation to task ambiguity and GPA. In fact, the relation between task ambiguity and degree of conformity was the most consistent and pronounced finding of this study. Yet, task ambiguity was not working in interaction with any other variable considered to affect conformity.

On the other hand, while neither attractiveness of influence source nor expertise of influence source significantly affected conformity independently, they did interact to affect conformity. Further, when the effects of GPA were controlled, the main effects of attractiveness of influence source emerged as significant, and while

interaction between the two variables was not statistically significant, a definite trend was evident.

It had been hoped that findings of this research would enable the formulation of some type of predictive model. However, it is evident that further research in the area of conformity will be necessary for any such formulation. Interaction as well as additive action may exist among many variables to determine the degree of conformity aroused. Different variables appear to affect conformity differently from situation to situation, individual to individual. Prediction is possibly only when the combinations of characteristics of the behavioral context in which conformity occurs, characteristics of the source of influence towards conformity, and characteristics of the individual being influenced are simultaneously considered.

Limitations of the Study

There were some limitations in the study, and it is necessary to discuss these limitations so that the findings and conclusions may be interpreted with these limitations in mind.

The sample employed in this research consisted of college students enrolled in introductory sociology classes at Oklahoma State University, a sample which is not typical of the total population of American adults. While this was an exploratory study to investigate the effects of interaction of variables on conformity and it was not felt to be necessary to use a random sample, it may be that the education of the individual may emerge as a factor contributing to the processes underlying conforming behavior, and thus, the findings would not be applicable to all individuals.

A related problem lays in the fact that so many factors have been found to be related to conforming behavior, including various characteristics of the behavioral activity influenced, the source of influence, and the individual on whom pressures are exerted. Only three independent variables, task ambiguity, expertise of influence source, and attractiveness of influence source, and three control variables, sex of the individual, academic classification of the individual, and college grade point average of the individual, were considered in this investigation. One of the major problems in considering the phenomenon of conformity has been the complexity and diversity of the factors affecting conforming behavior. As only six of a multitude of factors discovered thusfar as contributing to degree of conformity were considered in this investigation, further investigations of this nature, employing simultaneous variation of numerous other factors could possibly yield different results.

Further, conformity was investigated in relation to only one type of behavioral activity in this study. The nature of the behavioral activity influenced could significantly affect the processes of conformity taking effect and the factors relevant to these processes.

Another experimental limitation of this study is the use of a "supposed" group majority. This use of a "supposed" influence source, rather than face-to-face confrontation with the source of influence may have had a diminishing effect on amount of conformity exhibited by the subjects. Other studies have employed a simulated source of influence, and it appears that in general, people do react to such simulations as though other people were actually present (Dittes and Kelly, 1956; Olmstead and Blake 1955), and hence that simulation

procedures are adequate. As the individual is constantly bombarded with pressures to conform via magazines, newspapers, radio, and television, as well as those pressures exerted during interaction with others, such a methodological approach should yield data which is useful for research on conformity, and at the same time, economical for the researcher. Yet, it is not inconceivable that conformity which occurs with a simulated source of influence may be governed by processes differing from those which occur when pressures toward conformity are exerted during face-to-face interaction with the source of influence.

It is also necessary to note that when the control variables were added to the analysis of variance, relatively large unequal cell sizes occurred, as it was not feasible for the experimenter to control for the frequency of occurrence of variations in these characteristics of the subjects in the sample. Although the analysis of variance procedure utilized in the statistical analysis of the data corrected for unequal subclasses, if the research were repeated with equal cell sizes, significance could easily change.

The addition of qualitative data from post-experimental questionnaires or interviews could have added substantially to this investigation. By allowing the subject to describe feelings he had about himself, the source of influence, the behavioral task, the experimental condition, and perception of pressures to conform, a greater understanding of the processes underlying the conforming behavior which occurred as well as the processes underlying the non-conforming behavior which occurred, could have been obtained.

