

PERCEPTUAL DETERMINANTS
OF COLLECTIVE VIOLENCE

A Dissertation
Presented to
the Faculty of the Graduate Studies
University of Manitoba

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
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August 1971

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BIBLIOGRAPHY

Evelyne Marie Reese was born in Notre-Dame des Pins, Quebec on July 4, 1932. She received her elementary school education in St-Laurent, Quebec, and high school in McLennon, Alberta. In 1954, she obtained a teacher's certificate at the University of Alberta. For eight years she taught in elementary and junior high schools in Alberta, North West Territories and Manitoba. In 1969, she graduated from the University of Manitoba with a degree of Bachelor of Arts. Received a Fellowship in 1970 when she was accepted at the Faculty of Graduate Studies. She will receive the Master of Science degree in October, 1971.

ABSTRACT

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Perceptual Determinants of Collective Violence

Five groups of university students were compared to determine if moral and civil authority, the source of the authority, frustration, punishment and peer group pressure would affect the perception of a collective act of violence as well as the orientation of perception when controlling education and political affiliation. The results showed a significant difference between the heterogeneous group and all the groups except for the social science group. There was an indication that all the groups differed from each other slightly and that they were affected differently.

Punishment, Chinese civil authority, and Chinese authority of good conduct tended to elicit more authoritarian responses than peer group pressure, Christian moral authority, frustration, and Canadian civil authority except for the physical science group. The results of the battery of personality tests were consistent with the experimental conditions.

ACKNOWLEDGEMENTS

My sincere appreciation and gratitude are expressed to Dr. Hugh Brown, and Dr. Lola E. Jackson, whose support, understanding, and encouragement have helped me through this year of graduate study. I am also grateful for the thoughtful comments and suggestions offered by my committee members, Dr. Hugh Brown, Dr. Lola E. Jackson, and R. Stuart D. Johnson. I wish to acknowledge the persons who helped me carry out this study: Dr. I. S. Bilash, and Lydia Chase, who helped on the interpretation of the Hand Test, the administration of the Family Studies Department and the Audio-Visual Aid Center for the rooms and materials which were made available for the study. My deep appreciation goes to all the students who so willingly gave up their precious time to serve as my subjects. At this time, I feel that words are inadequate to express my heartfelt gratitude to my husband whose support, patience and faith in me never failed. I also wish to express to my children my love and gratitude for the mature understanding that they have displayed during all these years of studies. Last, but not least, I again have no words to express my sincere appreciation to Vivienne Doyle who, during all my years of studies, typed my term papers, proposal and thesis, and patiently unscrambled my writing.

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CHAPTER I

INTRODUCTION

Violence has been a common human behavior perhaps since the very beginning of man. The recent intensified interest in collective aggression shown by social scientists, the media, and governments gives the impression that never before was man faced with such a widespread phenomenon. Historians, archaeologists, and anthropologists provide some evidence that aggression or more correctly, that the domination of relatively large groups by individuals, or a small minority, was accomplished through violence, and that it has been the lot of human beings in the societies that they have created (Mumford, 1961; Graham & Gurr, 1969; Hammond, 1969; Mason, 1970). The trend has been to either accept this condition and its consequences as inevitable or to justify or ignore its existence. It is only recently that social scientists have begun to associate collective violence directly with dissatisfaction with political authority and institutional authority or domination rather than with strictly economic conditions (Gurr, 1970; Mason, 1970).

Strangely enough, most of the literature which is available on violence is produced by historians. The relatively few studies done by political scientists indicate that political or collective violence has until recently not been considered a conventional area of study. It is not surprising that Gurr (1970) was able to find only twenty-nine articles dealing with violence in the American Political Science Review

since its foundation in 1908, and fifteen of those were published after 1961.

A handful of experimental studies have investigated the social-psychological mechanisms of collective violence. Most of these looked at authoritarian, democratic and "laissez-faire" group situations and observed the subjects behaving in these different environments. The general assumption derived from these observations was that the aggressive acts were efforts to deal with the environment as the subjects perceived it (Swanson, 1953; Polansky, Lippitt, & Redl, 1950; Meir & Mennenga & Stoltz, 1941; Lewin, Lippitt, & White, 1939). These few studies clearly showed that at least children wish to participate in making decisions when it directly concerns them. There is no evidence to assume that adults are any different. These attempts at producing crowd behavior led to some other interesting findings. One in particular, was the fact that autocracy may lead to either aggression or to apathy. This result was assumed to be a reflection of the perceived forces at play. It was suggested that apathy occurs when the pressure and the restraining forces from without are kept or perceived as stronger than the forces from within (Lewin, Lippitt, & White, 1939). The same authors pointed out that whether or not the forces from without or those from within are stronger depends upon the amount of pressure and also on the "willingness" of the person to "accept" the pressure. In the studies mentioned above, the authority of the autocratic leader represented the forces from without, and the amount of "willingness" to "accept" the authoritarian leader's decision represented the forces from within. It is rather alarming that only one

of the five autocratic groups demonstrated large amounts of overt aggressive behavior while the other four groups submitted to authoritarianism. Lewin further observed that the transition from a democratic to an authoritarian "style of living" took less time than from authoritarian to democratic. These findings' implications should have been sufficient to instigate further research in this particular area. It should also be noted that none of the "democratic" conditions corresponded to any known governmental system. The dominative behavior of the authoritarian leaders in Lewin, Lippitt, & White's study did, however, correspond fairly well with the bureaucratic procedures of many governmental agencies and departments, business firms, institutions, and with those of many parents and teachers in our present day society. Baldwin (1948) found that democratic child-rearing practices tended to produce an aggressive, fearless, and planful child who is likely to be a leader. In addition, the author stated that democracy runs the risk of producing too little conformity to cultural demands. On the other hand, authoritarian-control procedures had a tendency to produce quiet, nonresistant children who are overtly unaggressive, and well behaved, but who are also restricted in originality, curiosity and creativity. In The Lonely Crowd, Riesman (1950) supported these findings when he asserted that our culture had exchanged inner-directedness for outer-directedness or social conformity. However, the long cherished psychological concept of adjustment is not only questioned by sociologists, but also by psychologists such as Fromm (1941). Other investigators (Lippitt, 1940; Sears, 1950) have maintained that the degree of social control exercised by parents and teachers, or

any other authority, can decrease the amount of overt aggression if an extremely punitive attitude is employed while a moderate amount of punitiveness produces frustration but fails to control, hence increasing overt aggressiveness. Others (Bandura, Ross, & Ross, 1961; Bandura, 1965) affirmed that aggression can be learned through imitation but that it is the expectations of rewards and punishments that determine its occurrence. In addition, Kaufmann and Feshback (1963a; 1963b) indicated that nonaggressive norms decreased aggressive behavior when these were based on a constructive rational attitude rather than on sinfulness, moral unacceptability and punishment which in this case produced displaced aggression and hostility in the subjects. However, the rational approach did not.

The more recent studies have emphasized the pathological aspects of violence. Many social scientists have been concerned about this orientation. Indications are that the work done in this area tends to treat violence as a pathological phenomenon and is very much dominated by therapeutic schools (Bienen, 1968; Gurr, 1970; Geertz, 1963; Fromm, 1941). The danger in such thinking is that it may well lead to pseudo-explanations, and produce in the mind of the scientific world and the public a preconceived stereotyped image of the individuals who participate in organized radical groups. It has been shown that once a cognitive personality structure has been set, there is a refusal to accept and incorporate into the perception behaviors or characteristics that are at variance with the previous picture of the person (Ichheiser, 1949; Asch, 1946; Bruner & Postman, 1947; Bruner & Goodman, 1947). Hence, students of violence cannot afford to have or at least be

influenced by preconceived ideas or by stereotyped images of radicals, and protesters. In Why Men Rebel, Gurr stated that aggression-prone victims of maladaptive socialization processes are found in every society and among the actors in most outbreaks of political violence, but they are much more likely to be mobilized by strife than to constitute it in its entirety (Gurr, 1970 p. 31).

Literature on violence reported three major psychological theories attempting to explain the sources of human aggression. The biological-instinctual theory, represented by Freud (1930) and Lorenz (1966) assumed that aggression is innate and that it can be both constructive and destructive. The social-learning theory suggested that it is a solely learned negative behavior. Its major exponents, Bandura and Walters (1963) believed that aggressive behavior is acquired through socialization processes such as the learning of cultural values, child-rearing practices, imitation, and that it does not necessarily require frustration. However, the frustration theory (Dollard, Doob, Miller, Mowrer, & Sears, 1939) proposed that it is an innate response activated by frustration, but does not deny that some of its components may be learned. Berkowitz (1962) emphasized the role of perception in his reformulation of the theory. He insisted that it is the perception of frustration which arouses anger which then functions as a drive.

Can any of the above theories be applied to collective violence? Some authors think so. Gurr (1970) considered the frustration-aggression mechanism as the most influential formulation and its relationship as most important to collective and political violence. Yet, Kaufmann (1970) leaned towards the social learning theory, though

admitting that the potential for violence is innate and is only one of many responses which can be developed and reinforced. The investigator tended to consider that both biological and environmental determinants are interrelated in the growth process and as such play a role in collective violence.

There has been considerable investigation into the effects of authoritarian parents on children. In most cases, the studies can support the claims of any of the proposed theories of aggression. The fact remains that some studies showed that authoritarian parents tended to have children who are more aggressive than those of permissive parents (Hoffman & Saltzstein, 1967; Patterson, Littman, & Bricker, 1967; Rosen & D'Andrade, 1969); while others (Baldwin, 1948; Merrill, 1946) claimed that highly authoritarian parents tend to have children who are highly conformist and unaggressive, but Sears, Maccoby and Lewin (1957) demonstrated that both parents' severity or permissiveness can produce aggressiveness in a child. Consequently, it is not unreasonable to ask what kind of control seems to be conducive to aggressiveness, apathy or integrative social behavior? Specifically, what kind of control can alter the perception of a particular stimulus, in this particular study, a violent event? Specific knowledge of how various forms of control affect the perception of aggression would be useful in handling collective violence. It would also be important to know if factors such as the family background, the educational and socio-economic level, personality and adjustive patterns and peer pressure have any influence on the perception of violence.

Purpose

The study was planned to determine whether or not a particular educational background, membership in a group oriented towards radical social change, personality and adjustive patterns, various forms of control (punishment, moral and civil authority) frustration and peer group pressure influence the perception of a specific violent event. The research was conducted with students from the University of Manitoba.

Hypothesis

The hypothesis under investigation was:

when controlling for educational background and membership in a group whose goal is radical social change, there will be a significant difference in:

- a) the perceiving or appraising of the same collective act of violence among the various selected groups; and
- b) the direction that perception will take,

when the independent variables are moral and civil authority, frustration, punishment, and peer group pressure, and

when the independent variables, personality adjustment patterns and aggressiveness level vary among the subjects as measured by the California Personality Inventory, the Bell Adjustment, and the Hand Test.

CHAPTER II

REVIEW OF THE LITERATURE

Investigations into the causes of violence have given rise to many psychological theories of aggression. Research moved in various directions. Some looked for evidence to support the aggressive instinct while others attempted to uphold the frustration-aggression hypothesis, the social-learning theory or other theories derived from the above. Both animal and human subjects were used. Studies revealed that aggression is not only a very complex phenomenon with no one-to-one causal relationship, but also led to the discovery of new variables which were believed to contribute to violence. It was found that perceptual processes also played a role in aggression, and that in turn, perception was influenced by such factors as affection, motivation, and culture, to name a few. Through a survey of the literature, it became obvious that both the terms "perception" and "aggression" have been given different meanings by various researchers. Disagreement among experts and statesmen on the meaning of "aggression" has added to the problems of research in this area while it has adequately demonstrated the diversity among the existing perceptual and conceptual interpretations of the term. The traditional definition which related aggression to physical attack or injury is no longer a common denominator. For some researchers, it now includes nonphysical damage. Kaufman (1970) embraced a class of behaviors where aggression may not appear obvious

but which he convincingly proved as nonphysical aggression; but which nevertheless results in serious damage (i.e. verbal attacks, prejudice or vicious gossips resulting in the loss of a job). It is evident as Gurr pointed out, that "all of us - citizens, officials, and scholars - look at 'violence' from perspectives colored by our beliefs and cultural experience (Gurr, 1970, vii)." Consequently, in our culture aggression more often refers only to physical damage inflicted by an individual or a group who are looked upon as aggressors, and henceforth draw the wrath of others upon themselves. All that is needed to define the aggressor is that he performs the initial physical act of violence. What leads to the act of violence is seldom looked into legally, since one of our society's major values is the belief in "free will"; that is, the belief that no one or nothing can make you do what you do not want to do. The execution of the law is based on such a system of belief. Strict sentences are imposed on the husband or wife who kills his or her spouse, although he or she may have been driven to it by the victim. Schultz says: "Just as we stress individualizing the offender and his sentence, so we should also individualize the offence and the victim (Schultz, 1970, p. 322)." In collective violence the same situational dynamics may be at work; but since it is more complex, it is more expedient to deal with only the physical aspects of this phenomenon, thereby eliminating the otherwise necessary scrutiny and analysis of various elements in society which may have contributed to the collective act of violence. Most studies have used the narrow definition of aggression. Nevertheless the writer has taken aggression as the behavior which occurs when a person or group:

- 1) directs his act against a living target;
- 2) has an expectation or subjective probability greater than zero of reaching the object and of imparting a noxious stimulus to it or both (Kaufman, 1970, pp. 10-11).

This definition does not exclude nonphysical noxious stimuli which can be just as destructive and violent in their effects as physical attacks; nor does it exclude acts of nonphysical domination or control which may result in psychological or physical damage; nor does it make it mandatory for feelings of frustration, hostility or resentment to be present. This definition can include premeditated acts of control which may have psychological or nonphysical as well as physical effects on an individual or group (i.e. economic policies, taxation policies).

The problem of defining perception has not fared any better than that of aggression. Psychological concepts are somewhat more difficult to define than those related to the physical sciences. Little is known about the dynamics of perceptual processes. However, the numerous studies conducted on the effects and changes of perception have led to a better understanding of its functions although scientists are still incapable of explaining its physiological dynamics. There is no clear differentiation between sensation and perception. Nevertheless, it is generally accepted that

sensations are primitive activities resulting from contacts with physical stimuli and mediated by the sensory organs with little, if any, 'interpretation' by the central nervous system, while perceptions are the results of interactions between sensory and central-nervous system processes, sensory data 'interpreted' within the matrix of present neurological processes, current motivating conditions, and a variety of other psychological variables (Thompson, 1962, pp. 317-318).

Past perceptions and experiences are some variables included in Thompson's definition. Once the individual's perceptual world is taken into

consideration, it becomes quite arbitrary on the part of any person, group or scholar to attempt to define a social phenomenon if all parties concerned in the interaction have not been considered (Kaufman, 1970). The difficulty in empathizing with others renders the problem that much greater. The fact remains that most studies referred to those who committed the initial physical act of violence as the aggressors while nonphysical acts of violence may have first been committed by the targets of violence. The targets of violence were usually immuned to legal investigations and consequences, as it is usually only the aggressor who has to appear in our courts of justice. The many contradictions encountered in the review of literature on perception and violence may not be due only to definition differences, but also to the variety of measurement and techniques used by researchers.

The number of perceptual variables associated with violence may be grouped into two general classes: the biological, and the environmental determinants. Only the major variables that are related to the role that perception plays in contributing to violence will be discussed.

Biological Determinants

In order to understand violent behavior, the process by which man becomes aware of himself and his world must be analysed. It appears that the perception of one event cannot be separated from past experience with that event or with certain aspects of it. The operational tendency to treat stimulus patterns as existing apart from the perceiving organism leads to ignoring the past experience, purposes and values of the person which alter the perception of environmental stimuli. Harlow (1939), Ades (1946), Raab (1948) and Morgan (1958) have

have adequately demonstrated that bilateral ablation of the visual cortex prevents animals from using learned cues from past experience. In human beings, evidence for the need of practice and sensory experience was acquired from subjects wearing goggles distorting visual input, congenital cataract patients and isolation studies (Senden, 1960; Kohler, 1962; Teuber, 1960; Heron, Doane & Scott, 1956).

The physiological condition of the organism has been shown to be related to aggressive behavior. Animals with a high concentration of the male hormone testosterone seemed to perceive more stimulus-situations requiring fighting behavior than those with a lower concentration (Beach, 1945; Beeman, 1947). In some early and recent studies, it was discovered that the cortex and different portions of the brainstem exerted some control over the generation or inhibition of aggressive behavior (Cannon & Bretton, 1927; Schreiner & Kling, 1956; and Brady, 1960). In the above studies, it would appear that perception of the stimulus-situation had no influence over whether or not the attacking behavior would take place. However, some more recent studies (Wasman & Flynn, 1962; Levinson & Flynn, 1965) found that electric stimulation of the hypothalamus producing attack behavior in animals was less likely to occur when no suitable objects of attack were in sight. Thus, it does seem that past perceptual cognition plays a role in aggressive behavior. Hence, indications were that perception of both internal and external stimulation mediated by the central nervous system are needed to produce aggressive behavior. There was further evidence indicating that pain is somewhat related to aggression in animals (O'Kelly & Steckle, 1939; Covain, 1949; Tedeschi, Tedeschi, Mucha, Cook, 1959).

Within-species and across-species fighting caused by pain was found to occur in various animals (Ulrich & Azrin, 1962; Azrin, Hutchinson & Sallery, 1964; and Ulrich, Wolff & Azrin, 1964). However, in man, pain or food deprivation do not produce quick reflex-like behaviors; but instead, other complex perceptual and cognitive processes appear to intervene which may or may not give rise to aggression.

Shirley and Poyntz (1941) observed 200 children's reaction to pain (age 2 to 7) during their half-yearly medical examinations. The authors noted six stages in the learning process of responding to pain. The conclusion was that response to pain, like any other responses, is influenced by the social context, and consequently, the culture defines the manner in which the adult may give vent to his feeling of pain. Hence, whether or not pain is a factor contributing to aggression is highly dependent on cultural and rearing practices. Animal studies can add little to the area of social learning in man.

Perceptual processes have responded to the influence of the organism's emotional state. The capacity to experience emotional arousal is without question innate; but its expression and labeling vary across cultures, as do the stimuli which contribute to the diversity of emotional response patterns (Stone, 1932; Hall, 1938; Jost & Sontag, 1944; Scott, 1958; Bridges, 1932). Attempts by James-Lange to show that perception of the reaction to a perceived situation is the felt emotion which occurs after the bodily change, was questioned by Cannon (1929). According to James, elimination of visceral feedback should deprive the organism of emotional behavior. It was found that this occurred only when the emotional behavior had not been established

before neural impairment (Wynne & Solomon, 1955). Cannon (1929) disagreed with James' statement since he believed that visceral states are not differentiated and are slow to change, and therefore, according to Cannon, perception of an emotion would occur after the visceral changes have taken place, but that it was not so since it is well known that one can respond emotionally and quickly to perceptual cues.

In 1953, Lacey, Bateman and VanLehn indicated that physiological emotional states all showed similar patterns of autonomic responses but Funkenstein (1955) proved that widely different emotions such as fear and anger are accompanied by different patterns of autonomic responses. Many other researchers have also found differences in physiological changes, specifically in the secretion of norepinephrine when in angry and aggressive states, and of epinephrine during fear (Ax, 1953; Mason, Mangan, Brady, Conrad & Rioch, 1961). Therefore, Cannon's proposed Emergency Theory which stated that the sensory input is transmitted by the thalamus both to the cortex and to the sympathetic nervous system so that both perception of the physiological state and external situation are two simultaneous processes, appeared valid. It would then seem that both theories are partially right in that visceral feedback is necessary for the establishment of emotional behavior, but that it is not to maintain it (Wynne & Solomon, 1955). Yet, Schachter and Singer (1962) claimed that visceral states were not sufficient, but that perceptual cognition and labeling of the stimulus conditions producing arousal were also necessary. The cognitive theory of emotions which they proposed stated that the perception of the emotion-producing situation is followed by a change in bodily state which is ambiguous

but which is then interpreted and labeled so that it fits the perceived situation. Some research tended to support their contentions. The above investigators gave students injections of epinephrine, but were told that they were receiving a vitamin compound. In one experimental condition, the subjects were not told about the effects that the injection would have. In the second condition, subjects were informed about the effects of the drug. In both experimental conditions, the subjects were exposed to an angry, and a happy situation. The uninformed subjects tended to feel the emotion and behave in ways appropriate to the situation in which they were placed. The informed subjects interpreted the bodily states as due to the injection and were not as inclined to experience emotions appropriate to the perceived situation. In some instances, epinephrine-induced "anxiety states" were clearly differentiated from true emotions by some subjects (Lindeman & Finesinger, 1940; Schildkraut & Ketty, 1967).