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APPENDIX A

FREQUENCY DISTRIBUTION AND MEAN RATINGS OF SOURCE ATTRACTIVENESS

TABLE XI

FREQUENCY DISTRIBUTION AND MEAN RATINGS OF SOURCE ATTRACTIVENESS

Source	Extremely Attractive 1	Moderately Attractive 2	Neutral in Attractiveness 3	Moderately Unattractive 4	Extremely Unattractive 5	Mean Rating
Homosexuals	5	1	11	22	143	4.68
Prisoners	2	4	53	84	38	3.86
Lawyers	90	82	41	2	1	2.17
Athletes	105	67	33	7	4	2.14
Juvenile Delinquents	5	4	45	97	31	3.88
Ministers	67	70	60	6	5	2.42
Communists	3	6	39	42	91	4.19
Fraternities	57	54	45	20	29	2.92
Sororities	53	49	44	21	27	2.79
Drug Culture	15	14	32	48	75	3.92
John Birch Society	9	14	33	48	76	3.93
Religious Groups	38	70	58	17	2	2.39
Mental Patients	1	6	80	62	41	3.64
Doctors	99	76	20	6	5	2.00
Rich People	43	60	69	15	3	2.47
Businessmen	35	87	57	6	1	2.27
Drunks	3	2	37	81	57	4.04
Sociology Majors	17	39	108	9	11	2.83
Cowboys	18	28	66	47	23	3.19
Radical Groups	5	16	55	76	29	3.62
Social Workers	36	79	65	8	5	2.48
Bankers	26	83	70	6	1	2.39
Boy Scouts	33	57	82	13	4	2.58
Girl Scouts	26	57	77	15	7	2.59
Christian Youth Fellowships	55	65	59	8	3	2.27
Civic and Volunteer Groups	52	80	48	6	1	2.14
Peace Corps	61	72	42	9	1	2.07
Jaycees	12	64	91	11	4	2.65
Policemen	22	74	55	21	11	2.63
Trashmen	8	15	79	58	22	3.43
Young Businessmen	44	81	51	10	.0	2.22
Women's Libbers	11	24	54	60	34	3.51
College Women	62	66	43	7	3	2.09
Secretaries	26	69	74	10	2	2.42
Nurses	44	79	58	2	2	2.19
Red Cross	45	75	54	6	3	2.20
Vista	51	64	53	9	7	2.27
Successful Businessmen	45	84	47	6	1	2.13
Cheerleaders	37	54	64	17	10	2.53
Counselors	19	72	67	18	5	2.56
Student Senate	8	35	94	32	11	3.02
Faculty Wives or Husbands	7	27	127	10	9	2.93

N = 180

APPENDIX B

TEST BOOKLET AND ANSWER SHEET

INVENTORY OF GENERAL SKILLS

Note: This test booklet contains items which will be utilized in the development of educational tests. You are taking part in one of a series of pretests which are being conducted in order to establish baselines of skills.

INSTRUCTIONS: Read each item, pick out the correct response, and indicate it in the appropriate blank on this answer sheet. At the right of each page of items within the booklet is a column labeled "Majority Response," and beside each item an answer will be found. The answers found in this column serve only as an indicator of the responses of the first group of subjects tested, and the word "majority" may imply anything from 51% to 100%. This column may or may not be of interest to you, and you are free to look at it or ignore it, according to your own preference. Answer each item; do not skip any. There is no time limit.

1. (a) (b) (c) (d) (e)
2. (a) (b) (c) (d) (e)
3. (a) (b) (c) (d) (e)
4. (a) (b) (c) (d) (e)
5. (a) (b) (c) (d) (e)
6. (a) (b) (c) (d) (e)
7. (a) (b) (c) (d) (e)
8. (a) (b) (c) (d) (e)
9. (a) (b) (c) (d) (e)
10. (a) (b) (c) (d) (e)
11. (a) (b) (c) (d) (e)
12. (a) (b) (c) (d) (e)
13. (a) (b) (c) (d) (e)
14. (a) (b) (c) (d) (e)
15. (a) (b) (c) (d) (e)
16. (a) (b) (c) (d) (e)
17. (a) (b) (c) (d) (e)
18. (a) (b) (c) (d) (e)
19. (a) (b) (c) (d) (e)
20. (a) (b) (c) (d) (e)
21. (a) (b) (c) (d) (e)
22. (a) (b) (c) (d) (e)
23. (a) (b) (c) (d) (e)
24. (a) (b) (c) (d) (e)
25. (a) (b) (c) (d) (e)

The following personal data is also necessary for computation of skill baselines:

What is your sex?

____1 Male
____2 Female

What is your academic classification?

____1 Freshman
____2 Sophomore
____3 Junior
____4 Senior
____5 Graduate
____6 Unclassified

What is your College Grade Point Average?

____1 Less than 1.5
____2 1.5 - 1.99
____3 2.0 - 2.49
____4 2.5 - 2.99
____5 3.0 - 3.49
____6 3.5- 4.0

MAJORITY RESPONSE:

1. The opposite of honor is: **b**
   a. glory
   b. disgrace
   c. cowardice
   d. fear
   e. defeat

2. Glove is to hand as sock is to: **d**
   a. arm
   b. shoe
   c. leg
   d. foot
   e. hose

3. Look at the three words on the left. Which word on the right belongs with these three? **b**

   Doctor
   Lawyer
   Engineer

   a. Farmer
   b. architect
   c. mechanic
   d. salesman
   e. laborer

4. What number should come next to finish the series 1, 2, 4, 7, 11 ? **a**
   a. 14
   b. 15
   c. 16
   d. 18
   e. 22

5. Pick the word whose meaning is closest to the word EXCITEMENT: **b**
   a. stimulation
   b. commotion
   c. agitation
   d. entrancement
   e. turbulence

6. Pick the word whose meaning is closest to the word INDUCE: **d**
   a. grant
   b. prolong
   c. mix
   d. persuade
   e. convict

7. Chose the correct answer: A woman weighed 125 pounds. After she had gained $4\frac{1}{2}$ pounds, lost 6 pounds, and gained $2\frac{1}{2}$ pounds, how many pounds did she weigh? **c**
   a. 124
   b. 125
   c. 126
   d. 127
   e. 128

MAJORITY RESPONSE:

8. A word meaning nearly the same as ROBUST is: **a**
   a. cheerful
   b. strong
   c. fat
   d. small
   e. wealthy

9. What number should come next to finish the series **b**
   3, 1, 4, 6, 2 ?
   a. 5
   b. 7
   c. 8
   d. 14
   e. 10

10. A word meaning nearly the same as BEGINNING is: **a**
    a. commencement
    b. onset
    c. inception
    d. embarkment
    e. initial

11. A boy bought candy bars at 90 cents for a box of 24 and sold them at 5 cents each. How much did he make on each bar? **c**
    a. 30 cents
    b. 3 3/4 cents
    c. 1 1/4 cents
    d. 4/5 cents
    e. none of these

12. Chose the word which has the same meaning or most nearly the same meaning as JAVELIN: **e**
    a. bleach
    b. coffee
    c. jacket
    d. rifle
    e. spear

13. A man has to take a 300 mile trip by car. If he goes 40 miles each hour, how many miles does he still have to travel after driving $5\frac{1}{2}$ hours? **a**
    a. 180 miles
    b. 100 miles
    c. 60 miles
    d. 2 miles
    e. none of these

14. What number should come next to finish the series **e**
    2, 4, 3, 5, 4 ?
    a. 2
    b. 3
    c. 4
    d. 5
    e. 6

MAJORITY RESPONSE:

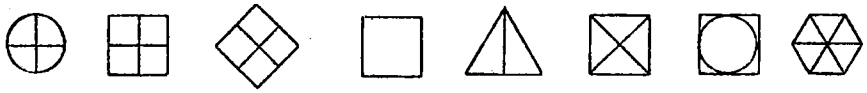
15. Pick the word or phrase whose meaning is closest to the word DEPRESSION: — a
    a. exaltation
    b. medallion
    c. parsimonious
    d. pervert
    e. persuade

16. Chose the correct answer: $\frac{.7}{.05}$ is equal to which of the following: — c
    a. 7/50
    b. 7/5
    c. 14
    d. 35
    e. none of these

17. Indicate the figure that will result from superimposing the first two figures: — a

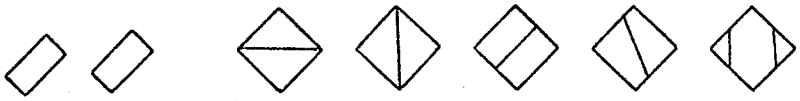
a. b. c. d. e.

18. The first three drawings in the row are alike in a certain way. Find the drawing at the right that goes with the first three. — e



a. b. c. d. e.

19. Choose the figure that would result if the pieces in the first section were assembled: — c

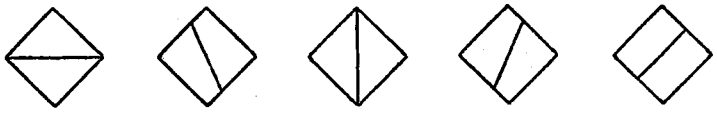


a. b. c. d. e.

20. Select the item that completes the series: — c

a. b. c. d. e.