Another study by Schachter and Wheeler (1962) showed that physiological arousal states appeared necessary for subjects to experience amusement at a slapstick movie since those who were given a depressant did not derive any amusement from the film. Moderate amusement was expressed by subjects who had been given a placebo; but the greater degree of amusement was shown by those who had received a drug to induce physiological arousal. Hence, it is difficult to determine to what extent physiological arousal influences the perception of a stimulus-situation, or to what degree a stimulus-situation may serve as a clue to influence the expression of a particular emotional behavior when physiological arousal is present. However, the cognitive

theory of emotion appears to be a simple case of conditioning. Once the perceived stimulus has become a conditioned stimulus, it is then capable of evoking the emotional response (Watson & Rayner, 1920). Hence, it is possible that many aggressive behaviors fall into a category of habitual aggression that is learned aggression controlled by labelled perceptual cues. Brehm, Back and Bogdonoff (1964), Zimbardo (1966), Hokanson and Shetler (1961) provided evidence that physiological states can respond to some degree to perceptual cognitive control. In short, a person can be fully aware that anger helps to perform, compete or aggress effectively, and therefore, deliberately becomes angry to perform more effectively. It is then quite clear that at least in human beings biological determinants are, to a large extent, influenced by learned perceptual cues.

Environmental Determinants

Whether or not aggressive behavior is innate or learned from the social environment remains a controversial issue. However, some studies in social perceptual growth were rather revealing. Maudry and Nekula (1939) found that the beginnings of social perception and response can be observed from the early age of six months. These authors reported that between the ages of six to eight months, social peer interaction was limited to looking, smiling and grasping for the partner, and that fighting was impersonal and consisted of securing play material. Between the ages of nine to thirteen months, fighting was at its maximum and these conflicts became personal. From the ages of 14 to 18 months, the child gave attention to his partner once his desire for toys was satisfied, and a noticeable decrease in conflicts over toys was reported.

Finally, by the age of 19 to 25 months, the child's play was personal with play material becoming more and more a source for establishing social relations rather than a source of dispute and conflict. Other investigators (Goodenough, 1930; Anderson, 1939; Isaacs, 1937; Malloy, 1935) have also found that social perceptual awareness of others and their needs increased with chronological age or maturation. It does seem that the infant is primarily interested in satisfying his own needs with little perception of the needs of others. The above studies tended to indicate that aggressive behavior is very primitive. Since it appears to early in the life of an infant, it would require very little learning due to limited perceptual power at such an early age. It is difficult to see how such a young child could have any expectations of rewards and punishments as claimed necessary for the occurrence of aggression (Bandura, 1965). On the other hand, behaviors such as cooperation and altruism require more years before their development can be observed. Altruism has been shown to be conditioned to a large extent by the children's perception of the generosity of others to whom they had an opportunity to be generous (Wright, 1942). Needs for dependency, affection and self-esteem were also reported to contribute to altruistic behavior development (Bossard and Boll, 1957). It is not surprising that the above behaviors are slower to develop than aggressiveness since it requires greater perceptual powers to recognize the needs of others, and to recognize that reciprocal behaviors are more effective in satisfying one's needs. In view of social growth studies, it is perhaps more fitting to look at aggressiveness as a lack of social growth and maturity rather than as a product of learning occurring later

in life as suggested by the social learning theorists.

Other forms of alternative primitive aggressive behaviors requiring little perception of others' needs are rivalry, ascendance or dominance which have been reported to increase during the preschool years, to drop slightly in kindergarten, and then to remain fairly stable in frequency through the twelfth year of life (Stott and Ball, 1957; Greenberg, 1932; McFarland, 1938; Maller, 1929).

Patterns of dominance in animals and man have been well documented by Lorenz (1963), Mason (1970), Mumford (1961), Carthy and Ebling (1964), Russell and Russell (1968), and Gurr (1970). In an evolutionary sense, man's organizations and social systems have evolved slowly from primitive aggressive societies ruled by a leader or king to centralized group leadership in the form of representative bureaucratic governments which have yet to reach full maturity.

Authority Studies

Authority, a very ambiguous concept which is often used to cover up aggressive behavior, has long been associated with divine rights. Fromm in Escape From Freedom (1941), undertook the difficult task of clarifying its dynamics. He defined authority "as an interpersonal relation in which one person looks upon another as somebody superior to him (Fromm, 1941, p. 186)." However, he differentiated between what he called "rational authority" and "inhibiting authority". "Rational authority" occurs when the interests of both the person holding authority and the person subjected to it lie in the same direction, and where eventually the authority relationship tends to dissolve itself (i.e. teacher-student, parent-child). In the case of "inhibiting authority",

the interests are antagonistic; that is, what is advantageous to the authority, is detrimental to the person submitting to it. According to Fromm, the psychological dynamics of this latter type produces either hatred or irrational overestimation and admiration of the authority figure. In real life situations, these two types of authority are more often blended than found alone (i.e. worker-boss, husband-wife, government-citizens). Autonomy does not guarantee freedom from external aversive authority since it may only have been internalized and can be as inhibiting, if not more than, external "inhibiting authority" since the person feels its orders to be his own. However, Fromm suggested that today we have a third form of authority which is even more detrimental because it is invisible and cannot be attacked. This "anonymous authority", according to Fromm, is disguised under the cloak

of common sense, science, psychic, health, normality, public opinion Anonymous authority is more effective than overt authority, since one never suspects that there is any order which one is expected to follow.... In anonymous authority both command and commander have become invisible (Fromm, 1941, p. 190).

What kind of social perceptual interactions can possibly exist under such conditions? Anderson (1939) and others have concluded from several studies that integrative or cooperative behavior is flexible and dynamic. The integrative person proposes, abandons and revises his plans in an attempt to satisfy his own needs as well as those of his associates. The above behavior can hardly develop and occur with an invisible authority. In addition, Fromm stated that "autonomous authority" is just another factor increasing the person's feeling of insignificance, powerlessness, and anxiety leading to destructiveness.

So, according to Fromm, authority must be perceived in order to lose some of its inhibiting and destructive powers. He suggested that the amount of destructiveness to be found in individuals or social groups is proportionate to the amount to which expansiveness of life is curtailed; that is

the thwarting of the whole of life, the blockage of spontaneity of the growth and expression of man's sensuous, emotional, and intellectual capacities (Fromm, 1941, p. 206).

Some sociological studies have thrown some light on the "authority" phenomenon especially in the world of work. Evan and Zelditch (1961) found that the groups of subjects under a supervisor whose knowledge was inferior to theirs, or about equal to theirs, perceived legitimacy of authority in terms of office while subjects with superior knowledge than the supervisor's justified authority in terms of competence. Thus, this would suggest that authority may be based on legality which is not necessarily legitimate, or knowledge, or ideally on both. Leaders at the top of a bureaucratic hierarchy were compared by Guest (1962). The findings revealed that "punishment-centered" discipline increased internal organizational tensions, while in another plant where the manager initiated interaction from lower levels in the hierarchy through group meetings at all levels of the organization to cope with problems, led to an increase in the productive efficiency of the plant. Thus, this study would indicate that democratic processes can function within the confines of seemingly authoritarian bureaucratic social systems. French (1956) seemed to support the assumption that the incidence of aggressive behavior is related to the structure of

interactive relations. The author compared reaction to frustration among members of organized groups (basketball and football teams) with such reactions in unorganized groups (students from introductory psychology) and also with an organized group with a different ethnic and socioeconomic background (Italian club). He found that open ingroup aggression varied positively with the degree of organization of the group. There was no expressed aggression toward members of the group in the unorganized group; but there were 61 instances of such aggression in the organized group. In addition, the highest degree of aggression occurred in the Italian organized group indicating the influence of cultural norms on the expression of aggression. Social psychologists have described some of the conditions conducive to obedience or disobedience to authority when the command involves doing violence to another.

Milgram's (1965) population consisted of 40 male subjects for each experimental condition. The occupational composition was made up of 40% white collar, 40% workers, skilled and unskilled, and 20% of professionals. All were selected on the same basis (ages 20s, 30s, and 40s). The aversive stimulus consisted in the amount of electric shock a subject would administer to another person when ordered by the experimenter to give the "victim" increasingly more severe shocks. Subjects were told that the purpose of the experiment was to study the effect of punishment on memory. The study was therefore designed in the context of a learning experiment. The four experimental conditions consisted of having the victim come closer to the subject administering the shock. In condition 1, the victim could not be seen or heard, except for the pounding on the wall to signal protest to pain received

by shock. Condition 2 was identical to the first except that verbal protests were introduced. Condition 3, the victim was placed in the same room as the subject; and in condition 4, physical contact was introduced by having the subject force the victim's hand on a shock-plate when he refused. The findings revealed that obedience increasingly decreased as the victim was made more and more visible. In condition 1, 34% of the Ss defied the experimenter, 37.5% in condition 2, 60% in condition 3, and 70% in condition 4.

Milgram concluded that it is more difficult to empathize with the victim in a remote condition. The subject can only be aware at an abstract conceptual level that his actions cause pain to another person. The author suggested that visual perceptual cues may trigger empathic responses in the subject providing him with a better understanding of the victim's experience. Furthermore, these empathic responses may in themselves be unpleasant and thereby provide the subject with a motivational drive to end the arousal situation, terminating in disobedience.

The author, Milgram, therefore assumed that if proximity to the victim influenced disobedience, then proximity to authority would also influence obedience. This hypothesis was tested by having the experimenter sitting a few feet away from the subject, and in the other condition, the experimenter gave his orders by telephone. The number of obedient subjects in the first condition was almost three times as great as in the second. Furthermore, the behavior of the subjects when not under direct surveillance changed. The Ss gave lower shocks than were required and assured the experimenter that they were raising the

shock level according to instructions. In another condition, when the experimenter could no longer obtain obedience via the telephone, he reappeared on the scene. He was then able to force further obedience.

Milgram concluded that obedience to destructive commands was highly dependent on the proximal relations between authority and subject, and subject and victim. The question of authority was further tested by relocating the experimental apparatus from Yale University to an office building in industrial Bridgeport. The research was conducted under a fictitious name. Although the subjects questioned the reliability and authority of the organization, the level of obedience was not significantly lower than that obtained at Yale (48% versus 65% at Yale). So it was concluded that if commands of a harmful sort were to be perceived as legitimate they must occur within the context of institutional structure, but not necessarily a distinguished institution. Another proposed possibility by Milgram was that our culture does not provide adequate models for disobedience in the presence of conflict. The tendency to comply with authority and the tendency not to harm others being at odds, produces a high degree of tension. Nevertheless, 62% of the Yale Ss could not resort to disobedience to authority to adequately solve their conflict. The author's concern can best be expressed in his own words:

The results, as seen and felt in the laboratory, are, to this author, disturbing. They raise the possibility that human nature, or more specifically, the kind of character produced in American democratic society, cannot be counted on to insulate its citizens from brutality and inhumane treatment at the direction of malevolent authority. A substantial proportion of people do what they are told to do, irrespective of the content of the act and without limitations of conscience, so long as they perceive that the command comes from a legitimate authority. In this study, an anonymous experimenter could successfully command

adults to subdue a fifty-year-old man, and force on him painful electric shocks against his protests, one can only wonder what government, with its vastly greater authority and prestige, can command of its subjects (Milgram, 1965, p. 26).

Sociologist Lewis A. Coser (1964) seemed to support the above findings of victim visibility. One of his proposed functions of violence was that violence tends to make a social dysfunction visible at least to certain sensitive and powerful sectors of the community. But Coser pointed out that the sensitive usually lack power and authority, and the powerful often lack sensitivity. Although, Coser admitted that the social perceptions of those in power and authority may be influenced by social scientists calling attention to previously neglected problems, he was nevertheless skeptical that it would be sufficient at all times to arouse their concern. So he maintained that outbreaks of social violence are more apt than other less sensitive indicators to be perceived by men in power and authority otherwise not noted for peculiar sensitivity to social ills. Therefore, Coser saw collective violence as a form of achievement when both legitimate and illegitimate avenues seem blocked, as a danger signal for men in power and authority; and as a catalyst in arousing the moral, and aesthetic sentiments of the public, and in creating social change. He pointed out that though it may serve as a danger signal, it may also alienate potential recruits for their cause.

Frustration

Many authors have criticized the use of frustration as a meaningful variable in the study of aggression. The major criticism

was that "frustration" is an inferred feeling attributed to the organism because it is aggressing. Consequently, it is measured in terms of the aggressive behavior (Buss, 1961; Kaufmann, 1970). Another serious criticism was that aggression is not always a product of frustration that may or may not be manifested. There have been many studies carried out in the laboratory attempting to show a relationship between aggression and frustration. These studies used either the blocking of instrumental behavior in achieving a task, or the blocking of consummatory responses.

Lindzey and Riecken (1951) using failure, were able to elicit anger on the part of the subjects. Unfortunately, the anger was turned against the self because of the subject's belief that the group had been let down. The attempt to block a consummatory response was reported by Barker, Dembo and Lewin (1941). The children's attempt to get to the toys was blocked and some children had violent temper outbursts.

Frustration has been most successfully studied through questionnaire studies. The difficulty in laboratory situations has been to differentiate between whether aggression had been produced by frustration or by anger elicited through verbal attacks. Allison and Hunt (1959) presented college students with a questionnaire. It was found that justified frustrating situations elicited a lower probability of anger than the unjustified and unspecified frustrating situations. The above findings were supported by Lee (1955) in a laboratory frustration situation. The teacher who acted in opposition to the desires of the students and explained his action in terms of his own desires rather than in terms of the good of the students produced more aggressive verbalizations than when using the good of the student rationale. A more recent study

(Gillespie, 1961) demonstrated that attack was more potent than frustration in eliciting aggression. The author had three groups consisting of college men and women. All the groups were given an ability test and were told that it correlated highly with I. Q. They were further informed that it could be completed in the time allotted. Verbal attack yielded more aggression than frustration. Hence, the results would indicate that frustration tolerance varies and consequently the same stimulus may not produce frustration in all the subjects.

Block and Martin (1955) and Davitz (1952) demonstrated that individuals vary considerably in their response to frustration. Children who failed to learn control over their emotional reaction (undercontrollers), and those who have overlearned inhibition of emotional response (overcontrollers) reacted differently to frustration. The aggressive trained subjects showed a significantly greater increase in aggression after frustration than did the peacefully trained subjects. It is interesting to note that one-third of the peacefully trained subjects were more aggressive after than before frustration, and one-fourth of the aggressively trained subjects were less aggressive after than before frustration. The authors attributed these findings to enduring response trends. Some children in each group did not acquire the training given in the experimental condition because of their previous tendencies to aggress or to submit. Consequently, it can be expected that some subjects may be expected to remain inhibited or angry and perhaps aggressive under severe frustrating situations. Feshbach (1958) demonstrated that a nonangry group who watched a prize fight film gave more aggressive associations than the nonangry group who watched a

neutral film. In addition, the angry group who watched the prize fight film gave fewer aggressive word associations than the angry group that watched the neutral film. These findings would indicate that when aggression occurs without anger, there is an increase in the tendency to aggress. Consequently, it would appear that catharsis occurs only when anger is present. It would then seem that frustration narrows the range to perceive other alternatives to aggression.

Punishment

It has been shown in the laboratory that punishment is effective in repressing aggression only when other alternative responses are perceived by the individual as available. Otherwise, the repressed response will only be temporary (Hollenberg & Sperry, 1951).

It was demonstrated that extreme parental punitiveness produces more aggressiveness in children than when reared by affectionate parents. The effects of punishment were interpreted as undermining the individual's conception of himself as a person of worth and significance (McCord, McCord, & Howard, 1961). In 1957, Sears, Maccoby and Levin had also found that aggression in childhood was associated with the use of punishment. McCord et al (1961) suggested that extreme parental punitive attitude influences the child to perceive the world as a dangerous, hostile environment and that "aggression" is the way to cope with the world. The type of punishment has also been shown to have a differential effect. Physical punishment was found to result in more aggression than psychological punishment. In addition, physical aggression led to direct aggression against authority, while psychological punishment led to indirect aggression against authority

(Allensmith, 1954). The immediate effect of personal punishment such as verbal attack has been anger. Worchel (1957) frustrated college students and subjected them to verbal attack in a group situation. More anger and verbal aggression were manifested toward the student assistant than to the faculty member. It would then seem that the perceived source of punishment influences the amount of anger and aggression that will be overtly manifested.

Peer Group Studies

Peer group studies strongly indicated that at least there is an overt change in the individual's perceptions and values that occur due to peer pressure. Newcomb (1943) demonstrated that the peer group may influence the political and economic beliefs of the individual to such an extent that parental influences may become secondary. However, it was noted that this occurred only to the degree that the individual participated in the activities of their peers. Others (Festinger, 1954; Schachter and Singer, 1962; Asch, 1955; Deutsch & Gerard, 1955) have also reported that the degree of knowledge, the majority's consensus, and anonymity determine the degree of peer group's influence on its members. Kittes and Kelly (1956) showed that subjects with low acceptance from the peer group externally conformed to group opinion, but privately conformed less than those who felt accepted by their peer group. Similarity or dissimilarity in important characteristics perceived to exist between the subject and the target of aggression, was shown to affect the tendency to aggress (Kaufmann & Marcus, 1965; Wheeler & Levine, 1967). This aspect of perception is likely to be operative in collective violence, although no research has been done in this area.

The authors claimed that major characteristics similarity and dissimilarity are unlike prejudice in that the stimulus characteristics of the victim are not synonymous with those commonly associated with discrimination or prejudice. Some studies implied that the immediate social environment or group in which a person finds himself may influence the person to choose an aggressive response. It was demonstrated by Thibaut (1950) and by Pepitone and Reichling (1955) that highly cohesive groups are more likely to aggress against an insulting outsider than groups with a low degree of cohesiveness. The above study added support to Lewin, Lippitt, and White's findings (1939) that an authoritarian or democratic climate affects the degree of resistance it opposes to an insulting intruder. The children who had experienced democratic leadership by an adult group leader showed greater resistance to an adult who tried "to push them around" than the children under autocratic or passive adult leadership.

Milgram's studies (1963, 1965) showed that group pressure could obtain the same obedience to a command involving doing physical harm to another person as an individual authority (experimenter) could achieve or could also facilitate disobedience to the experimenter's instructions.

Mass Media

Another area which has created much discussion is the effect of the mass media on aggression. The issue is whether or not violent comics and television programs help individuals to release some energy that might otherwise be used in aggressive behavior. (Same principle is applied to war toys and aggressive games). Feshback (1967) reported that institutionalized boys exposed to constant viewing of violent television

shows exhibited less interpersonal aggression than did another group watching nonviolent programs. Riley and Flowerman (1951) found that school children who were highly peer-oriented tended to perceive and evaluate the content of mass media in terms of its usefulness in peer-group activities. Another study (Riley & Riley, 1951) showed that the children's responses to the content of mass media differed depending on the child's dominant reference group. Berkowitz's experiment (1962) with university students indicated that watching filmed violence may reinforce aggression.

It is interesting to note Wheeler and Levine's (1967) findings concerning the effects of the characteristics of a model. It was found that if the model is perceived by the observer as being highly dissimilar to himself, the model was imitated in terms of aggressive behavior. The effects of violent television shows may have the same results, that is if the characters are similar, they will not be imitated; but if dissimilar, the model is likely to break down the social restraints. The transgression is according to the authors perceived as more generally acceptable than when a similar model has transgressed.

It is then reasonable to conclude that it is not so much the physical properties of the stimulus-situation which are conducive to aggression, but rather it seems to depend on how these are perceived by the individual or group and on the perceived range of alternative responses seen as available.

Personality

Many psychologists have attempted to show that activists have a type of personality which is conducive to aggression (Horn & Knott,

1971; Hendin, 1971; Bettelheim, 1968). Hendin, using psychoanalytic interviewing techniques with paid subjects, obtained the following findings. The subjects were white, from middle class or affluent families, and had a variety of religious backgrounds. They all believed in the necessity for a violent revolution and worked to radicalize groups. The author suggested that there was a relation between these students' inner feelings and their outer revolt. These students were the product of socially conforming families with whom they were covertly in conflict. Although most of the students did have parents with a left-wing or at least liberal background, the important factor was that political discussions were the closest things to personal exchange that took place in the family. All the students (N = 15) felt that the parents had not been physically affectionate toward them or each other, and described their fathers as repressed and emotionally tight. Most of the subjects saw their fathers as successful at work, but as failures as fathers and husbands. They had an unusual fear of losing out to other men or women in competition for the opposite sex, and in competition for various kinds of achievements. He further stated that the idea that activist students are able to work within the context of society but choose to do otherwise, turned out not to be true. Although they are all intelligent and articulate men and women, most will not finish college. The author claimed that the activists' frustration, anger and increasingly exclusive interest in violent political action deprived them of the necessary patience to finish, even though they realized that education, such as in law, would enable them to contribute more to the radical cause. Finally, he concludes that young radicals have suffered

in families which more than provided for their material needs but which ignored and frustrated their personal needs and continued to be blind to them as people. In short, according to Hendin, the young radicals are the result of covert parental and child conflict under the cover of harmony. In the above approach there is no room for objective radicalism but rather that its only source is inner conflict. The radical's entire perception of the world would then seem to be derived from personal conflicts and fears. The author's generalization do not seem reasonable in the light of past historical violent events. It seems unreasonable to assume that past riots were all the result of actions based on the perceptual world of pathological individuals.

Horn and Knott reviewed the studies done on the activist youth of the 1960's and attempted to develop the modal personality of activists. In contrast to Hendin, the above authors concluded that there are within the group of activists a subgroup who appear to reject parental values while the rest identify with their parents and emulate and live out their values. In 1956, Wirt tested the assumption that hostility covaries with degree of psychopathology, with schizophrenics, neurotics and normals. The hypothesis was not confirmed, hostility did not covary with degrees of psychopathology. He found that normals tended to give the most aggressor responses and schizophrenics the most victim responses. Many other studies have shown that a response set, that is, a person's tendency to respond in a particular manner regardless of the specific stimulus complex presented, is based on a personality factor which results in acquiescent or resistant behavior. Similar styles of behavior were reported by Heath (1959). The notion that response sets

influence the nature of responses when other factors do not exert a strong influence was demonstrated by Armatas and Collister (1962). He found that the "like" person is socially oriented, impulsive, spontaneous, and flexible; the "dislike" person is impersonal, object oriented, rigid, suspicious, conforming, passive and intensive; and the "indifferent" responder is unable to cope with the various stimuli he finds in the world, is indecisive, passive, ambivalent, and tends to procrastinate. The "like" subjects scored high on EPPS needs of heterosexuality, dominance, and aggression; low on succorance and exhibition and earned scores on the 16 PF test indicating a general tendency to be outgoing. It would then appear that certain personality tendencies influence the way the person perceives and responds to external environmental stimuli.

Perception

Social Learning Theorists have made a good case for the influence of "learned attitudes and response tendencies" acquired by a child in the early period of his life. To view aggression as one of many behaviors determined by learned attitudes, needs and expectations seems reasonable as it is well accepted that man's behaviors are mostly a product of learning. The number of basic learning processes will not be discussed as this issue has yet to be solved. By whatever process learning occurs, perception is a common major factor in any of the learning processes whether it is through association alone, or through reinforcers, drive reduction, internalization, identification, or imitation. All these approaches assume that there is a perceiving organism capable of responding in a specific stimulus-situation, and

whose response is largely determined by the values, attitudes and beliefs of the culture in which the person has been socialized.

It has been found that parents may act as models or as perceptual cues for aggressive behaviors (Sears, Pintler, & Sears, 1946; Kagan, 1958; Bandura, Ross, & Ross, 1961, 1963a, 1963b). Berkowitz (1960) indicated that not only specific response habits, but also that personality structure influences aggressive behaviors. Individuals who became more annoyed toward their partners in a task performance when aroused to anger had scored high on a hostility scale.

Perception of a stimulus may be influenced in various subtle ways. A study by Berkowitz and Geen (1966) demonstrated this in a very ingenious manner. Male Ss who were previously angered by a person who was either called Kirk or Bob, were exposed to either a prize fight in which the actor Kirk Douglas was a ruthless boxer, or to an exciting movie about a track race. The Ss were then given an opportunity to administer electric shocks to the person who had previously made them angry. The results showed the greatest number of shocks were administered by the Ss who had been angered, had seen the prize fight and who had been introduced to the person who had angered them under the name of Kirk. Similar findings were obtained in later studies by the same authors (1965b; 1967).

In conclusion, it appeared from the studies reviewed that the interdependence of all the aspects of the organism and of the environment are important influences on perceptual organization. The difficulty of establishing the degree to which the process of perception is affected by all other determinants and how these in turn are affected by the

perceptual processes becomes an impossible task as these dynamic interactions vary from one individual to another. However, an awareness of the multiplicity of interacting factors can lead to a better understanding of the complexity of this dynamic perceptual process. The important factor to remember is that in order to understand contemporary violence, it must be studied within its own context; that is, each case of collective violence differs from others in that it has its own dynamic interactive processes, along with its own frame of reference and context.

CHAPTER III

METHOD

Description of Subjects

The study consisted of 22 boys and 2 girls. The subjects were all from the University of Manitoba. The subjects were chosen in the following manner:

1. Four subjects who belonged to a left-wing political group were first secured through contact with a member of the group who obtained the volunteers.
2. The matched control, physical sciences, social sciences, and the heterogeneous groups were chosen from a list of volunteers from first and second year psychology classes.
3. The control group was matched with the left-wing group as closely as possible in reference to age, ethnicity, socioeconomic background, and subject matter. The mean age for the left-wing group was 24.5, and for the matched control group, was 24. Ethnicity and subject area were identical while the subjects' social class status as measured by the Revised Index of Status Characteristics (Warner, Meeker, & Eells, 1949) ranged from upper lower class, to lower middle. The left-wing group ranged from upper lower to lower middle; while the matched control group were all upper lower. These results were obtained from the subjects during the interviews; the information given was computed according to the Revised Index of

Status Characteristics based on four status characteristics which were: occupation, source of income, house type, and dwelling area of the parents, and not of the subjects. However, it is interesting to note that in most cases the subjects' education will provide them with an occupation and income superior to that of their parents, and consequently a higher social status.

4. The physical sciences and social sciences groups' mean ages were 24.75 and 23 respectively in comparison to 24.5 for the left-wing group. The ethnicity variable was not identical in all cases in that either the mother or father of the Ss belonged to the same ethnic groups as the left-wing group's subjects. The Ss' major was either physical sciences or social sciences for each group, and consequently, were similar to some of the subject areas of the left-wing group. The subject's socioeconomic background, as measured by the Revised Index of Status Characteristics, social class ranged from upper lower class to upper middle class. Once again, the revealed information, given during personal interviews, was used to compute the subjects' social class. The physical science group's social class status ranged from upper lower to upper middle. The social science group's social status had the same range.
5. The heterogeneous group was chosen from the list of volunteers who were given numbers and then selected according to the Random Digits Table. The subjects were therefore chosen at random from a list of volunteers obtained from first and second year psychology classes. The mean age was 21. The range was 19 to 27. The subjects' major consisted of both physical or social sciences areas. Ethnicity was

also varied. The social class status ranged from upper lower to lower middle.

Multiple correlation coefficient and standard error of estimate for the four characteristics (occupation, source of income, house type, dwelling area) was .972, and standard error of estimate was 1.02. Correlations for each status characteristic were as follows: 1) social class and occupation .91; 2) social class and source of income .85; 3) social class and house type .85; 4) social class and dwelling area .82. Since the primary interest was to determine the correct social class and not the relative position within the class, the following percentages for all groups including ethnicity were considered as sufficiently accurate for the purposes of the present study. The authors reported that in 64% of the cases, one could be certain of 96% certainty that the social class was as indicated by the Revised Index of Status Characteristics; that in about half of the remainder (17%), one could be moderately certain of 69% certainty, and that in the remainder 19% of the cases, the correct social class could not be determined with any satisfactory degree of certainty at all, other than it would be either one lower or higher.

The investigator carried a structured and an informal interview with each subject. A good rapport was developed with the subjects to ensure that they would persist until the termination of the study. All the subjects remained until the entire study was terminated.

Description of the Materials

Stimulus Materials

All the subjects were exposed to the following stimuli: verbal reports of moral and civil authorities' position on collective violence, frustration, punishment, peer pressure and standardized tests.

Films

Film I - Revolt in Hungary: made from footage taken by a member of the Hungarian underground and smuggled out of the country. The film documented the events leading up to the rebellion and revealed the savagery of the Russian Army in crushing the revolt (27 min. B/W). See Appendix A.

Film II - Civil Rights Movement: the film examined the forces that combined after the Supreme Court's desegregation decision to ignite the civil rights movement in the South. Clips were shown that illustrated representative moments in the history of the protest: Little Rock, Montgomery, Alabama, Bus Boycott, Lunch Counter Sit-Ins, and others. The principle of civil disobedience was traced back through Martin Luther King, Ghandi, and Thoreau (28 min. B/W). See Appendix A. Both films were shown to all the subjects in Session 1.

Variables which other studies have shown to influence perception of a stimulus were authority, frustration, punishment, peer pressure, personality, adjustive patterns, and aggressiveness.

Authority Stimuli

Moral and civil authority were introduced as an influential variable by reporting to the subjects in an oral form the views held on

collective violence by a Christian authority and by a Chinese authority of good conduct. The reported stand of these authorities appears in the Appendix B and C. Legal authority was similarly introduced and the reported views of Canadian and Chinese government officials appear in Appendix E and F.

Frustration

The frustration variable was produced by asking the subjects to do an intellectual task which was impossible to accomplish within the requested amount of time. The task consisted of rearranging the order of sentences to form a logical comprehensive paragraph. See Appendix D.

Punishment

The administration of punishment was accomplished by requesting the subjects to write a paragraph on the values of speed and accuracy due to their poor performance on their sentence rearrangement assignment. The paragraph was further evaluated and given a low evaluation in terms of the subject's ability.

Peer Pressure

The subjects were first given the task to give their opinions on the violent events portrayed in the films and to reach an agreement as to their views on the riots viewed in the films. Then the subjects had to decide whether the riots were a realistic or a nonrealistic conflict according to Lewis Coser's definition. See Appendix G.

Measuring Scale

All the subjects were presented with a scale immediately after

they viewed films 1 and 2 (Session 1) as well as immediately after each variable was introduced in each experimental session. The items on the scale allowed each subject to reveal his perception of the violence that he had viewed in the films. The Murphy and Likert's Scale (1938) was revised to correlate with the films that had been chosen for the study. For example, in Item 1, East St. Louis was replaced with The Cities Mentioned for Film 1, and with The Countries for Film 2. The reported reliability for the Riot Scale was .70, and for the attempted Lynching Scale was .77. The scale was pretested for Film 1 with 56 students, and for Film 2 with 48 students. Validity was determined in terms of the degree to which the items differentiated between the upper and lower 25% of the individuals in the distribution of obtained scores. All items were significant at .001 level except for Items 2 and 5 on Film 1. See Appendix H.

The following tests were administered to all the subjects:

1. The California Psychological Inventory consists of 18 scales related to personality characteristics important for social living and social interaction. The scales are grouped under four broad categories which are:
 - a) Measures of Poise, Ascendancy, Self-Assurance, and Interpersonal Adequacy;
 - b) Measures of Socialization, Maturity, Responsibility, and Intra-personal Structuring of Values;
 - c) Measures of Achievement Potential and Intellectual Efficiency; and
 - d) Measures of Intellectual and Interest Modes.

The California Psychological Inventory is largely self-administering.

Testing time is about 45 minutes to one hour. Reliability on the scales ranges from a low .48 to a high .87. Only two of the scales are rather low: the Cm (Communality) and Py (Psychological-mindedness). Validity of scales ranged from -.58 to a low of .26 to a high of .78.

2. The Bell Adjustment Inventory Adult Form was also given to all the subjects. It took no more than thirty minutes. The Inventory provides five measures of adjustment:

- a) Home Adjustment;
- b) Health Adjustment;
- c) Social Adjustment;
- d) Emotional Adjustment; and
- e) Occupational Adjustment (unemployed individuals and housewives are scored only for the first four scales).

The coefficients of reliability for each of the five scales ranged from .81 to .91 and for total score .94. Validity was first determined in terms of the degree to which the items differentiated between the upper and lower fifteen percent of the individuals in a distribution of adult scores. Only the items which clearly differentiated between these extreme groups were included in the present adult form of the Inventory. Secondly, the Inventory was validated through the selection of "Very Well" and "Very Poorly" adjusted groups of individuals by specialists in adult counseling and a determination of the degree to which the Inventory differentiated among them.

3. The Hand Test (Wagner, 1962) can be used as both a projective or objective measurement. It took from 10 to 15 minutes to administer.

The test consists of ten cards approximately three by five inches in size which portray pictures of hands as a projective medium. Each card, except the last, consists of a different picture of a hand. The Hand Test provides a score for Interpersonal Responses, Environmental Responses, Maladjustive Responses, and Withdrawal Responses. These are arranged in the order given, in a ratio producing the experience ratio which provides an overall estimate of basic, gross personality structure. In addition, an acting-out ratio (aggressiveness) gives an approximate measure of the probability of behaving in an overt, hostile, antisocial manner. A pathology score is also given.

Reliability of the scorers was obtained by using the following formula:

$$\frac{\text{Total number of agreements}}{\text{Total number of scored responses}} \times 100$$

The obtained percentage agreement was 80%, 78%, and 83%. Disagreements occurred within scoring categories rather than between major scoring categories. Validity was obtained from known diagnostic groups.

Description of the Experimental Situation

There were eight sessions to the experimental situation. The Murphy and Likert Scale (revised by the investigator) was used for each session.

First Session

The subjects had been instructed to present themselves at a certain lecture room at a certain time. The room had previously been

arranged for viewing the films. The subjects were requested to give their close attention to the instructions given on a tape recorder.

The recorder was then turned on. The instructions were as follows:

I am grateful for your willingness to participate in this experiment. I am sure that I can count on your cooperation and continual attendance until this experiment is over. It will require nine sessions which will prove to be stimulating. In order to make this experiment interesting, the subject matter which will be presented to you, will deal with social issues. The content is not related to the purpose of this research, but is an attempt to make your participation a stimulating experience. I hope to get accurate and honest scoring; otherwise it will distort the data that I am attempting to collect. I hope that you will find the task worthwhile, and that you will perform to the best of your ability. You will be given the results of the research once it is compiled. You may fill in a self-addressed envelope, if you so desire. The assistant will have envelopes ready for your convenience. I am going to give you all the instructions on recordings. My assistant will see that you have the required material to perform your tasks.

Now, I want you to listen carefully. When I have finished speaking, you will see two films of two social events which I hope will interest you. While viewing the films, you are asked to refrain from communicating with other subjects, or in any way discuss the films during the viewing or after the viewing. Since this is an experiment, your integrity is not questioned; it is, therefore, assumed that if you know any of the other subjects you will not discuss the films now or at any time during the entire duration of the research. Immediately after the viewing of each film you will be given a questionnaire to fill in, and a pencil. I cannot offer to answer your questions, but answer the questions the best you can. Do your utmost to answer sincerely. Turn in your questionnaire immediately after you are finished. Thank you.

At the end of each session, arrangements were made with each subject for the following session. The subjects arranged a convenient and suitable time so that it did not interfere with their classes.

Consequently, the following sessions were conducted with two to six subjects at one sitting. Therefore, the instructions only were given by the investigator.

Session 2

The purpose of Session 2 was to measure the influence of a Christian authority on the perception of the revised Murphy and Likert Scale (revised by the investigator). The following instructions were given to the subjects in different sittings until all the subjects had been through Session 2 of the experiment:

I am pleased to see that you have remembered your appointment, and that you share with me the work involved in the research. Today, you are asked to listen to what Teillard de Chardin, a Christian Philosopher, had to say about collective violence. Again, you are reminded to not communicate with each other during the recording, or any time after until the research is over. You will be given a questionnaire immediately after and again you are asked to answer it the best way you can. When you are finished, please hand in your questionnaire and arrange for the time of your next session. Thank you.

See Appendix B for de Chardin's viewpoint on collective violence.

Session 3

The purpose was similar to Session 2, but measuring the influence of a non-Christian authority. The procedure was the same as for Session 2, except for the content of the recording. The views of a Chinese authority of good conduct, Mrs. Nguyen Thi Binh, were given. See Appendix C.

Session 4 and 5

The purpose of Sessions 4 and 5 was to measure the influence of

frustration and punishment on the Revised Murphy and Likert Scale. The procedure used was as follows:

I'm glad that you are still participating in the research. It is very encouraging and I am sure that you are doing your best.

Today, you will be given a rather difficult timed problem to solve. You will be given the necessary material but you are not to start until you are told to do so. You must stop when you are requested to do so. You will have ten minutes for the task. Further instructions will be given to you after this task is over.

See Appendix D for the nature of the task. It consisted of rearranging eleven sentences to form a logical comprehensive paragraph. In order to accomplish the task within the allotted time, either accuracy or completion of the task had to be sacrificed. The subjects were given the signal to start and to stop. The problem was immediately checked and the results given. Immediately after the subjects were asked to fill in the Murphy and Likert Scale (revised by investigator). Session 5 followed immediately after. The subjects were told to write a paragraph of 100 words on the value of speed and accuracy within a ten minute period of time, due to their poor performance on the previous task. The subjects were given the start and stop signals. Paragraphs were checked immediately after and evaluated according to the individual's weaknesses which were exaggerated. The following is an example of the evaluations done:

You might be interested to know some interesting findings that are unrelated with the purpose of this experiment. The English used in your paragraph is at the junior high school level. The spelling is even worse. You have paid no attention to punctuation and capitalization which made comprehension difficult. Judging only from the quality and content of your

paragraph, one would doubt that you are capable of mastering knowledge at a university level. You may be able to do so, of course, through memory work and straight regurgitation. However, logical analysis is a necessary quality needed at university level. The reasons that you have given for the necessity of speed and accuracy lacked substance. However, we must carry on with the research. Would you please fill in the scale that I will now give you and return it as soon as it is completed. This will be all for today. Do not forget to make arrangements for the next session. Thank you.

This procedure was followed with all the subjects in several sittings.

Session 6

The purpose of this session was to measure the impact of civil authority on the perception of a violent event. The views of Prime Minister Trudeau were reported to the subjects. Immediately after the subjects again filled the revised Murphy and Likert Scale. See Appendix E for the content of the reported Trudeau's views to the subjects.

Session 7

The procedure reported in Session 6 was also used for Session 7. The civil authority in this session was Chinese. The purpose was to see if the source had an effect on perception. See Appendix F for Mao Tse-Tung's views on collective violence.

Session 8

This session attempted to measure the influence of peer pressure on perception and to see if it would be reflected on the revised Murphy and Likert Scale. The subjects were grouped according to the criterion used to pick the subjects. The groups, therefore, consisted of the left-wing subjects ($N = 4$), the matched control group ($N = 4$), the

physical sciences group ($N = 4$), the social sciences group ($N = 4$), and the heterogeneous group ($N = 8$).

The discussions took place in a special observation room designed for the purpose. Each group was taken separately to the observation room which had a two-way window. The subjects sat around a table and were addressed as follows:

Today I have tried to make this experiment even more exciting. You will be allowed to discuss the films that you saw in Session 1; and you are asked to attempt to reach agreement on the violent events that you viewed in the films. You will be given a total of fifteen minutes to do so.

The subjects were then asked to fill the revised Murphy and Likert Scale.

Another session had been planned to measure the effects of solidarity as well as group interactions. The session was carried out but since it was impossible to get a reliable level of agreement among the observers, it was deemed not necessary to describe the procedure.

The standardized tests were administered according to the given instructions provided for each test in their published manual. The subjects made appointments to take the tests at their convenience.

The Hand Test was given individually. Interscoring reliability measures were carried out, comparing the scoring of the investigator with one other scorer. The other scorer was a graduate student in Clinical Psychology with five years of experience at a children's clinic. Using the percentage of agreements method for all scoring categories taken collectively, a reliability coefficient .73 was obtained.

Most disagreements were mostly within rather than between major scoring categories. The scoring labels of Ac and ACQ both Environmental

Responses, and of DIR and Com, both Interpersonal Responses, were the most frequent disagreements.

The formula used was:

$$\frac{\text{The total number of agreements}}{\text{Total number of scored responses}} \times 100$$

CHAPTER IV

RESULTS AND DISCUSSION

The Independent Variables Measures

The range and mean scores for each group are presented in Table 1. Analysis of variance revealed that there were no significant differences between the groups for Session 1 (subjects' exposure to films), Film 1 (Civil Rights Movements), but that they differed significantly ($p < .01$) on Film 2 (Revolt in Hungary). See Table 2. The groups also differed significantly ($p < .05$) on Session 4 (Canadian civil authority), Film 2, and Session 7 (Chinese civil authority), Film 2 ($p < .01$).