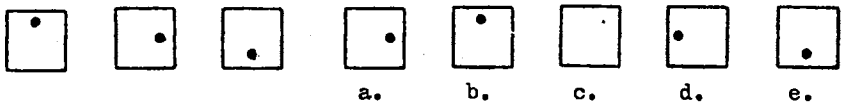
21. Which one of these figures does not belong with the other four? — b



a. b. c. d. e.

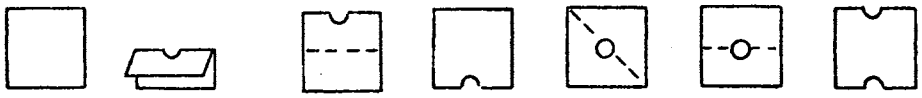
MAJORITY RESPONSE:

22. Select the figure that follows the movement sequence established by the three figures in the stem of the item: d

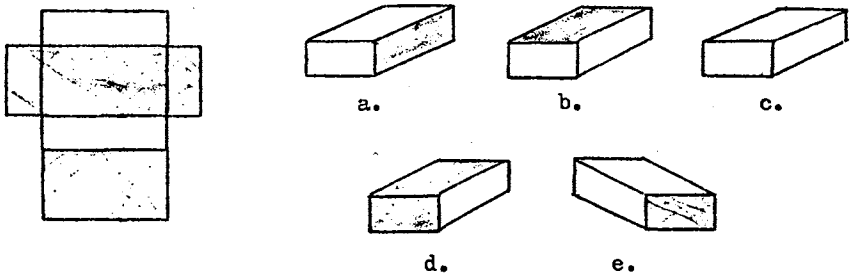


23. Choose the figure that would result if the pieces in the first section were assembled: a

24. Select the diagram that shows how a paper folded and cut as in the stem of the item will look when unfolded: d



25. Which one of the following figures could be made by folding the pattern at the left? The pattern shows the outside of the figure. Note the grey surfaces. e



APPENDIX C

PRETEST RESPONSE DISTRIBUTION FOR CRITICAL ITEMS

TABLE XIII

PRETEST RESPONSE DISTRIBUTION FOR CRITICAL ITEMS

	Response				
	A	B	C	D	E
High Ambiguity Items					
5	18* (35)	13 (24)	2 (4)	15 (29)	3 (6)
9	22 (43)	15 (29)	13 (25)	1 (2)	0 (0)
10	17 (33)	7 (14)	6 (12)	4 (8)	17 (33)
15	16 (31)	8 (16)	19 (37)	8 (16)	0 (0)
21	12 (24)	10 (20)	7 (14)	7 (14)	15 (29)
Low Ambiguity Items					
4	6 (12)	4 (8)	40 (78)	0 (0)	1 (2)
8	10 (20)	38 (75)	1 (2)	1 (2)	1 (2)
13	2 (4)	3 (6)	7 (14)	0 (0)	39 (76)
18	0 (0)	0 (0)	45 (88)	2 (4)	4 (8)
25	0 (0)	7 (14)	0 (0)	42 (82)	2 (4)
	N = 51				

*The number in parentheses is the percentage

APPENDIX D

ORAL INSTRUCTIONS FOR ADMINISTRATION OF TEST TO EXPERIMENTAL GROUPS

You have been selected to take part in the development of an educational test. This test will measure the proficiency of individuals in basic general skill areas, such as arithmetical reasoning and problem solving, vocabulary skills, spatial perception, and general discrimination skills. This test will not measure intelligence, but only proficiencies in basic skill areas.

In order to interpret any individual score obtained on such an inventory it is necessary to conduct pretests with the instrument. The purpose of pretesting is to establish baselines of skills; to determine the range and distribution of skill proficiency among various groups of individuals. Pretesting allows for the standardization of scores; norms or average scores of various groups of individuals are computed, and individual scores become meaningful when compared to these average scores.

You are taking part in one of a series of pretests which are being conducted in order to establish baselines of the skills which will be included in this inventory. The completed inventory will consist of over 200 items; however, these 200 items have been divided into a number of pretests, each consisting of only 25 items of varying difficulty. As this inventory is intended to be applicable to the general population, many different groups of individuals, from different walks of life, are taking part in the pretesting.

Experimental Group 1: Low attractiveness
Low expertise

As a matter of fact, this particular pretest was first administered to a group of adjudicated juvenile delinquents at a detention center in the Southwest. I might add that this particular group of

delinquents does not have a past record of scoring extremely high on tests of this nature.

Experimental Group 2: Low attractiveness
High expertise

As a matter of fact, this particular pretest was first administered to a group of adjudicated juvenile delinquents at a detention center in the Southwest. I might add that this particular group of delinquents has a past record of scoring extremely high on tests of this nature.