In order to determine whether the independent variables other than Canadian and Chinese authority also had an influence on perception of violence, an item analysis was carried out. Table 3 reveals that in all the sessions, some items differentiated between the groups at .05 and .01 levels except for Session 2, Film 2. Consequently, a T-test was carried out between Session 1 and subsequent sessions for each group and only the heterogeneous group was significantly influenced ($p < .05$, $p < .02$, $p < .01$, $p < .001$) by all the variables except for punishment. See Table 4. A T-test computed for each group, session and film (see Table 5), indicated that:

- 1) the left-wing group differed significantly ($p < .05$) from the heterogeneous group in Session 1, Film 2; Session 6, Film 1 ($p < .02$),

TABLE 1

The Murphy and Likert Scale (Revised by Investigator)
 Range and Means of Experimental Groups, Sessions, Films
 (Possible Score - 14 to 70)

Session Variable	Film	Left-Wing Group		Matched Control Group		Physical Science Group		Social Science Group		Heterogeneous Group	
		Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean
1. Subjects Exposure to Films	1	25-39	30.250	28-32	30.750	28-32	30.000	28-44	35.000	31-36	33.375
	2	23-31	27.500	21-28	24.750	22-30	26.500	24-38	29.750	31-36	33.375
2. Christian Moral Authority	1	28-35	30.750	28-30	29.500	24-33	28.750	26-40	32.000	30-37	32.500
	2	21-33	26.750	20-29	25.500	24-33	28.750	26-38	30.000	24-28	27.500
3. Chinese Authority of Good Conduct	1	27-38	32.250	27-33	29.750	23-38	30.000	25-35	29.500	27-36	31.625
	2	24-34	28.250	20-37	28.750	25-35	29.000	20-40	27.750	23-27	24.000
4. Frustration	1	25-35	29.500	26-35	31.250	27-34	30.250	20-40	29.500	27-31	28.500
	2	24-34	27.750	24-31	27.250	20-32	27.250	20-39	28.750	24-26	25.250
5. Punishment	1	25-36	30.000	26-39	33.250	25-32	28.500	21-39	28.750	28-35	31.500
	2	25-34	29.250	22-32	26.500	22-35	28.750	18-38	29.250	29-36	32.250
6. Canadian Civil Authority	1	27-36	30.750	27-34	31.750	28-33	30.500	21-41	29.000	29-42	36.625
	2	23-32	27.000	19-35	28.250	21-34	28.500	17-42	29.500	32-43	37.625
7. Chinese Civil Authority	1	25-38	30.500	28-36	31.500	30-33	31.250	21-40	29.250	31-39	36.000
	2	22-32	26.750	23-38	30.750	24-32	28.000	17-41	27.750	33-43	38.375
8. Peer Group Pressure	1	24-38	30.000	27-37	31.750	28-34	31.500	21-38	28.500	26-34	28.875
	2	20-30	25.750	21-33	26.750	22-35	26.250	17-37	25.000	26-32	30.000

TABLE 2

Computations for Analysis of Variance of Experimental Groups

Session and Variable	Film	Sum Squares			Variance Estimate		F
		Between	Within	Total	Between	Within	
1. Subjects Exposure to Films	1	85.250	295.375	380.625	21.562	15.546	1.371
	2	260.586	283.375	543.961	65.146	14.914	4.368a
2. Christian Moral Authority	1	51.500	256.500	308.000	12.875	13.500	0.954
	2	48.836	296.500	345.336	12.209	15.605	0.782
3. Chinese Authority of Good Conduct	1	27.586	376.375	403.961	6.896	19.809	0.348
	2	108.711	504.250	612.961	27.178	26.539	1.024
4. Frustration	1	22.336	337.500	359.836	5.584	17.763	0.314
	2	39.336	410.500	449.836	9.834	21.605	0.455
5. Punishment	1	67.336	390.500	456.836	16.834	20.553	0.819
	2	98.211	484.750	582.961	24.553	25.513	0.962
6. Canadian Civil Authority	1	215.586	460.375	675.961	53.896	24.230	2.224
	2	475.211	724.625	1199.836	118.803	38.138	3.115a
7. Chinese Civil Authority	1	166.336	369.500	535.836	41.584	19.447	2.138
	2	575.211	606.125	1181.336	143.803	31.901	4.508b
8. Peer Group Pressure	1	40.211	379.625	419.836	10.053	19.980	0.503
	2	94.711	516.250	610.961	23.678	27.171	0.871

a - $p < .05$ levelb - $p < .01$ level

Degrees of Freedom - 4 and 19 for Between and Within Groups Respectively. Total 23.

TABLE 3
 F-Value of Items Which Clearly
 Differentiated Between the Experimental Groups

Session and Variable	Film	Items and F-Value			L/S
1. Subjects Exposure to Films	1	3-3.808	8-4.011	13-3.742	.05
		11-7.162			.01
	2	3-3.089	8-3.032	6-3.476	.05
		12-2.980	13-3.295		.05
		10-7.220	11-5.326		.01
2. Christian Authority of Good Conduct	1	10-3.694	12-4.433		.05
	2	6-9.500			.01
3. Chinese Authority of Good Conduct	1	3-4.062	4-3.091		.05
	2	1-3.665	6-3.445		.05
		3-7.026			.01
4. Frustration	1	2-3.185	3-3.862	4-4.499	.05
		12-4.990			.01
	2	3-4.298	6-3.317		.05
		4-5.454	11-5.398		.01
5. Punishment	1	2-3.247	9-3.669	10-3.149	.05
	2	5-3.814			.05
6. Canadian Civil Authority	1	4-3.130	5-2.952		.05
		8-4.469			.01
	2	2-5.101			.01
		4-3.776	6-4.494	5-3.805	.05
7. Chinese Civil Authority	1	5-3.563	8-4.301		.05
		1-5.881	3-7.917	6-7.141	.01
		9-11.423	11-9.500	13-6.922	.01
	2	10-3.228	12-3.854		.05
		2-4.964	3-8.369	5-12.350	.01
		7-6.781	8-5.650	9-6.816	.01
		13-5.094			.01
8. Peer Group Pressure	1	3-4.320	6-3.607		.05
		5-7.829			.01
	2	12-3.288	2-4.268		.05

TABLE 4

t-Scores Obtained From Comparisons of Session 1
With Subsequent Sessions for Each Group

Group	Film	Christian Moral Authority	Chinese Authority of Good Conduct	Frustration	Punishment	Canadian Civil Authority	Chinese Civil Authority	Peer Group Pressure
Left-Wing	1	-0.1466	-0.4655	0.2030	0.0659	-0.1398	-0.0607	0.0591
	2	0.2137	-0.2415	-0.0791	-0.6261	0.1796	0.2526	0.5840
Matched Control	1	1.1677	0.5377	-0.2325	-0.8771	-0.5377	-0.3612	-0.4280
	2	-0.2873	-1.0837	-0.9967	-0.6329	-0.8761	-1.6776	-0.6745
Social Science	1	0.5222	0.0	-0.1429	0.8783	-0.3333	-1.0580	-0.8542
	2	-0.7804	-0.8147	-0.2095	-0.6018	-0.5410	-0.5636	0.0694
Physical Science	1	0.6278	1.3506	1.0287	1.2322	1.0985	1.1019	1.3154
	2	-0.0588	0.3644	0.1938	0.0946	0.0412	0.3275	0.8477
Hetero- geneous	1	0.8760	1.4142	6.2680a	1.6550	-1.8345	-2.4203d	4.1849a
	2	7.5537a	12.0538a	12.0702a	0.9449	-2.9309c	-3.7845b	3.4409b

Significant at level indicated: a) .001
b) .01
c) .02
d) .05

TABLE 5

t-Scores for Group Comparisons for Each Session and Film

Session and Variable	Group	Left-Wing		Matched Control		Physical Science		Social Science	
		Film 1	Film 2	Film 1	Film 2	Film 1	Film 2	Film 1	Film 2
1. Subjects	2	0.1571	-1.0410						
Exposure to	3	-0.0788	-0.3430	-0.5704	0.6624				
Films	4	1.0391	0.5814	1.1991	1.3629	1.4142	0.8397		
	5 *	1.0057	2.7378d	2.2829d	4.9113a	3.0071c	3.2038b	-0.4673	1.0888
2. Christian	2	-0.7685	-0.3587						
Moral	3	-0.7407	0.5744	-0.3306	1.1387				
Authority	4	0.3394	0.8283	0.7399	1.3318	0.8109	0.3703		
	5	1.0159	0.2601	3.3101b	0.9608	1.6038	-0.6019	0.1459	-0.9078
3. Chinese	2	-0.7280	0.1239						
Authority of	3	-0.5199	0.2308	0.0720	0.0624				
Good Conduct	4	-0.7312	-0.1004	-0.0914	-0.1817	-0.1317	-0.2522		
	5	-0.1944	-1.7886	0.9791	-1.4228	0.4990	-2.1483	0.8660	-0.8461
4. Frustration	2	0.6132	-0.1640						
	3	0.2909	-0.1323	-0.4097	0.0				
	4	0.0	0.2150	-0.3851	0.3400	-0.1714	0.3033		
	5	-0.4665	-1.0356	-1.3911	-1.0453	-1.1278	-0.6796	-0.2419	-0.8752
5. Punishment	2	0.9231	-0.9444						
	3	-0.5571	-0.1371	-1.5565	0.5879				
	4	-0.2851	0.0	-0.9752	0.5844	0.0622	0.0963		
	5	0.6112	1.3950	-0.6154	2.3515d	1.7495	1.0654	0.7120	0.7014
6. Canadian	2	0.4041	0.3056						
Civil	3	-0.1120	0.4174	-0.6266	0.0525				
Authority	4	-0.3754	0.4596	-0.6040	0.1994	-0.3390	0.1678		
	5	2.3454d	4.6381a	2.1227	2.4225d	3.0144c	2.7310d	1.6687	1.5401
7. Chinese Civil	2	0.2993	1.0460						
	3	0.2601	0.4596	-0.1253	-0.7658				
	4	-0.2589	0.1792	-0.5165	-0.4957	-0.4981	-0.0461		
	5	1.8865	4.7645a	2.2045	2.2531d	4.1461b	5.0481a	1.6713	2.0096
8. Peer Group	2	0.4811	0.3044						
Pressure	3	0.4540	0.1363	-0.0958	-0.1300				
	4	-0.3241	-0.1488	-0.7811	-0.3385	-0.7746	-0.2306		
	5	-0.3670	1.8398	-1.2497	1.2584	-1.5206	1.2273	0.1021	1.0840

* 5 is Heterogeneous Group. Significant at level indicated: a) .001; b) .01; c) .02; d) .05

and Film 2 ($p < .001$); Session 7, Film 2 ($p < .001$). The left-wing group did not differ from any other group;

- 2) the matched control group differed significantly from the heterogeneous group in Session 1, Film 1 ($p < .05$) and Film 2 ($p < .001$); Session 2, Film 1 ($p < .01$); Session 5, Film 2 ($p < .02$); Session 6, Film 2 ($p < .05$); Session 7, Film 2 ($p < .05$). The matched control group did not differ from any of the other groups in the study;
- 3) the physical science group differed significantly from the heterogeneous group in Session 1, Film 1 ($p < .02$) and Film 2 ($p < .001$); Session 6, Film 1 ($p < .01$) and Film 2 ($p < .001$). It did not differ from any of the other groups;
- 4) the social science group did not differ from any of the groups under study. It is possible that the age factor may be responsible for this finding. The mean age for social science was 23, and for the heterogeneous group was 21, which is much less than the other groups. However, this does not appear to be so, since the social science group should then have been influenced more than the matched control and physical sciences since the mean age of these groups were 24 and 24.75 respectively.

The left-wing group was the least influenced (one item only under punishment); then the social science group with two items under punishment, and peer group pressure, followed by the physical science group with seven items under frustration, Chinese civil authority and peer group pressure. The matched control group had twelve items under Christian moral authority, Chinese authority of good conduct, frustration, Canadian civil authority, Chinese civil authority, and peer group

pressure. Finally, the heterogeneous group was influenced by all the variables on all items (see Table 6). In order to determine if subsequent sessions were influenced by prior sessions, an item analysis was carried out between each session for each group. Table 6 indicates that each variable appears to have had a separate effect in that some items which had been influenced by a prior variable were also influenced by the subsequent variable. As an example of this, Table 6 shows that for the matched control group in Session 1, Film 1, Item 11 compared to Session 2 (Christian moral authority), the \bar{T} -score was -2.449 ; but between Session 1 and 3 (Chinese authority of good conduct), the \bar{T} -score was then -3.000 . Table 6 reports all the significant changes that took place from session to session, and all the possible combinations. The 0.0 was reported to indicate the degree of group consensus. The heterogeneous group had 58 items upon which there was complete agreement on the part of the group; whereas the physical science group had 35, the social science group had 30, the matched control group had 22, and the left-wing had only 16 items upon which there was complete agreement. In terms of conformity, the heterogeneous group would be the most conformist, while the left-wing group would be the most nonconformist or autonomous with the other groups lying in between.

Hypotheses 1a and 1b stated that there would be no significant differences between the groups when controlling for educational background and radical group membership in the perception of collective violence, and in the direction of perception. From the data of the present investigation, hypothesis 1a was rejected for some experimental groups. The left-wing group reacted only to punishment for only one

TABLE 6

t-Scores Comparison Between Sessions

Group I - Left-Wing

Session	Film	Christian Moral Authority - 2	Chinese of Good Conduct-3	Authority Frustration 4	Punishment 5	Canadian Civil Authority - 6	Chinese Civil Authority - 7	Peer Pressure-8	Group
		Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score
1	1	6 0.0e	8 0.0e	5 0.0e	8 0.0e	8 0.0e			
	2	7 0.0e	8 0.0e	6 0.0e					
	2		7 0.0e						
2	1			6 0.0e					
	2		7 0.0e			10 0.0e			
3	1				8 0.0e	8 0.0e			
	2				5 3.000d				
4	1				7 0.0e				
5	1					8 0.0e			
6, 7 and 8 Sessions - nil									

Group II - Matched Control

1	1	11 -2.449d	11 -3.000d	11 -3.000d		11 -3.000d	11 -3.000d	11 -3.000d	11 -3.000d
	2	5 0.0e		13 2.828d					
				12 2.828d	6 0.0e	12 2.215	12 3.665b	6 0.0e	
				10 2.828d			11 2.529d		
				5 0.0e					
2	1		6 0.0e		6 0.0e	6 0.0e		6 0.0e	
	2			5 0.0e					
3	1				5 0.0e	5 0.0e		5 0.0e	
					6 0.0e	6 0.0e		6 0.0e	
5	1					5 0.0e		5 0.0e	
						6 0.0e		6 0.0e	
	2							6 0.0e	
6	1							5 0.0e	
								6 0.0e	
Sessions 4, 7 and 8 - nil									

TABLE 6 - Continued

Group III - Physical Science

Session	Film	Christian Moral Authority	Chinese Authority of Good Conduct	Frustration	Punishment	Canadian Authority	Civil Authority	Chinese Civil Authority	Peer Group Pressure		
		Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score		
1	1	1		14	-2.449			3	3.000	5	3.000
								4	3.000		
								5	0.0		
	2	nil									
2	1		1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	
			2 0.0	2 0.0		2 0.0		2 0.0			
								5	3.000		
	2	nil									
3	1			1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	1 0.0	
				2 0.0		2 0.0		2 0.0			
								3	3.000		
								6	3.000		
	2				1 0.0			1 0.0			
4	1				1 0.0	2 0.0	2 0.0	2 0.0	1 0.0	1 0.0	
						1 0.0		1 0.0			
	2	nil									
5	1					1 0.0	6 3.000	1 0.0	1 0.0	1 0.0	
							1 0.0				
	2						1 0.0				
6	1						1 0.0	1 0.0	1 0.0	1 0.0	
							2 0.0				
	2	nil									
7	1									1 0.0	
	2	nil									

Session 8 - nil

TABLE 6 - Continued

Group IV - Social Science

Session	Film	Christian Moral Authority	Chinese Authority of Good Conduct	Frustration	Punishment	Canadian Authority	Civil Authority	Chinese Civil Authority	Peer Group Pressure
		Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score
2	1		14 0.0	14 0.0	14 0.0	14 0.0	14 0.0	14 0.0	
	2		14 0.0	14 0.0	2 -2.449	14 0.0	14 0.0	14 0.0	2 -2.449
					14 0.0				
3	1			14 0.0	14 0.0	14 0.0	14 0.0	14 0.0	
	2			14 0.0	14 0.0	14 0.0	14 0.0	14 0.0	
4	1				14 0.0	14 0.0	14 0.0	14 0.0	
	2				14 0.0	14 0.0	14 0.0	14 0.0	
5	1					14 0.0	14 0.0	14 0.0	
	2					14 0.0	14 0.0	14 0.0	
6	1						14 0.0	14 0.0	
	2						14 0.0	14 0.0	

Sessions 1, 7 and 8 - nil

Group V - Heterogeneous

1	1			1 0.0	1 0.0	1 -2.645	1 0.0	1 0.0	
			2 -7.000	2 -7.000	2 0.0	2 3.555			
	3	-4.781	3 -7.637	3 -7.637	3 -6.148		3 -7.637	3 -6.778	
				4 -5.227	4 -3.631	4 3.000	4 -2.701	4 -2.701	
	5	4.582		5 0.0	5 3.415	5 3.812	5 5.000	5 0.0	
			6 -7.000	6 -7.000	6 -3.034		6 2.575	6 -7.000	
			7 3.861	7 0.0	7 2.645	7 2.645	7 7.637		
	8	-7.000		8 0.0		8 2.375		8 -3.000	
			9 0.0	9 2.645	9 9.000		9 10.692		
	10	-3.600		10 -2.333	10 -4.320	10 -2.396		10 -4.245	
	11	3.210		11 3.210	11 3.210		11 0.0		
	12	3.415		12 3.564					
			13 3.415		13 3.000	13 0.0	13 7.937		
	14	0.0		14 0.0			14 2.645	14 -7.000	8

TABLE 6 - Continued

Group V - Heterogeneous (Continued)

Session	Film	Christian Moral Authority		Chinese Authority of Good Conduct		Frustration		Punishment		Canadian Civil Authority		Chinese Civil Authority		Peer Group Pressure	
		Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score
1	2			1	0.0	2	-5.656			2	3.794	1	-7.000	1	0.0
		3	-4.582	3	-6.148	3	-7.637	3	-5.291			2	5.150	2	2.197
				4	0.0	4	0.0	4	-4.582	4	5.612	3	-7.637	3	-5.000
				5	-3.415	5	-2.256	5	-2.256	5	2.701	5	5.227		
				6	0.0	6	0.0	6	2.375	6	7.937	7	3.346		
		8	-5.656	8	-3.861	8	-7.000							8	-7.000
		10	-4.245	10	-4.477	9	2.256	9	4.830	9	2.256	9	9.104		
		11	-3.346	11	-7.637	10	-4.320	10	-4.477	11	-2.545			10	-4.245
				12	-2.758			13	3.384			13	7.171	14	-5.656
				2	-4.582	2	-4.582	2	-4.582	1	-2.393	1	-5.000		
				3	-4.582	3	-4.582	3	-2.160	2	3.741	3	-4.582	3	-3.034
2	1			4	0.0	4	0.0	4	-4.582	4	5.612	4	-2.645	4	-2.645
				5	-3.034	5	-4.582	5	-4.582						
				6	-7.000	6	-7.000	6	-3.034			6	2.575	6	-7.000
				7	2.236							7	4.320		
				8	3.034			8	2.256	8	5.150	8	5.462		
				10	2.688			9	2.575			9	4.438		
				13	2.909			13	2.236	12	-3.741	12	-3.861	10	7.000
						14	0.0							11	-9.000
														12	-5.291
														13	6.068
														14	2.645
						1	-5.000	2	-3.034	2	4.582	1	-4.024	14	-7.000
						3	-4.582	3	0.0	3	-2.645	3	2.965	2	3.034
						5	-4.582	4	-7.000	4	-3.034	4	5.507		
				6	-4.582	5	-3.034	13	3.415	5	2.393	3	0.0		
				14	0.0	6	-4.582	6	2.824	6	7.000	14	2.645		
						11	3.346	7	3.384	7	4.248	5	5.000		
						12	2.256	8	3.384	8	3.210	12	4.242		
						13	0.0	9	4.965	9	3.741	7	6.676		
						14	0.0	11	3.346	10	3.741	8	7.071		
								12	3.034	14	0.0	9	10.692		
												10	7.637		
												11	2.393		
												12	2.909		
												13	7.937		
												13	0.0		

TABLE 6 - Continued

Group V - Heterogeneous (Continued)

Sessions	Film	Christian Moral Authority		Chinese Authority of Good Conduct		Frustration Punishment		Canadian Civil Authority		Chinese Civil Authority		Peer Group Pressure	
		Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score
		1	1			2	0.0	2	7.000	2	6.148	1	-4.582
				3	0.0	4	-4.582	3	3.274	2	3.274	4	-2.645
				4	0.0	5	2.256	4	5.612	3	0.0	5	7.000
				6	0.0	9	9.000	5	3.120	4	-2.645	6	0.0
				7	-3.861	10	-3.360	6	3.210	5	4.024	7	-2.898
				8	-4.582			8	2.824	6	6.177	10	-3.210
				9	2.645			13	-3.303	8	2.160	14	-4.320
				13	-2.909			14	-2.160	9	10.692		
2				1	7.000	1	7.637	1	2.375	2	4.464	1	0.0
				4	0.0	4	-4.582	2	2.256	5	10.583	10	7.000
				6	0.0	5	0.0	3	4.816	6	4.582	6	7.000
				9	2.256	6	6.177	4	5.612	7	4.320	11	3.415
				11	7.637	8	2.375	5	5.612	8	4.965	12	3.555
				12	3.384	9	4.830	6	13.228	9	9.104	14	-7.000
				14	0.0	11	7.637	7	2.160	10	6.480		
						12	4.248	8	2.645	11	5.291		
						13	3.384	9	2.256	12	5.656		
						14	0.0	10	3.988	13	7.171		
								11	3.415	14	2.645		
								12	2.256				
								14	0.0				
4	1			1	0.0	1	0.0	1	-2.645	1	0.0	1	0.0
				2	7.000	2	7.000	2	6.148	2	3.274	2	4.582
				5	3.415	3	3.415	3	3.274	3	0.0	4	2.645
				7	2.645	4	2.645	4	9.354	4	2.645	5	0.0
				8	3.415	5	3.415	5	3.812	5	5.000	6	0.0
				9	2.758	6	2.758	6	3.210	6	6.177	10	-2.645
				10	-2.758	7	-2.758	7	2.645	7	7.637	14	-7.000
				12	-3.988	8	-3.988	8	6.177	8	7.637		
				13	2.236	12	2.236	12	-4.024	9	5.000		
										10	2.645		
										11	-9.000		
										12	-5.000		
										13	6.068		

TABLE 6 - Continued

Group V - Heterogeneous (Continued)

Session	Film	Christian Moral Authority	Chinese Authority of Good Conduct	Frustration	Punishment	Canadian Civil Authority	Chinese Civil Authority	Peer Pressure	Group		
		Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score	Item t-Score		
4	2				2 4.242	2 6.324	1 -4.242	2 4.709			
					3 2.645	3 6.354	2 8.583	3 3.415			
					5 7.000	4 0.354	3 0.0	5 4.242			
					6 6.177	5 4.660	4 3.861	6 7.000			
					7 3.415	6 13.228	5 8.275	8 0.0			
					8 3.415	7 4.582	6 4.582	13 0.0			
					9 2.575	8 3.055	7 7.637	14 -7.000			
					13 3.415	10 3.812	8 9.000				
					14 0.0	11 -2.545	9 5.600				
						14 0.0	10 6.676				
							13 7.937				
							14 2.645				
		5	1					1 -2.645	1 0.0	1 0.0	
								2 3.555	6 4.438	9 -5.656	
						3 2.496	7 3.000	14 -4.024			
						4 7.179	8 2.545				
						6 2.262	9 3.034				
						8 3.120	10 9.000				
						9 -3.384	11 -9.000				
2						13 -2.393	13 2.393				
						2 4.427	1 -5.462	2 2.825			
						3 3.924	2 6.008	6 -2.575			
						4 7.179	3 -2.645	8 -3.415			
						6 2.701	4 2.236	9 -3.864			
						9 -2.575	5 5.291	13 -3.415			
						10 3.988	7 2.545	14 -7.000			
				11 -2.545	8 2.256						
				13 -3.384	9 2.236						
				14 0.0	10 6.480						
					13 3.326						
					14 2.264						

TABLE 6 - Continued

Group V - Heterogeneous (Continued)

Session No	Film	Christian Moral Authority		Chinese Authority of Good Conduct		Frustration		Punishment		Canadian Civil Authority		Chinese Civil Authority		Peer Pressure		Group	
		Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score	Item	t-Score		
1	1											1	-2.645	1	2.645		
													3	-3.274	2	-3.741	
													4	-6.110	3	-2.852	
													7	3.000	4	-6.110	
													9	5.600	6	-3.210	
													10	2.375	8	-3.788	
													11	-2.965	14	-4.242	
													13	5.612			
													14	2.758			
													3	-6.354	3	-3.600	
													4	-4.637	4	-4.071	
													6	-2.645	6	-7.171	
													7	2.160	8	-3.055	
													9	5.600	10	-3.741	
											12	2.256	14	-7.000			
											13	7.171					
											14	2.645					
2	2																
7	1																

Session 1 indicates Subjects' Exposure to Films
 Session 2: Christian Moral Authority
 Session 3: Chinese Authority of Good Conduct
 Session 4: Frustration
 Session 5: Punishment
 Session 6: Canadian Civil Authority
 Session 7: Chinese Civil Authority

Significant at: a) $p < .001$; b) $p < .01$; c) $p < .02$; d) $p < .05$; e) $T < .001$
 Groups I, II, III, IV: 2.447; 3.143; 3.707; 5.959
 Group V: 2.145; 2.624; 2.977; 4.140

item, and the direction was towards more authoritarianism. The social science group reacted to punishment (one item only), and peer group pressure (one item only) in a more autonomous manner. The physical science group reacted only to frustration in an autonomous manner. However, it reacted to Chinese civil authority in a more authoritarian manner (six items), and also to peer group pressure (one item). The matched control group reacted to Christian moral authority (one item only) in a more autonomous manner also to the Chinese authority of good conduct (one item only), and to frustration on one item only. However, three items showed more authoritarianism under frustration. Canadian civil authority produced more autonomy on one item only. Chinese civil authority produced more autonomy on one item; but more authoritarianism on two items. Peer group pressure elicited greater autonomy on one item. The heterogeneous group showed the following trends:

- 1) Christian moral authority produced seven autonomous responses and three authoritarian responses;
- 2) Chinese authority of good conduct: 17 autonomous responses, and six authoritarian responses;
- 3) frustration elicited 16 autonomous responses, and twelve authoritarian responses;
- 4) punishment, however, reversed the trend: 18 autonomous responses were given in comparison to 41 authoritarian responses;
- 5) Canadian civil authority produced 16 autonomous responses and 64 authoritarian responses;
- 6) Chinese civil authority elicited 25 autonomous responses and 89 authoritarian responses;

7) peer group pressure produced 52 autonomous responses and 21 authoritarian responses. Hence, it would appear that for the heterogeneous group, Christian moral authority, Chinese authority of good conduct, frustration and peer group pressure tended to produce autonomous responses while punishment, Canadian civil authority and Chinese civil authority tended to elicit more authoritarian responses than autonomous responses.

In order to determine the trend for the other groups, the investigator looked at the nonsignificant items. The left-wing group showed more autonomous responses under Christian moral authority, frustration, Canadian civil authority, Chinese authority and peer group pressure and more authoritarian responses under Chinese authority of good conduct, and punishment. The matched control group followed the same trend except for frustration and Chinese authority which produced more authoritarian responses. The physical science group produced authoritarian responses under Christian moral authority, Chinese authority of good conduct, punishment, Canadian civil authority, and Chinese civil authority, and autonomous responses under frustration and peer group pressure. The social science group had more authoritarian responses under Christian moral authority only. All the other variables elicited more autonomous responses (see Table 7).

The trends shown in Table 7 can only be explained in terms of past experiences and personality. These trends will be further discussed under the standardized tests and the structured interview.

The investigator's observations led to the belief that there may have been several explanations for the different trends produced by the

TABLE 7

Direction of Responses on the Murphy and Likert Scale

(Revised by Investigator)

	Christian Moral Authority	Chinese Authority of Good Conduct	Frustration	Punishment	Canadian Civil Authority	Chinese Civil Authority	Peer Group Pressure
Left-Wing	Autonomous	Authoritarian	Autonomous	Authoritarian	Autonomous	Autonomous	Autonomous
Matched Control	Autonomous	Authoritarian	Authoritarian	Authoritarian	Autonomous	Autonomous	Autonomous
Physical Science	Authoritarian	Authoritarian	Autonomous	Authoritarian	Authoritarian	Authoritarian	Autonomous
Social Science	Authoritarian	Autonomous	Autonomous	Autonomous	Autonomous	Autonomous	Autonomous
Heterogeneous	Autonomous	Autonomous	Autonomous	Authoritarian	Authoritarian	Authoritarian	Autonomous

independent variables. The physical science group's overall tendency towards authoritarian responses may have been due to a lower level of social awareness as well as to a general disinterest in social issues. The intensity of the stimuli (independent variables) may have been more effective if the authorities, whose views were reported had been presented in person. Another, perhaps more likely explanation, is that in the structured interview the subjects agreed with their parents' views 60.2% of the time. The subjects perceived their parents as traditional, uncritical and often indiffererent or undecided towards social issues. On the other hand, the left-wing group's parental percentage agreement of 70.4 was the highest. However, the subjects most often perceived their parents as involved or interested in social issues and more critical. The left-wing tended to be more autonomous except in the cases of punishment and Chinese authority of good conduct. The social science group who displayed authoritarianism only under Christian moral authority agreed with their parents 69.3% of the time. The subjects perceived their parents as very uncritical, indifferent, traditional and undecided (data obtained from structured interview (see Appendix J). The matched control group gave autonomous responses under only Christian moral authority, Canadian civil authority and peer group pressure. The subjects agreed with their parents 61.4% of the time. However, they appeared to have only a hazy idea of their parents' opinions on many of the items; but nevertheless had a high level of agreement. They either perceived their parents as indifferent, undecided, traditional and uncritical; consequently had less items to agree with than if they had had a greater knowledge of their parents' position. This also holds

true for the social science group. The heterogeneous group responded in an authoritarian manner under punishment, Canadian and Chinese civil authorities. The subjects' percentage agreement with parents was 59.1%. The subjects perceived their parents as being mostly undecided, indifferent, or disinterested, and uncritical. The subjects themselves tended to be undecided and indifferent. Consequently, there was a fair amount of agreement or attitude between subjects and parents.

It is interesting to note in Table 6 the strength of the variables when considering all the groups. Frustration and Chinese civil authority had the greatest effects, followed by punishment, then Canadian civil authority and peer group pressure having equal effect, and then Christian moral authority and Chinese authority of good conduct. However, Gillespie (1961) found that punishment in the form of verbal attack was more effective in producing aggression than frustration. It appears that this held true for all the groups except for the social science group when considering the increase in authoritarian responses (including the nonsignificant responses), but was less powerful in effecting a significant change than frustration and Chinese civil authority.

Another interesting finding (see Table 6) is that all the independent variables (forms of control) tended to produce more conformity to the values of the authorities in the groups who tended to be conformist while it produced more nonconformity in the groups who tended to be nonauthoritarian (nonsignificant items are included but were not reported due to the mass of figures involved). Table 6 gives an indication of the trend for the heterogeneous group. Examining the groups as a whole unit and considering only the significant items,

punishment, Canadian and Chinese authority were the only variables eliciting more conformist responses while all the other independent variables produced more nonconformist responses. This finding appears to support the authority studies done by Milgram (1965), Lewin, Lippitt and White (1939), and Baldwin (1948), and others mentioned in the review of the literature. Thus it would appear that the more powerful the authority source, the less it is likely to be questioned, and hence elicits more conformity. This appears to hold true regardless of the source as was shown by Milgram (1965). Both Canadian and Chinese authority were able to obtain more conformity with Chinese civil authority drawing the greatest number of conformist responses (Chinese civil authority 69; Canadian civil authority 48; and punishment 23).

The only definite conclusion that can be derived from the data in regard to hypothesis 1a is that there was a significant difference only between the heterogeneous group and the other groups except for the social science group which did not differ from any group. In regard to hypothesis 1b, the direction of perception, only a tentative hypothesis can be assumed. When considering the nonsignificant scores, the trend suggested that each group greatly differed from each other except for the social science group and the left-wing group who displayed less authoritarianism than any other group with the social science group showing the least. The physical science group demonstrated more authoritarianism than any other group.

Standardized Tests

In comparing the left-wing group subjects to the other experimental groups' subjects in terms of their scores on the Adjustment Inventory (Adult Form), the California Psychological Inventory, and the Hand Test, the overall differences across the subscales will first be discussed, and then the individual subscales. Each test will be discussed in the order listed above.

The Adjustment Inventory (Adult Form)

Analysis of variance indicated that there was no significant F Values between the groups. However, when a T-test was carried out for all possible combinations, the matched control group and the heterogeneous group differed significantly ($p < .05$) on the home adjustment scale (see Figure 2 and Figure 5). The heterogeneous group's home adjustment is 10, while (11 is unsatisfactory) the matched control group is 4 which is average (3 is good). See Figure 6 which compares all the groups' norms to the Bell Adjustment Inventory norm. It is apparent from the data in Figure 6 that the trends obtained for each group are strikingly similar. High scores indicate unsatisfactory adjustment, and low scores satisfactory adjustment. The within variance is so great that between variances cannot be reflected. The physical science group appears to be the best adjusted group. This test supports the experimental findings in that it was also the group which had the highest level of conformity and the lowest in autonomy. Each group appears to have subjects who have a poor adjustment all across the scales except for the heterogeneous group (Figure 5) who shows no subjects with any health

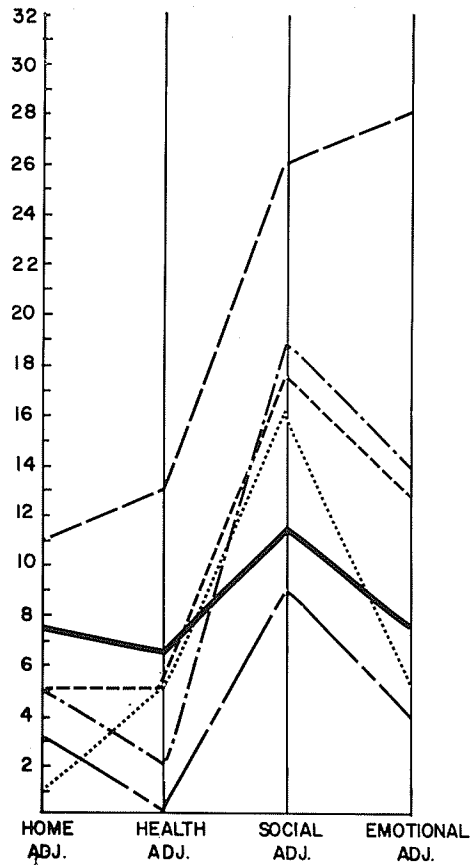


FIGURE 1 - PROFILE FOR GROUP 1 - *
LEFT - WING

* Group Norms -----

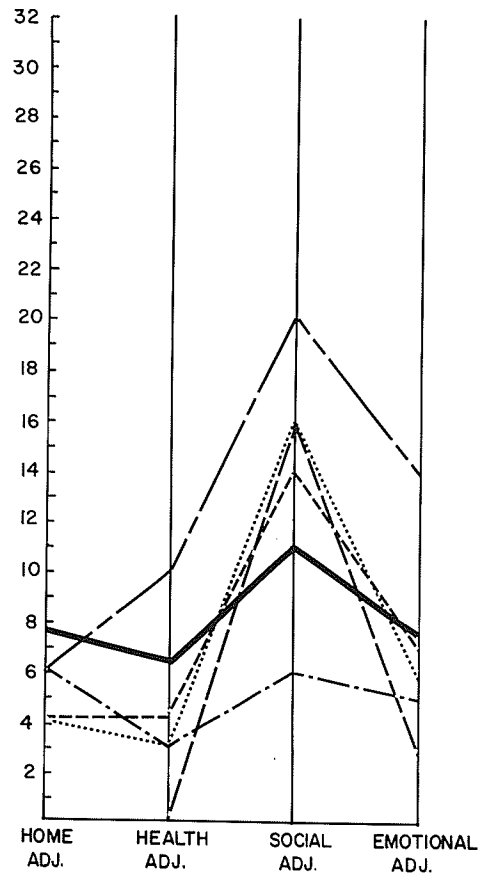


FIGURE 2 - GROUP 2 - MATCHED - CONTROL *

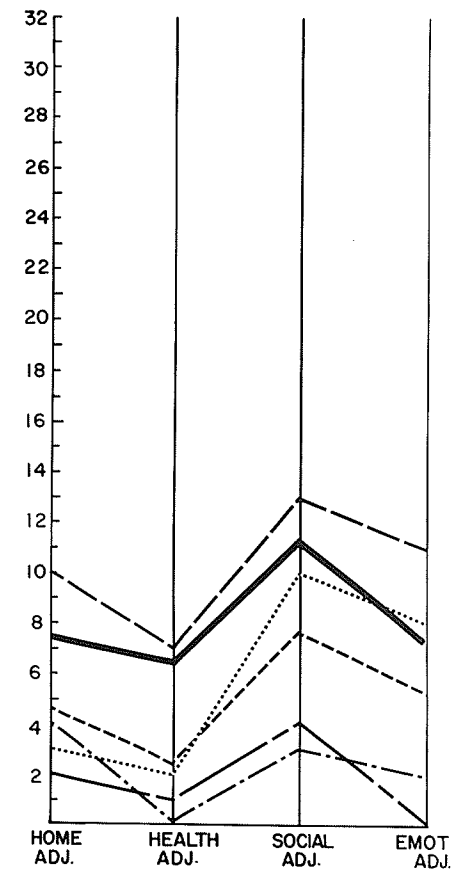


FIGURE 4 - GROUP 3 - PHYSICAL SCIENCES *

The Adjustment Inventory
Adult Form (Bell, H. M., 1934)

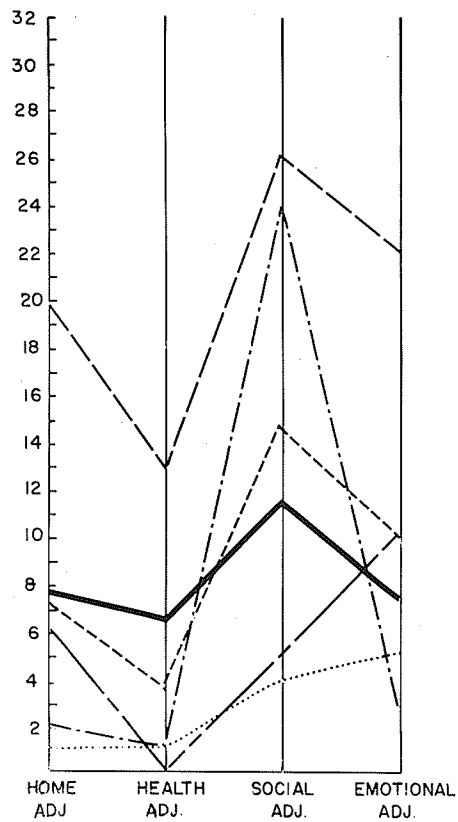


FIGURE 3 - GROUP 4 - SOCIAL SCIENCES ✕
✕ Group Norms -----

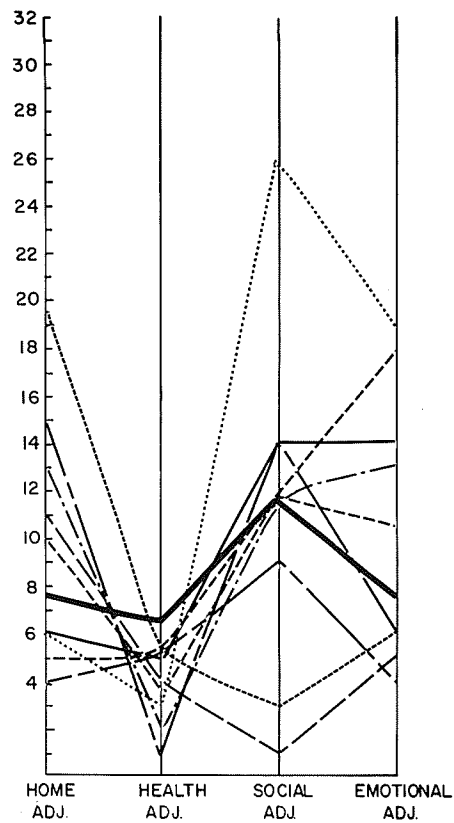
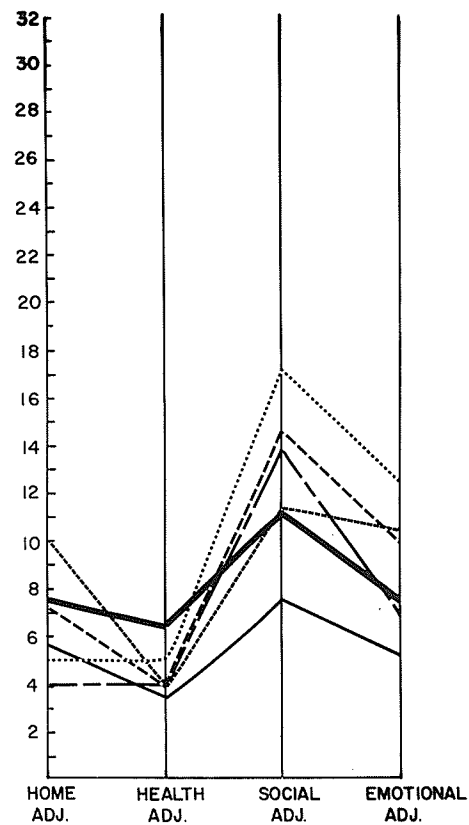


FIGURE 5 - GROUP 5 - HETEROGENEOUS GROUP ✕



RESEARCH GROUP NORM COMPARED TO
THE BELL ADJUSTMENT INVENTORY NORM ———
..... LEFT WING
----- MATCHED CONTROL
----- SOCIAL SCIENCE
----- PHYSICAL SCIENCE
----- HETEROGENEOUS

Figure 6

maladjustment. Figure 6 indicates that all the groups fall within the average range for home adjustment, (4 - 11) health adjustment (4 - 8), social adjustment (7 - 15) except for the left-wing group, and emotional adjustment (4 - 11) except for the left-wing group. However, when one looks at Figure 1, it is clear to see that one subject has extreme scores on three of the scales. Both the left-wing group and the matched control group have three subjects with unsatisfactory social adjustment. These findings agree with Whittaker and Watts' Berkley Study (1969). It would appear according to the Bell Adjustment Inventory that not only the left-wing group tends toward social and emotional maladjustment, but also the social science, the matched control group (social) and the heterogeneous (emotional). Perhaps the present day values have changed since the author constructed this test (1934), and it can no longer apply. It is possible that today's trend of questioning authorities, values, and beliefs was not considered as a positive social norm, and consequently weighed accordingly.