Experimental Group 3: High attractiveness
Low expertise

As a matter of fact, this particular pretest was first administered to a group of civic and volunteer group members in a community in the Southwest. I might add that this particular group of civic and volunteer group members does not have a past record of scoring extremely high on tests of this nature.

Experimental Group 4: High attractiveness
High expertise

As a matter of fact, this particular pretest was first administered to a group of civic and volunteer group members in a community in the Southwest. I might add that this particular group of civic and volunteer group members has a past record of scoring extremely high on tests of this nature.

I will now pass out the pretest. Each of you will receive a pretest booklet and an answer sheet. Please do not open the test booklet until I indicate that it is to be opened. (PASS OUT TEST BOOKLETS AND ANSWER SHEETS.) Is there anyone who does not have both a

pretest booklet and an answer sheet? (ASCERTAIN THAT ALL INDIVIDUALS HAVE BOTH AN ANSWER SHEET AND A TEST BOOKLET.)

Please look at the answer sheet with me. You will note that on the right hand portion of the page there is a column of questions pertaining to personal data: sex, academic classification, and college grade point average. This information is necessary for the computation of skill baselines. Please mark the proper response for each of these questions. You may do so now. (ALLOW TIME FOR MARKING RESPONSES ON ANSWER SHEET.)

On the left hand portion of the answer sheet, you will note that there is a column of response blanks, numbered from 1 to 25. Open your pretest booklet to the first page, please. You will note that each item has five alternative responses, labelled "a", "b", "c", "d", and "e". As you read each item in the pretest booklet, pick out the correct response and indicate it in the appropriate blank on the answer sheet. Be sure to color in the appropriate response completely. If you should desire to change you response on any question, and you are using an inkpen, please do it in this manner: mark an "X" through the response which you wish to change. Then, mark the response which you feel to be correct, and draw a circle around it to indicate that it is the response you have chosen as correct. (ILLUSTRATE ON CHALKBOARD.)

You will note that at the right of each page of items within the pretest booklet is a column labeled "Majority Response," and beside each item an answer is found in this column. The answers found in

this column serve only as an indicator of the response of the first group of subjects pretested.

Experimental Group 1: Low attractiveness
Low expertise

As you will recall, this first group of subjects pretested were juvenile delinquents at a southwestern detention center who have not scored extremely high on tests of this nature in the past.

Experimental Group 2: Low attractiveness
High expertise

As you will recall, this first group of subjects pretested were juvenile delinquents at a southwestern detention center who have in the past scored extremely high on tests of this nature.

Experimental Group 3: High attractiveness
Low expertise

As you will recall, this first group of subjects pretested were civic and volunteer group members in a southwestern community who have not scored extremely high on tests of this nature in the past.

Experimental Group 4: High attractiveness
High expertise

As you will recall, this first group of subjects pretested were civic and volunteer group members in a southwestern community who have in the past scored extremely high on tests of this nature.

The word "majority" may imply anything from 51 percent to 100 percent. This column may or may not be of interest to you, and you are free to look at it or ignore it, according to your own preference. You are now ready to begin the pretest: answer each item; do not skip any. There is no time limit. When you have completed

answering all items, please close the test booklet and place your answer sheet on top of the pretest booklet. Are there any questions? (ASCERTAIN THAT THERE ARE NO QUESTIONS.) You may begin.

VITA

Terry Ann Dean

Candidate for the Degree of

Master of Science

Thesis: A STUDY OF THE EFFECT OF INTERACTION AMONG VARIABLES AFFECTING CONFORMITY

Major Field: Sociology

Biographical:

Personal Data: Born in Bartlesville, Oklahoma, September 18, 1948, the daughter of Marion Dean, Jr. and Patricia Ann Dean.

Education: Graduated from College High School, Bartlesville, Oklahoma in May, 1966; attended Northeastern State College, Tahlequah, Oklahoma, 1967 to 1970, received Bachelor of Arts degree from Northeastern State College in 1971 with a major in Sociology and Psychology; enrolled in graduate study at Northeastern State College, 1971; completed requirements for the Master of Science degree in Sociology at Oklahoma State University in May, 1974.

Professional Experience: Graduate teaching assistant, Oklahoma State University, Department of Sociology, 1971-73; instructor, Oklahoma State University Technological Institute, 1973; graduate teaching assistant, Oklahoma State University, Department of Sociology, 1974.