In view of hypothesis 1b that there would be a significant difference between groups when there are differences in adjustment patterns, it was rejected for all the groups except for the heterogeneous group. It appears that home adjustment may have been a factor differentiating the heterogeneous group from the other groups although it differentiated significantly only with the matched control group.

The California Psychological Inventory

The analysis of variance for each subscale yielded only one significant F-value ($F = 5.162$, df 4/19, $p < .05$) for the Sy subscale

(sociability). A T-test was computed between groups for all possible combinations and the T-scores are reported in Table 8.

The mean standard score line is at 50. The normal range is 30 to 70. If nearly all scores are above the mean standard score line, the probabilities are that the person is one who is functioning effectively both socially and intellectually. Conversely, if most scores are below the mean, the chances are that the individual is experiencing significant difficulties in his interpersonal adjustment.

Class I

Measures of Poise, Ascendancy, Self-Assurance and Interpersonal Adequacy:

The subscales in Class I have a common emphasis on feelings of interpersonal and intrapersonal adequacy.

Sociability (sy):

The left-wing group differed significantly ($p < .01$) from the physical science and the heterogeneous group ($p < .05$). The matched control differed from the physical science group ($p < .01$). The physical science and heterogeneous groups appeared to be more outgoing, enterprising, ingenious as well as more competitive, forward, original, and fluent in thought than all the other groups. The left-wing seemed to be the most awkward, conventional, quiet, submissive and unassuming, as well as being detached and passive in attitude and being suggestible and overly influenced by other's reactions and opinions. The next group, close to the left-wing, was the matched control group.

The above test findings do not support the experimental findings. When considering only the significant findings, the heterogeneous group was the most influenced and the left-wing was the least influenced.

TABLE 8

T-Scores Between Experimental Groups
For the California Psychological Inventory

Group	Subscale	1		2		3		4		5	
		T-Score	L/S	T-Score	L/S	T-Score	L/S	T-Score	L/S	T-Score	L/S
2	Cm	2.898	.05								
3	SP	4.029	.01								
	SA	3.273	.01	2.644							
	SY	4.119	.01	4.386							
4	Cm	2.569	.05								
	Sc			-3.401	.01						
	Le			-3.299	.01						
	Ac					-2.905	.05				
5	Sp	3.154	.01								
	Fe			2.617	.05			2.879	.05		
	AC							3.150	.01		

Social Presence (sp):

The social presence subscale assesses factors such as poise, spontaneity, and self-confidence in personal and social interaction. The left-wing group differed significantly ($p < .01$) with the physical science and the heterogeneous group ($p < .01$). Figure 7 indicates that all the groups were above the mean score line except for the left-wing group. The left-wing group would then be inclined to be deliberate, moderate, patient, self-restrained, and simple; also as vacillating and uncertain in decision; and as being literal and unoriginal in thinking and judging. On the other hand, the other groups to a lesser or greater degree tended to be clever, enthusiastic, imaginative, quick, informal, spontaneous, and talkative, as well as being active, vigorous, and having an expressive, ebullient nature. These findings do not seem to be related to the experimental findings as there were no significant differences among the groups except with the heterogeneous group. However, it does not seem to hold true that the left-wing group tends to be vacillating and uncertain in decision as this group was the least influenced in the experimental conditions. On the contrary, the heterogeneous group seemed to be the least committed, and therefore the most easily influenced by the experimental conditions.

Self-acceptance (Sa):

This subscale assesses factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.

The physical science group differed significantly ($p < .05$) from the matched control and the left-wing group ($p < .02$). Only the left-wing group appeared below the mean score line. The California

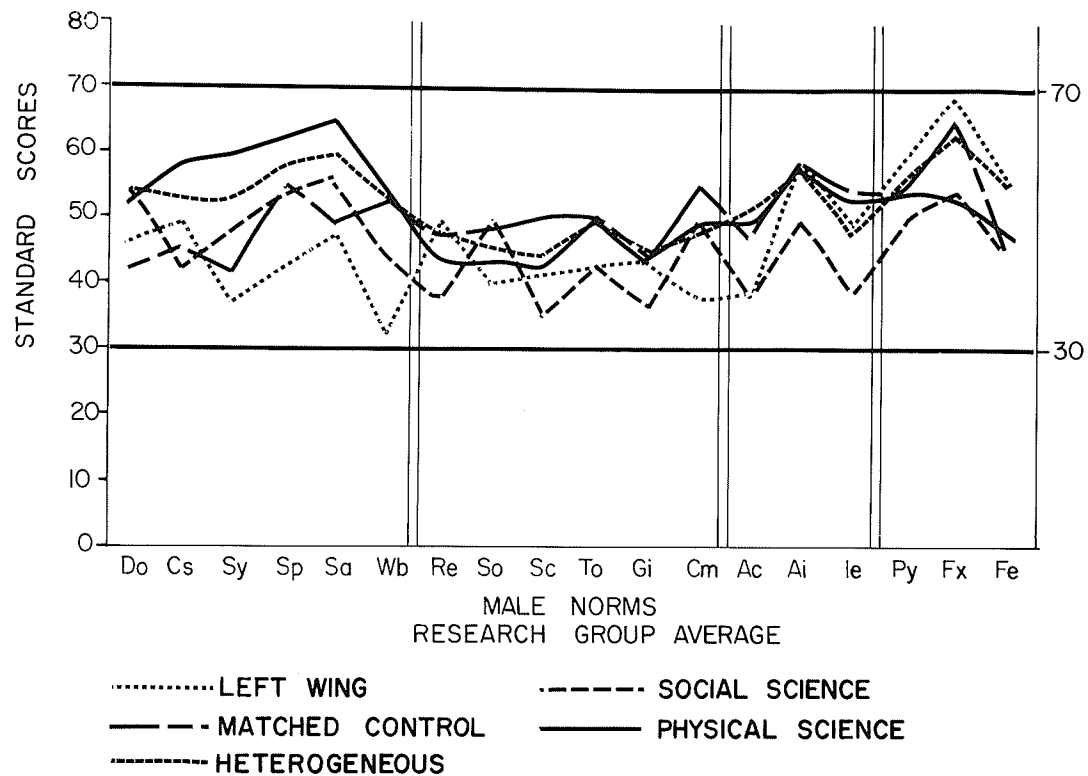


Figure 7

California Psychological Inventory

Psychological Inventory describes persons with low scores as methodical, conservative, dependable, conventional, easygoing, and quiet; as self-abasing and given to feelings of guilt and self-blame; and as being passive in action and narrow in interests. On the other hand, high scores are described as intelligent, outspoken, sharpwitted, demanding, aggressive, and self-centered; as being persuasive and verbally fluent; and as possessing self-confidence and self-assurance.

These findings are supported by the data from the structured interviews but not to the extent indicated by the above sweeping statements.

Class II

Measures of Socialization, Maturity, Responsibility, and Intrapersonal Structuring of Values:

This categorization is primarily concerned with social norms and values, and dispositions to observe or reject such values.

Communality (cm):

Indicates the degree to which an individual's reactions and responses correspond to the modal pattern established for the inventory. A high score indicates a dependable, honest and conscientious person having common sense and good judgment. A low score points to an impatient, changeable, complicated, imaginative, disorderly, nervous, restless, and confused person having internal conflicts and problems.

The left-wing group differs significantly ($p < .5$) with the matched control group and the social science group ($p < .05$). See Figure 7. It would then seem that the social science group is more inclined to reject the social norms and values of society than the

left-wing group, while the matched control group is more inclined to accept them. Nevertheless, all the groups, except for the matched control, tended to reject the values and norms of society to a lesser or greater degree, but all within the normal range.

Self-Control (Sc):

This subscale assesses the degree and adequacy of self-regulation and self-control and freedom from impulsivity and self-centeredness. The matched control group differed significantly ($p < .01$) from the social science group. The social science group also displayed a significant difference ($p < .05$) with the heterogeneous group. Consequently, the matched control and heterogeneous were more self-denying, inhibited, thoughtful and more strict and thorough in their own work and in their expectations of others than the social science group who tended to be more impulsive, self-centered and uninhibited and displayed little concern with the needs and wants of others.

The above two subscales tend to support the perceptual direction demonstrated in the experimental sessions. The social science group conformed only under Christian moral authority, while the heterogeneous conformed under three independent variables. See Table 7. Only the matched control group was above the mean standard score line (50). All the groups are within the normal range. Looking at the individual groups (Figures 8 to 13), it is obvious that each group is composed of individuals with very different personalities.

Class III

Measures of Achievement Potential and Intellectual Efficiency:

The subscales in this class are grouped together because of

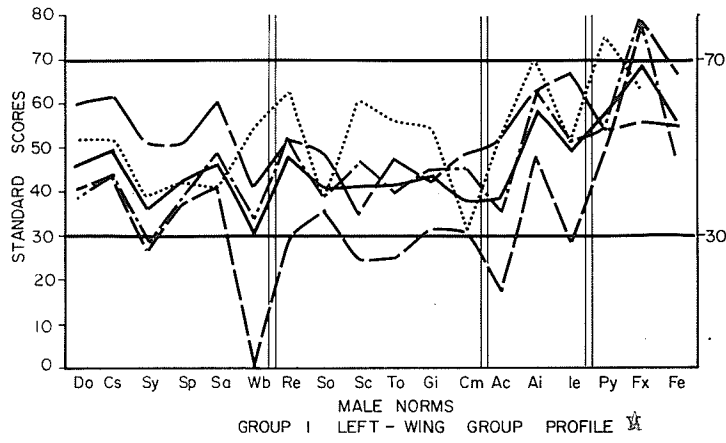


Figure 8

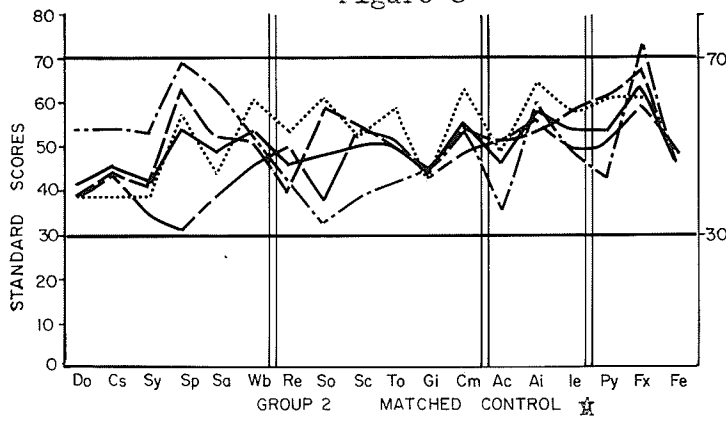


Figure 9

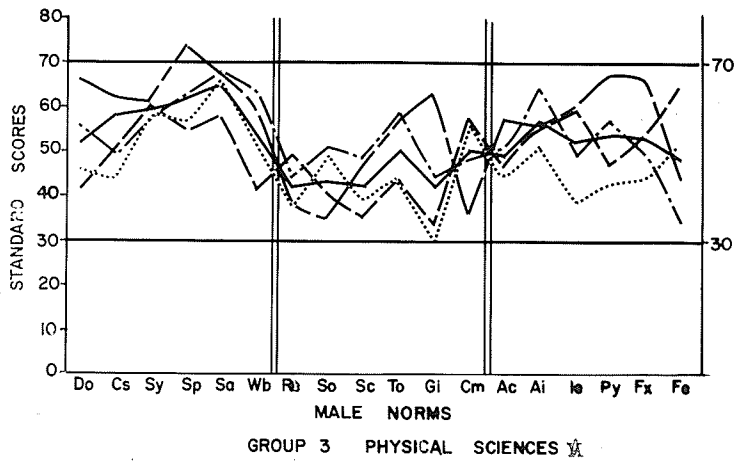


Figure 10

☆ California Psychological Inventory

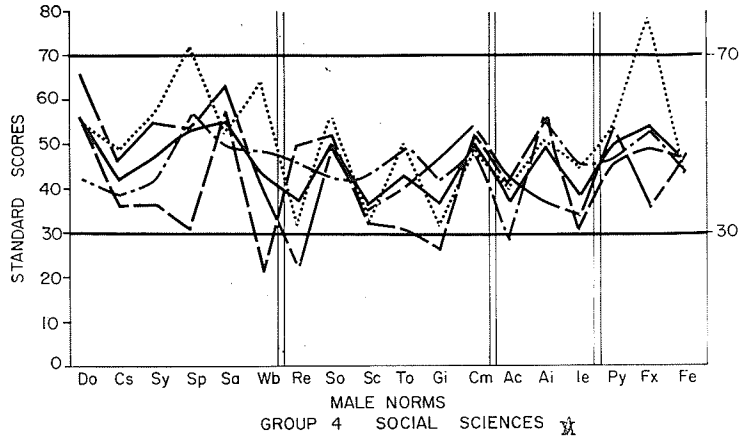


Figure 11

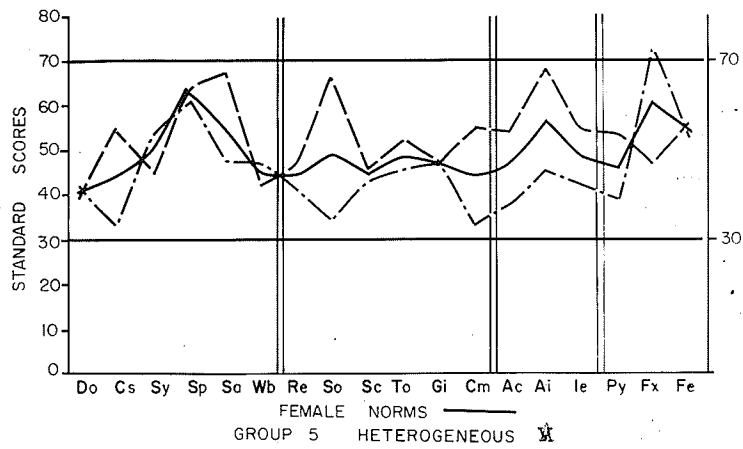


Figure 12

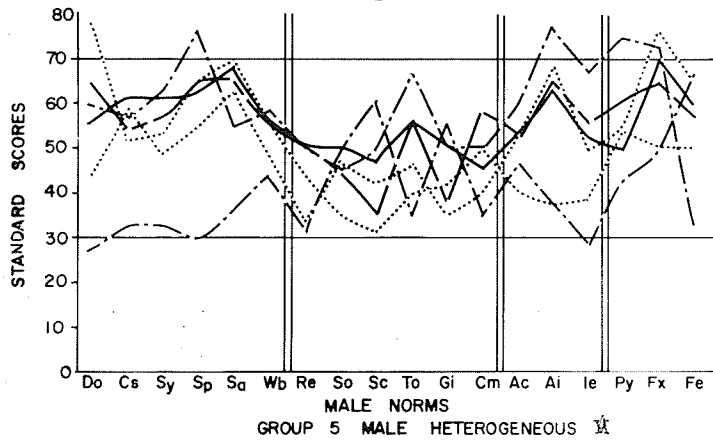


Figure 13

✕ California Psychological Inventory

their common bearing on matters of academic and intellectual endeavor.

Intellectual efficiency (Ie):

This subscale indicates the degree of personal and intellectual efficiency which the individual has attained.

The only two groups which differed significantly ($p < .05$) were the matched control and the social science groups. The social science and the heterogeneous groups are the only two groups below the mean score line of 50 (Figure 6). The other three experimental groups are all above. These groups would then tend to be efficient, clear-thinking, capable, intelligent, progressive, planful, thorough, and resourceful; and as being alert and well-informed; and as placing a high value on cognitive and intellectual matters. The social science group tended to be more cautious, confused, lazygoing, defensive, shallow, and unambitious, as well as being conventional and stereotyped in thinking and lacking in self-direction and self-discipline. However, the group's mean was within the normal range. Looking at Figure 11, not one of the subjects came up to the mean score line of 50. Data from the experimental situations does not indicate that these subjects are conventional.

Achievement (Ac):

The purpose of this subscale is to identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

The physical science group differed significantly ($p < .05$) from the social science, and from the heterogeneous group ($p < .02$). All the groups were at or above the mean score line except for the left-wing

and social science groups, which were both below. Consequently, these two groups are categorized as coarse, stubborn, aloof, awkward, insecure and opinionated; as easily disorganized under stress or pressures to conform; and as pessimistic about their occupational futures. The fact that only the heterogeneous group was greatly influenced in the experimental conditions would indicate that either the left-wing and the other groups are opinionated according to the California Psychological Inventory, or perhaps simply more committed towards certain values. On the other hand, one could perceive the heterogeneous group as more flexible, and the other groups as more rigid. It appears to depend upon the values of the test maker.

Class IV

Measures of Intellectual and Interest Modes:

The subscales included in this category vary independently of each other and of the prior 15 scales, and which are believed to reflect attitudes toward life of broad and far-reaching significance.

Femininity (Fe):

This subscale assesses the masculinity or femininity of interests. High scores indicate more feminine interests, and low scores more masculine.

The left-wing group significantly differed from the social science group ($p < .05$). The heterogeneous group differed significantly ($p < .05$) from the matched control and also from the social science group ($p < .02$). The left-wing and the heterogeneous groups are both above the mean score line while the other groups are below. The low score groups (matched control, physical sciences, and social science) are

described as outgoing, hard-headed, ambitious, masculine, active, robust, and restless; as being manipulative and opportunistic in dealing with others; blunt and direct in thinking and action; and impatient with delay, indecision and reflection. The high scorers (heterogeneous and left-wing) tend to be appreciative, patient, helpful, gentle, moderate, persevering, and sincere; as being respectful and accepting of others; and as behaving in a conscientious and sympathetic way.

The experimental conditions may be said to support these findings when considering the high number of autonomous responses in that it may indicate high respect for other people's opinion, rather than conformity to authority or to the trends set by values and norms.

The Hand Test

The Hand Test's rationale is based on the assumptions that:

1) human behavior is organized; 2) stimulus-specific perceptions of unstructured stimuli must, in some way, reflect higher-order behavioral tendencies; 3) responses to hands in ambiguous poses indicates these hierarchial organizations and are particularly amenable to a classification scheme which is psychologically and diagnostically useful. The Hand Test reveals action tendencies which are efferent and behavioral. The normal number of responses for environment (ENV) and Interpersonal (INT) are approximately the same for well adjusted individuals. Each subscale will be discussed separately when reporting within group differences.

Withdrawal (With):

The withdrawal category consists of three kinds of responses: descriptive, failure to respond to a card, and bizarre. A high With

score is always pernicious, but becomes especially hopeless as interpersonal (INT) responses decrease; when only environmental (ENV) responses remain to compensate for a high With, a psychosis characterized by limited attempts to cling to reality is indicated; the mixture of high With and maladjustive (MAL) responses reflect the person's unhappy awareness of his abnormal mental state, and usually denotes psychosis with a neurotic overlay. The model adult would have an experience ratio (ER) of 5:5:1:0 (ER = \leq INT: \leq INV: \leq MAL: \leq WITH).

Analysis of variance yielded only one significant F value (F = 5.768, df 4/19, $p < .01$). A T-test was computed for all possible combinations between groups. Only one subscale showed a significant difference ($p < .05$) between the social science and the heterogeneous group. See Figures 14 to 19 which represent each group's scores, and the last figure (19), the groups' median compared to the test median for college students. Here again the within group differences are so great for each group that only the subscale, withdrawal is reflecting a between group difference. See Figure 19. The median for college students on WITH is 0. The social science group had 2. However, since the subjects' interpersonal (INT) responses are high, there is no indication of psychopathology.

The social science's score on withdrawal seems to support the tendency to respond to the items on the structured interview as undecided.

Within Group Differences

Analysis of variance indicated that the rather few differences which existed between groups were due to large within group differences.

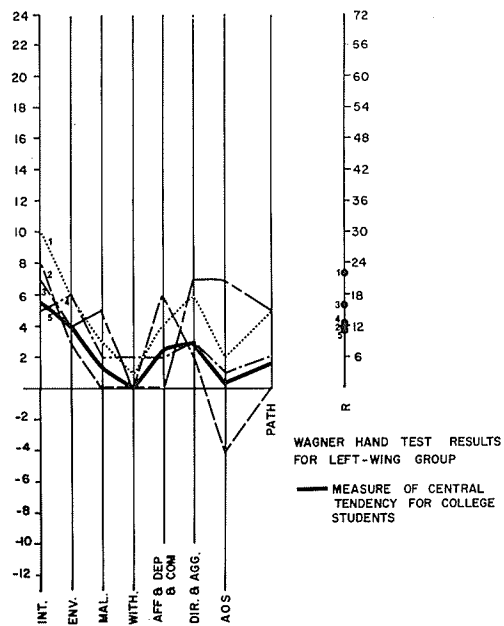


Figure 14

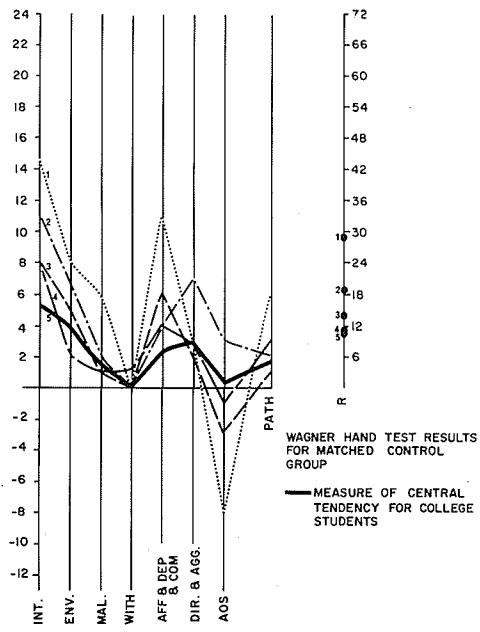


Figure 15

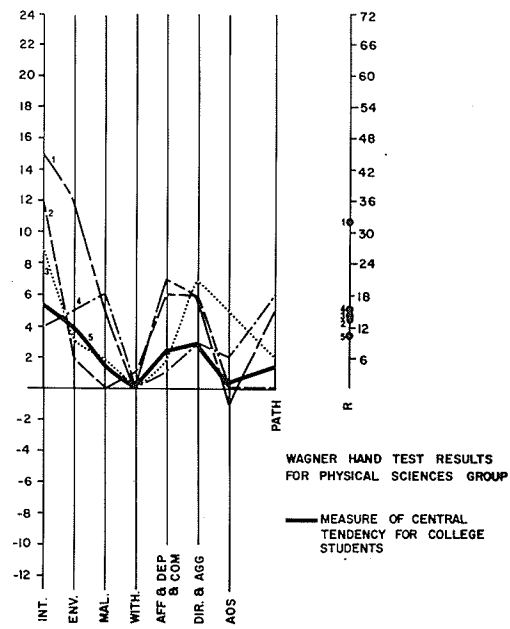


Figure 16

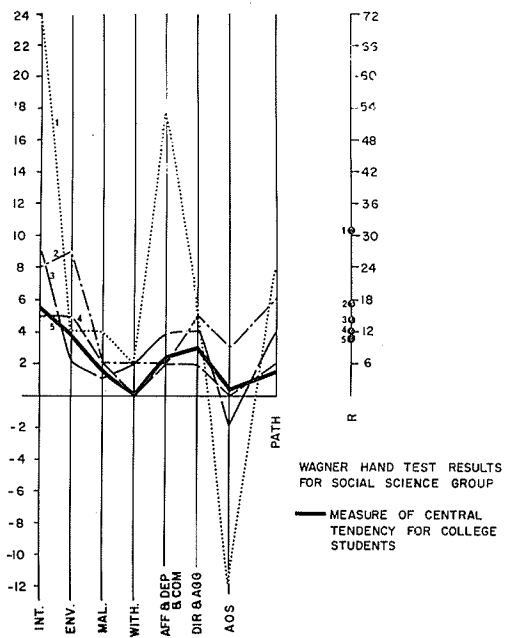


Figure 17

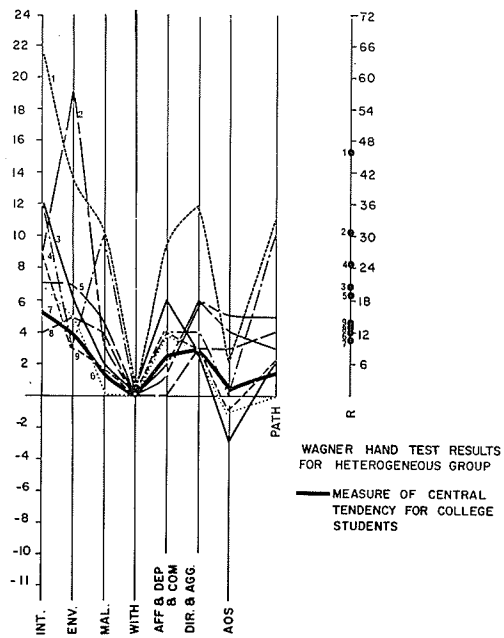


Figure 18

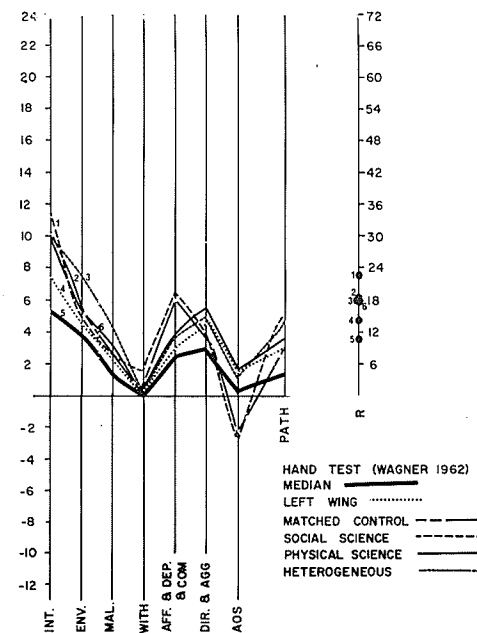


Figure 19

Consequently, a T-test of total scores between subjects was computed for each group and standardized test. Table 9 indicates the significant within group differences for each test and group. From Table 9, it would appear that the California Psychological Inventory is the most sensitive to individual differences. However, it did not show any within group differences (total score) for the matched control and the social science groups. It must be noted that most of the significant within differences occurred with the heterogeneous group which had a larger N, and hence greater possibilities for differences to occur. The group being picked at random also would increase the chances of getting more individual differences. Figures 8 to 13 (California Psychological Inventory) representing each experimental group, demonstrates without a doubt that all the groups were composed of widely different personalities, even the physical science group, although the differences were not as great except for the good impression (Gi), dominance (Do), communality (Cm), intellectual efficiency (Ie), psychological-mindedness (Py), and flexibility (Fx). Even within the physical science group, there were great differences in Class IV - Measures of Intellectual and Interest Modes. It may be then concluded that the California Psychological Inventory did not totally support hypothesis 1b since there was very little differences between groups; but there were also very few differences between groups on the experimental conditions. So the results are consistent. However, a larger sample may have given different results. Nevertheless, it would be reasonable to conclude as Gurr (1970) suggested, that regardless what the movement is, it attracts different elements of the society in

TABLE 9

The T-Test Scores for Within Group Differences

Group	California Psychological Inventory			The Bell Adjustment Inventory			The Hand Test		
	Between Subjects	<u>T</u> -Test Score	L/S	Between Subjects	<u>T</u> -Test Score	L/S	Between Subjects	T-Test Score	L/S
1 Left-Wing	3 - 1	-3.262	.02	4 - 3	3.261	.02			
	4 - 1	3.409	.02						
2 Matched Control	nil			3 - 2	-2.444	.05			
3 Physical Science	4 - 1	-2.676	.05	4 - 2	-5.614	.01			
				4 - 3	-5.284	.01			
4 Social Science	nil			2 - 1	-4.399	.01			
				4 - 1	6.017	.001			
5 Heterogeneous	4 - 1	3.117	.01				2 - 1	3.013	.01
	6 - 1	2.546	.05				3 - 2	-2.909	.02
	7 - 1	3.059	.01				4 - 2	-2.294	.05
	7 - 3	2.341	.05				7 - 2	-2.807	.01
	8 - 2	-3.746	.01				8 - 2	-2.185	.05
	8 - 4	-4.923	.001						
	8 - 5	-2.842	.02						
	8 - 6	-4.251	.001						
	8 - 7	-4.519	.001						
	4 - 3	2.153	.05						

which it operates. The same may be said of study areas. The social sciences or the physical sciences also attracted different personalities. Subsequent life situations and chance may possibly play a greater role in the choice of professions and movement affiliations than personality factors.

The Bell Adjustment Inventory did not detect any within group differences (total score) for the heterogeneous group. However, like the California Psychological Inventory, there are great differences between subjects on certain scales. When examining Figures 1 to 6, it is evident that again the subjects greatly differed from each other, especially the left-wing group (Figure 1). The physical science group showed the least differentiation. However, on the social adjustment scale, there is a significant difference ($p < .01$) between two subjects. See Table 9 which gives the number of subjects who showed significant differences. In terms of the Adjustment Inventory, the physical science group displayed a superior adjustment. See Figures 3 and 6.

The Hand Test T -score (subject's total score) revealed differences only for the heterogeneous group. However, looking at the individual groups, Figures 14 to 19, it is once again evident that the subjects differed greatly from each other. The left-wing group appears to be the most homogeneous. The acting out score above 0 indicates overt aggressiveness, and below 0, passive aggressiveness. It is interesting to note that the physical science has the highest overt aggressiveness score, followed by the left-wing and the heterogeneous groups. Both the social science and the matched control groups are passive aggressive. The individual groups (Figures 14 to 18) clearly

show the within group differences on each scale. It is rather interesting to note also that the physical science group which show the highest adjustment on the California Psychological Inventory and the Bell Adjustment Inventory, also show the most overt aggressiveness. The physical science group also showed a high level of dominance (Do) on the California Psychological Inventory; but the left-wing displayed a low level of dominance on the California Psychological Inventory. The left-wing group is the closest to the Hand Test median on all the scales except for the direction and aggression (Dir & Agg) scale, and the acting out (Aos) scale. The heterogeneous group shows the highest score on maladjustment which in this case is considered normal due to the mean age of the group (21).

In conclusion, it seems reasonable to state that overt aggression when accompanied with a good social and emotional adjustment, can be a positive characteristic; but if accompanied with poor adjustment in other areas, it may be used destructively, rather than constructively. The Bell Adjustment shows (see individual groups - Figures 14 to 18) that there are some individuals in each group who have: 1) some extreme scores on interpersonal (INT) and (ENV) which should be approximately the same; 2) maladjustment (Mala); 3) direction and aggression (Dir & Agg); 4) acting out score (Aos - overt and passive); and 5) pathology.

In conclusion, it is reasonable to say that both hypotheses 1a and 1b have been rejected except for: 1) the heterogeneous group; 2) the few significant items in the experimental conditions which differentiated some groups; and 3) the few subscales on the standardized tests which differentiated between the groups. However, the findings are consistent.

There were few factors which differentiated the groups within the experimental conditions, and similarly with the standardized tests. Since the within group differences were great on the standardized tests, it is logical to assume that perhaps the personality differences also produced the high within group differences in the experimental conditions, therefore reflecting little between group differences. The direction of perception tended to show a different trend for each group and perhaps also reflected the aggressiveness, dominance, flexibility, and other personality dispositions displayed on the personality standardized tests.

Hence, it is the contention of the investigator, that one must look to personality make-up and to the variables which contributed to the development of the personality which tends to turn to violence to solve problems. Therefore, it logically follows: 1) that one must examine the environmental conditions which enhanced the development of violent tendencies in the individual, rather than to seek specific groups who supposedly are composed of only violent people; and 2) to examine the social institutions (in the case of the family, parental authority) which, due to their over-bureaucratization, display a lack of sensitivity, empathy, and flexibility, and hence, set limits to individual expression and freedom and produce frustration. These situations are responded to according to the personality style developed from one's past experiences with the world.

Structured Interview

The data of the structured interview was collected through a questionnaire designed by the investigator to determine how the subjects perceived their parents and whether or not they agreed with them. The reported responses in regard to the parents' views may not necessarily correspond with the actual views that the parents hold; but this is not important. It is how the subjects perceived their parents, and whether they identify with them. See Appendix J for the questionnaire items.

All the subjects selected nonviolent means of action to create social change with the exception of one who belonged to the left-wing group, and left the option dependent upon the situation. The modes suggested ranged from sit-ins, petitions, referendum, demonstrations, strikes, education, meetings, publicity, boycotts, pressure groups, and organization of people who are concerned. Only one subject from the heterogeneous group was apathetic and appeared to think that nothing could be done. The number of subjects and parents who had a political affiliation were as follows: 1) left-wing: all the subjects, but only one subject's parents; 2) the matched control: 2 subjects, and 2 sets of parents plus one father; 3) the physical science: subjects - none, one set of parents plus one father; 4) social science: one subject, 4 sets of parents; 5) heterogeneous: 5 subjects, 4 sets of parents and one father.

Reported participation in protest marches, petitions, or demanding some kind of social change was as follows: 1) left-wing: subjects - 4, parents - none; 2) matched control: subjects - none, parents - one set; 3) physical science: subjects - 1, parents - 1 set;

4) social science: subject - 1, parents - 3 sets; 5) heterogeneous: subjects - 4, parents - 1 set plus 1 father. The parents' political affiliation and participation did not appear to influence the subjects. The reported political affiliation of the parents often differed from the subjects.

Table 10 reports the number of agreements for each item for each group and as a total for all the groups, in order to determine parents' influence in developing their children's values. When both subjects and parents were undecided on an item, the item was reported as agreement since attitudes were the same. Similarly with disinterest and indifference when it was expressed as being the same for subjects and parents.

It may, therefore, be within reason to conclude that for the subjects in the study, the beliefs, values and attitudes are still greatly influenced by the home and milieu within which they live. Consequently, it may be that the youth or young adult generation simply reflects the changing attitudes and beliefs of the older generation, and therefore are not the trend setters, but the followers in the criticisms of the status quo. The above findings can only be applied to the groups studied and cannot be generalized to the rest of the population due to the small sample ($N = 24$).

Limitations and Recommendations

The most serious limitations of the present study were the fact that the samples for each group were too small, and that the independent variables could have been presented with more intensity. In future research in measuring the effects of moral and civil authority, persons

TABLE 10

Subjects' Agreement Responses with Parents

Item	N = 4				N = 4				N = 4				N = 4				N = 8			
	Left-Wing				Matched Control				Physical Science				Social Science				Heterogeneous			
	A	D	PA	U	A	D	PA	U	A	D	PA	U	A	D	PA	U	A	D	PA	U
1. Children Upbringing	1		1	2	4				4				2	1	1		3	3	1	1
2. Sex and Marriage	1	2			1	2	1		2	2			1	3			4	2	2	
3. Religion	2		1	1	1	2		1	1	2	1	1	3	1			4	3		1
4. Aggression	2		1	1	2	2			2	2	1		1	1	1		3		1	4
5. Youth Organization	3				1	3		1	2	2			2		1	1	1		2	4
6. School		3			1		2	1	1	3				1	3		4	3	1	
7. Teachers	1	3			1	2	1		3	1			2	2			4	4		1
8. Community Adult Organization																				
9. Law and Police	2	2			1	2	1		3			1	3	1			4	3	1	
10. Social and Political Issues	1		3		1		3		1	3	1		2		2		2	3	3	
11. Political Parties	1	2	1		1	1	2		1	3			4				1	2	2	3
12. The World of Work	1	1	2			2	1		2	1			1	2	1		4	2	1	1
13. Leisure	3				4				4				2	1	1		4	1	3	
14. Sources of Authority	1		3		1	3			2	2	1			1	2	1	4	2	2	

TABLE 10 (Continued)

Item	N = 4				N = 4				N = 4				N = 4				N = 8			
	Left-Wing				Matched Control				Physical Science				Social Science				Heterogeneous			
	A	D	PA	U	A	D	PA	U	A	D	PA	U	A	D	PA	U	A	D	PA	U
15. Socio-Economic Inequalities	2		2		1	1	1	1	3				2		2		5	1	1	1
16. Guaranteed Income Concept	2		1	1	2	1	1		3	1			2	1			4	3		1
17. Social Welfare Concept	2	1	1		3		1		1	3	1		3			1	4	3		1
18. Means of Wealth Presently Used	2		1	1	1	1	1		3	1			2	1	1		3	2	1	2
19. Wars	3		1		3	1			2	2			3				6	1	1	
20. Student Protesters	1	2	1		1	1	1	1	2	2			1	2	1		4	2	1	1
21. Unemployment	3		1		3	1			4				4				5	2		1
22. Democratic System in its Present Form	3		1		1	2	1		2	1		1	3	1			4	2		3
Totals	39	16	23	10	37	27	17	5	46	39	7	3	43	21	18	3	79	47	25	26

* A = Agree

* D = Disagree

* PA = Agree with one parent

* U = Undecided

%ages were computed as follows: $\frac{(A \& PA) \times 100}{88}$

Total Subjects Disagreement - 27.06

Total Subjects Agreement with Both Parents & 1 Parent - 64.8.

Agreement with both parents & 1 parent:

LWG - 70.4%

MCG - 61.4%

PSG - 60.2%

SSG - 69.3%

HG - 59.1%

Disagreement with both parents:

Both parents agreement only: LWG - 18.2%

LWG - 44.3%

MCG - 42%

PSG - 52.3%

SSG - 48.8%

HG - 44.9%

MCG - 30.7%

PSG - 44.3%

SSG - 23.9%

HG - 18.2%

representing such authorities should be directly involved in presenting their views on collective violence. Frustration and punishment could be administered in a more realistic manner such as using a real class situation.

The films could also have been shown more than once as preplanned. This would have kept the impressions more vivid and lasting throughout the experimental conditions. The entire study could have been carried out in a more natural situation such as part of a class project where subjects would be completely unaware of the independent variables as elements being measured. Possibly different results may emerge from those observed in the present investigation. The findings of the present investigation suggested that the subjects did reorganize their perception when a new variable was introduced. Although the independent variables on perceptual organization are not clearly revealed, they are not completely refuted by the present study. However, for the heterogeneous group, the variables had a clear effect. Hence, it would seem important to provide a more real life situation, and more powerful independent variables. If however, the independent variables used in the present study do have an effect on perceptual organization in the perception of violence, then it would be important to continue the attempts to determine the kinds of effects it has.

Some authorities have suggested that the present age is more known for its questioning of many of the authorities; consequently the effects of authority should be further investigated. Perhaps the findings would have been different with upper middle, and upper classes. The majority of the subjects in the present study were lower middle class in terms of their parents. Further exploration of perceptual determinants of collective violence could include subjects from all areas, occupations and socioeconomic background.

CHAPTER V

SUMMARY

There has been little research into the causes of collective violence previous to the sixties, except for a few which have been mentioned in the review of the literature. In recent literature perception has been proposed as a major factor contributing to violence. The stimuli most often used to produce aggression have been frustration, punishment and verbal attacks. However, except for the very early authority studies, and Milgram's more recent investigation, the effects of authority on collective violence have not been studied extensively.

The present study was designed to compare the effects of the traditional forms of control most frequently used with that of moral and civil authority on the perception of violence.

The 24 subjects, 22 boys and 2 girls, were 18 to 29 years old, lower and middle socio-economic class. They were from the University of Manitoba during the Spring of 1969.

Two films were obtained consisting of collective violent events in U. S. A. and in U. S. S. R. satellite countries. One film was available from the University of Manitoba's Audio-Visual Center, and the other from Montreal.

The study consisted of five groups which were as follows: 1) the left-wing group, N=4; 2) matched control group, N=4; 3) physical science group, N=4; 4) social science group, N=4; and 5) heterogeneous group, N=8. The subjects were chosen on the basis of education and political

affiliation. The left-wing group subjects were obtained through a contact. The matched control, physical science and social science subjects were obtained from a list of volunteers from first and second year psychology classes. The heterogeneous group was picked at random from the list of volunteers. This explains why two girls happen to be part of the heterogeneous group.

The subjects' perception of the films was recorded on the Murphy and Likert Scale (revised by the investigator) which was considered as Session 1 of the experiment. Item analysis of the pretest revealed that all items had a significant differentiating range of .05 to .001. This scale was presented immediately after each independent variable was introduced. The variables were presented in the following sequence: Christian moral authority, Chinese authority of good conduct, frustration, punishment, Canadian civil authority, Chinese civil authority, and peer group pressure. The above were considered as Sessions 2 to 8. Another session which was carried to measure group solidarity failed to turn out meaningful data due to the inexperience of the observers. Consequently it will not be reported.

Analysis of variance and the student's t -ratio were used to test the hypotheses. Several other analyses were made using the student's t -test for group comparisons and for individual groups when necessary.

The findings of the experimental conditions showed that for these groups, when education, and party affiliation were controlled, there were a few significant differences between the left-wing group and the matched control, physical science, and social science groups. However, there were many differences between the heterogeneous group

and the other groups. The hypothesis was rejected for all the groups except for the heterogeneous group.

More specifically, there were only three significant F values which were on Session 1, Film 2 (exposure to film Revolt in Hungary), Session 6, Film 2 (Canadian civil authority, Revolt in Hungary, $p < .05$), and Session 7, Film 2 (Chinese civil authority, Revolt in Hungary, $p < .01$). However, item analysis and a student's t-test revealed that all the groups differed greatly from the heterogeneous group. Only a few items revealed significant differences between the other groups.

The standardized tests revealed the same trend as the experimental conditions. Analysis of variance for each standardized test used revealed the following: the California Psychological Inventory yielded only one significant F value ($F = 5.162$, df 4/19, $p < .05$) for the Sy subscale (sociability); the Bell Adjustment Inventory revealed no significant differences between groups; and the Hand Test yielded only one significant F value ($F = 5.768$, df 4/19, $p < .01$) for the withdrawal category. T-tests were computed for all possible group combinations for all the tests. All the t-scores revealed that all the groups differed mostly from the heterogeneous group. However, there were a few subscales which differentiated the other groups from each other. A striking factor was the tremendous within group differences which explains the low between group differences. However, this may have been due to the small size of the sample.

There was a trend displayed by each group in the orientation of perceptual organization as measured by the independent variables. Although the trend was nonsignificant since the nonsignificant items

were considered, it nevertheless revealed the trend of the effects of the independent variables. Punishment, Chinese civil authority and Chinese authority of good conduct tended to elicit more authoritarian responses while peer group pressure, Christian moral authority, frustration, and Canadian civil authority tended to produce more autonomous responses in general for all the subjects except for the physical science group.

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A P P E N D I X

APPENDIX A

Film 1 - Revolt in Hungary: ACBS News "20th Century" Production
McGraw-Hill, Canada,
330 Progress Avenue,
Scarborough, Ontario.

Film 2 - Civil Rights Movement: No. 2441 - produced by the "National
Broadcasting Company", can be obtained from:

Encyclopaedia Britannica,
Educational Corporation,
346 Hargrave Street,
Winnipeg 2, Manitoba
(Phone 942-3938)

APPENDIX BContent of Tape Recording for Session II - A Christian view of violence:

Teilhard de Chardin had this to say about violent conflicts:

The great enemy of the modern world, 'Public Enemy No. 1' is boredom. So long as life did not think, and above all, did not have time to think; that is to say, while it was still developing and absorbed with the immediate struggle to maintain itself and advance, during all that time it was untroubled by questions as to the value and interest of action. Only when a margin of leisure for reflection came to intervene between the task and its execution did the workman experience the first pangs 'of boredom'. But in these days the margin is immeasurably greater, so that it fills our horizon. Thanks to the mechanical devices which we increasingly charge with the burden not only of production, but also of calculation, the quantity of unused human energy is growing at a disturbing rate both within us and around us;

this phenomenon will reach its climax in the near future, when nuclear forces have been harnessed to useful work.

I repeat: despite all appearances, Mankind is bored.

Perhaps this is the underlying cause of all our troubles.

We no longer know what to do with ourselves. Hence in social terms the disorderly turmoil of individuals pursuing conflicting and egotistical aims; and on the national scale, the chaos of armed conflict in which, for want of a better object, the excess of accumulated energy is destructively released

APPENDIX CContent of Tape for Session III

Mrs. Nguyen Thi Bink, Chief Viet Cong negotiator at the Paris Peace Talks, an authority on good conduct, states that:

Collective violence is normal. Historically, collective violence has flowed regularly out of capitalistic, political processes. Men seeking to seize, hold, or realign the levers of power have continually engaged in collective violence as part of their struggles. The oppressed have struck in the name of justice, the privileged in the name of order, those in between, in the name of fear. Modern violence centers on rights not yet enjoyed but now within reach. The economic power group has tenaciously resisted the upward strivings of the lower classes. The political and economic elite have used their access to the levers of power to maintain their dominance, using legal force surrounded by an aura of legitimacy for such ends as economic exploitation. Workers have only force at their disposal to press their grievances against the political and economic power blocks.

APPENDIX DTask for Session IV

Read the following paragraph and rearrange in logical order.

(Harbrace College Handbook, p. 336). Please do not guess.

- 1) At the age of seven he was a poor, fatherless boy, severely handicapped by a serious impediment in his speech.
- 2) But he did not accomplish his purpose without many long, discouraging hours of practice.
- 3) A man can make of himself what he will.
- 4) But he was ambitious and persevering.
- 5) It is a well-known story how, with pebbles in his mouth, he worked to overcome his defect in speech, how he shut himself up in a cell, and how he was derided by the Assembly.
- 6) It was a long way from the awkward, stammering boy on the Grecian seashore to the most skillful, finished speaker of Athens, but his will-power and determination carried him along the way, and brought him at last to the coveted goal.
- 7) One of the greatest orators in history became an effective speaker only after he had overcome many obstacles.
- 8) But in the end he won out.
- 9) Such is the story of Demosthenes, the Attic Orator and Statesman.
- 10) He was undaunted by difficulties.
- 11) He decided to become a statesman, and that he became.

Indicate the logical order in the following blanks:

- a) _____ b) _____ c) _____ d) _____ e) _____ f) _____ g) _____ h) _____
 i) _____ j) _____ k) _____

Key: a) 3; b) 7; c) 1; d) 4; e) 10; f) 11; g) 2; h) 5; i) 8; j) 9; k) 6.

APPENDIX EContent of Tape for Session VI

Prime Minister Trudeau's legal stand towards collective violence:

If a democratic society is to continue to exist, it must be able to root out the cancer of armed, revolutionary movements that are bent on destroying the very basis of freedom. A democratic government must have sufficient authority to deal effectively with the nebulous yet dangerous challenge to society represented by the terrorist organizations. The criminal law must be adequate to deal with systematic terrorism. The government recognizes its grave responsibilities in interfering in certain cases with civil liberties, and that it remains answerable to the people of Canada for its actions. A democracy must be prepared to defend itself. The replacement of the legal system by the law of the jungle would endanger the lives of Canadians. Freedom and personal security are safeguarded by laws; those laws must be respected in order to be effective.

Will you please remain in the room for another task. It is gratifying to see your determination and perseverance with this research. Today you will be listening to the thoughts of a government official regarding violence. You will be listening to what Mr. Trudeau claims is the role of the government in cases of civil conflicts. Immediately after, you will be asked to fill in a questionnaire.

APPENDIX FContent of Tape for Session VII - Mao Tse-Tung

All Communist militants have a chance to debate party positions before they are legislated, but once they are determined, they apply to all. China must guard herself against extreme deviationism and against those who represent this deviationism and oppose the legal power (i.e. such as groups similar to Followers of Liu Shao'Shi). The legal authority must guard itself from a return to the past, and embourgeoisement of the regime and the reappearance of social classes. It must have effective laws to guard Chinese youth against these dangers. Youth have got out of line at the instigation of higher authority. It had to be made to get back into line. This was not easy, but it has been achieved. The army has effectively been used to put a stop to anarchy.

You are now asked to listen to what Mao Tse-Tung representative of Chinese government officials' stand on collective violence. You will again be asked to complete a questionnaire.

APPENDIX GContent of Tape for Session 8

Sociologist, Lewis Coser, claims that social conflicts that arise from frustrations of specific demands within a relationship and from estimates of gains of the participants, and that are directed at the presumed frustrating objects, can be called realistic conflicts. Insofar as they are means toward specific results, they can be replaced by alternative modes of interaction with the contending party if such alternatives seem to be more adequate for realizing the end in view. If a conflict simply aims at annihilation, it does approach the marginal case of assassination in which extermination is now the goal and no longer the desired demands.

Nonrealistic conflicts are not occasioned by the rival ends of the antagonists, but by the need for tension release of one or both of them. In this case the conflict is not oriented toward the attainment of specific results. Insofar as unrealistic conflict is an end in itself, insofar as it affords only tension release, the chosen antagonist can be substituted for by any other 'suitable' target.

In realistic conflict, there exist functional alternatives with regard to the means of carrying out the conflict, as well as with regard to accomplishing desired results short of conflict; in nonrealistic conflict; on the other hand, there exist only functional alternatives in the choice of antagonists.

APPENDIX H

VALIDITY OF SCALE

<u>Film 1 N=56</u>			<u>Film 2 N=48</u>	
<u>Test Items</u>	<u>Stand Error of Mean</u>	<u>T-Score</u>	<u>Stand Error of Mean</u>	<u>T-Score</u>
1	.25	8.50	.19	12.41
2	.29	2.92 *	.26	10.41
3	.31	7.85	.17	17.00
4	.24	7.49	.19	8.86
5	.20	2.83 *	.14	9.38
6	.27	4.16	.29	6.66
7	.19	14.91	.24	8.99
8	.19	13.98	.19	10.79
9	.22	12.58	.24	8.21
10	.19	17.68	.19	12.85
11	.21	13.88	.22	11.87
12	.16	16.48	.15	13.99
13	.14	19.32	.30	7.29
14	.19	12.16	.19	13.39

P < .001 level of significance used except where *'d, then P < .01 used.

APPENDIX IFilm Rating - Likert Scale (revised by Investigator)

Film 1: Subject _____

Indicate, by checking, how you reacted to the picture just shown.
Double check those reactions which were especially intense:

Excited	Mad (irritated or enraged)
Depressed	Amused
Thrilled	Disgusted
Bored	Others

After each statement please indicate your feelings by underscoring one of the five possible answers:

1. The cities mentioned were a more comfortable place for a white man to live in after the riot.

Absolutely true	Probably true	Undecided	Probably false	Absolutely false
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2. Even when such riots cost many lives and much property damage to both races, they are necessary if the white race is to protect itself against Negro encroachments.

Absolutely true	Probably true	Undecided	Probably false	Absolutely false
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3. Riots of this kind are a tragedy for both the white and black races.

Absolutely true	Probably true	Undecided	Probably false	Absolutely false
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4. Any decent man ought to be sorry for the individual Negroes who lost their homes but had not participated in the riot.

Strongly approve	Approve	Undecided	Disapprove	Strongly disapprove
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5. Many Negro communities should be treated like this occasionally in order to keep the Negroes in their place.

Strongly approve	Approve	Undecided	Disapprove	Strongly disapprove
---------------------	---------	-----------	------------	------------------------

6. There is no justification for white persons driving large numbers of Negroes from their homes, burning their homes, and killing many of them.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
7. The leaders of the riot should be held personally responsible for the loss of life and property.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
8. All persons who participated in the riot should be held criminally liable.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
9. Law must be maintained at all costs.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
10. The government had no right to resist public opinion as expressed by these groups.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
11. It would have been better for the Supreme Court to decide against desegregation.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
12. The authorities should be praised for preventing mob violence.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
13. Every mob resisting federal or state authority is a menace to society and must be restrained.
- | | | | | |
|-----------------|---------------|-----------|----------------|------------------|
| Absolutely true | Probably true | Undecided | Probably false | Absolutely false |
|-----------------|---------------|-----------|----------------|------------------|
14. If governments would always take such a stand, mob violence would soon disappear.
- | | | | | |
|-----------------|---------------|-----------|----------------|------------------|
| Absolutely true | Probably true | Undecided | Probably false | Absolutely false |
|-----------------|---------------|-----------|----------------|------------------|

Film Rating - Likert Scale (revised by Investigator)

Film 2:

Subject _____

Indicate, by checking, how you reacted to the picture just shown.

Double check those reactions which were especially intense:

Excited	Mad (irritated or enraged)
Depressed	Amused
Thrilled	Disgusted
Bored	Others

After each statement please indicate your feelings by underscoring one of the five possible answers:

1. The countries were a better place to live in after the revolts were crushed by the Russian Army.

Absolutely true	Probably true	Undecided	Probably false	Absolutely false
--------------------	------------------	-----------	-------------------	---------------------

2. Even when such riots cost many lives, they are necessary if Communism is to be protected against anticommunists.

Absolutely true	Probably true	Undecided	Probably false	Absolutely false
--------------------	------------------	-----------	-------------------	---------------------

3. Revolts of this kind are a tragedy for both the Communists and the anticommunists.

Absolutely true	Probably true	Undecided	Probably false	Absolutely false
--------------------	------------------	-----------	-------------------	---------------------

4. Any decent man ought to be sorry for the individuals who lost their lives but had not participated in the revolt.

Strongly approve	Approve	Undecided	Disapprove	Strongly disapprove
---------------------	---------	-----------	------------	------------------------

5. Many anticommunists should be treated like this occasionally in order to keep them from rebelling.

Strongly approve	Approve	Undecided	Disapprove	Strongly disapprove
---------------------	---------	-----------	------------	------------------------

6. There is no justification for Communists to cruelly suppress anti-Communists.

Strongly approve	Approve	Undecided	Disapprove	Strongly disapprove
---------------------	---------	-----------	------------	------------------------

7. The leaders of the revolt should be held personally responsible for the loss of life and property.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
8. All persons who participated in the riot should be held criminally liable.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
9. Law must be maintained at all costs.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
10. The government had no right to resist public opinion as expressed by the revolt.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
11. It would have been better for the government to decide against allowing the Russian Army to crush the revolt.
- | | | | | |
|-----------------|---------------|-----------|----------------|------------------|
| Absolutely true | Probably true | Undecided | Probably false | Absolutely false |
|-----------------|---------------|-----------|----------------|------------------|
12. The authorities should be praised for crushing revolts.
- | | | | | |
|------------------|---------|-----------|------------|---------------------|
| Strongly approve | Approve | Undecided | Disapprove | Strongly disapprove |
|------------------|---------|-----------|------------|---------------------|
13. Every group resisting governmental authorities is a menace to society and must be restrained.
- | | | | | |
|-----------------|---------------|-----------|----------------|------------------|
| Absolutely true | Probably true | Undecided | Probably false | Absolutely false |
|-----------------|---------------|-----------|----------------|------------------|
14. If governments would always take such a stand, revolts would soon disappear.
- | | | | | |
|-----------------|---------------|-----------|----------------|------------------|
| Absolutely true | Probably true | Undecided | Probably false | Absolutely false |
|-----------------|---------------|-----------|----------------|------------------|

APPENDIX JPART I - Personal Data (designed by Investigator)

Subject's Name _____

1. Age _____ F _____ M _____
2. Marital Status: Single _____ Married _____ Divorced _____
3. Occupation _____
4. Income: Below Average _____ Average _____ Above _____
5. Native Town _____ Rural _____ City _____
6. Education: Major _____ Minor _____
7. Religious Affiliation _____
8. Political Affiliation _____
9. Club Affiliation _____

Parents

1. Occupation: Mother _____ Father _____
2. Ethnicity: Mother _____ Father _____
3. Income: Below Average _____ Average _____ Above _____
4. Native Town: Father: Rural _____ City _____
Mother: Rural _____ City _____
5. Education:

	<u>Mother</u>	<u>Father</u>
Elementary	_____	_____
Junior High	_____	_____
Senior High	_____	_____
University	_____	_____
Major	_____	_____
Minor	_____	_____
6. Religious Affiliation _____
7. Political Affiliation _____
8. Club Affiliation _____

PART II

How do you perceive your parents' and your own attitudes toward: (From the groups of words listed at the bottom of this page (or directly under the questions on following pages). Choose the word which best describes the situation in each case. Use the words Strongly disagree, Disagree, Undecided, Agree, Strongly agree, when you are evaluating your parents' attitudes.

	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
1. Children's Upbringing:		
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	
2. Sex and Marriage:		
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	
3. Religion:		
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	
4. Aggression:		
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	
5. Youth Organizations:		
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	
Strongly approve	Very rigid - traditional	
Approve	Rigid or traditional	
Undecided	Undecided	
Disapprove	Flexible or modern	
Strongly disapprove	Very flexible or modern	

6. School: Parent's Attitudes Subject's Evaluation of Parent's Attitude

Mother _____

Father _____

Subject's Attitude _____

Strongly critical, Critical, Indifferent, Uncritical, Strongly uncritical

7. Teachers:

Mother _____

Father _____

Subject's Attitude _____

Strongly critical, Critical, Indifferent, Uncritical, Strongly uncritical

8. Community Adult Organizations:

Mother _____

Father _____

Subject's Attitude _____

Deeply interested, Interested, Indifferent, Disinterested, Very disinterested

9. Law and Police:

Mother _____

Father _____

Subject's Attitude _____

10. Social and Political Issues:

Mother _____

Father _____

Subject's Attitude _____

Deeply interested, Interested, Indifferent, Disinterested, Very disinterested

11. Political Parties:	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Deeply involved, Involved, Indifferent, Disinterested, Very disinterested

12. The World of Work:	_____	_____
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Greatly fair, Fair, Indifferent, Unfair, Greatly unfair

13. Leisure:	_____	_____
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Strongly approve, Approve, Indifferent, Disapprove, Strongly disapprove

14. Source of Authority:	_____	_____
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Strongly critical, Critical, Indifferent, Uncritical, Strongly uncritical

15. Socioeconomic Inequalities:	_____	_____
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Very fair, Fair, Indifferent, Unfair, Very unfair

16. Guaranteed Income Concept:	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Strongly approve, Approve, Indifferent, Disapprove, Strongly disapprove

17. Social Welfare Concept:	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Strongly approve, Approve, Indifferent, Disapprove, Strongly disapprove

18. Means of Wealth Distribution Presently Used: (Income Tax, etc.)	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Strongly agree, Agree, Undecided, Disagree, Strongly disagree

19. Wars:	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

20. Student Protesters:	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	

Strongly approve, Approve, Undecided, Disapprove, Strongly disapprove

21. Unemployment:	<u>Parent's Attitudes</u>	<u>Subject's Evaluation of Parent's Attitude</u>
Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	_____

Very fair, Fair, Indifferent, Unfair, Very unfair

22. Democratic System in its Present Form:

Mother	_____	_____
Father	_____	_____
Subject's Attitude	_____	_____

Strongly approve, Approve, Undecided, Disapprove, Strongly disapprove

PART III

1. Have you ever at any time participated in protest marches, sit-ins, petitions, or any other organization to effect change? State reasons for your participation.

Have your parents ever felt sufficient concern to participate in effecting a change?

2. Would you participate if the opportunity arose?

3. Would you ever feel strongly enough about an issue to actively organize a movement or get directly involved to produce changes?

4. In your opinion, what are the most effective procedures or means to effect social change?

5. State your reasons for having chosen the Arts or Science programme.

APPENDIX K

WARNER'S INDEX STATUS CHARACTERISTICS

Revised Scale for Rating Occupation

(Multiply by 4)

Status Level

Professionals	Proprietors & Managers	Business Men	Clerks & Kindred Workers	Manual Workers & Service Workers	Protective	Farmers
---------------	------------------------	--------------	--------------------------	----------------------------------	------------	---------

1	Lawyers, doctors, dentists, engineers, judges, high-school superintendents, veterinarians, ministers (graduated from divinity school) chemists etc. with post-graduate training, architects	Businesses valued at \$75,000 and over	Regional and divisional managers of large financial and industrial enterprises	Certified Public Accountants		Gentleman farmers
---	---	--	--	------------------------------	--	-------------------

2	High-school teachers, trained nurses, chiropodists, chiropractors, undertakers, ministers (some training), newspaper editors, librarians (graduate)	Business valued at \$20,000 to \$75,000	Assistant Managers & office department of real estate, large businesses, assistants to executives, etc.	Accountants, salesmen of insurance, postmasters		Large farm owners, farm owners
---	---	---	---	---	--	--------------------------------

3	Social workers, grade-school teachers, optometrists, librarians (not graduate) undertaker's assistants, ministers (no training)	Business valued at \$5,000 to \$20,000	All minor officials of business	Auto salesmen, bank clerks & cashiers, postal clerks, secretaries to executives, supervisors of railroad, telephone, etc. justices of the peace	Contractors	
---	---	--	---------------------------------	---	-------------	--

	Professionals	Proprietors	Business Men	Clerks & Kindred Workers	Manual Workers	Protective & Service Workers	Farmers
4		Business valued at \$2,000 to \$5,000		Stenographers, bookkeepers, rural mail clerks, railroad ticket agents, sales people in dry goods store, etc.	Factory foremen, electricians, plumbers, carpenters & who own business, watchmakers	Dry cleaners, butchers, sheriffs, railroad engineers and conductors	
5		Business valued at \$500 to \$2,000		Dime store clerks, hardware salesmen, beauty operators, telephone operators	Carpenters, plumbers, electricians (apprentice), time keepers, linemen, telephone or telegraph, radio repairmen, medium-skill workers	Barbers, firemen, butcher's apprentices, practical nurses, policemen, seamstresses, cooks in restaurant, bartenders	Tenant farmers
6		Business valued at less than \$500			Moulders, semi-skilled workers, assistants to carpenter, etc.	Baggage men, night policemen and watchmen, taxi and truck drivers, gas station attendants, waitresses in restaurant	Small tenant farmers
7				Heavy labor, migrant work, odd-job men, miners	Janitors, scrub-women, news-boys	Migrant farm laborers	

Source of Income

(Multiply by 3)

Status
Rating

-
1. Inherited wealth (trust funds, etc.)
 2. Earned wealth (savings and investments)
 3. Profits and fees (from business or practice of professions)
 4. Salary (from job) or commissions (from sales)
 5. Wages (from job, or piece work)
 6. Income from private relief (from relatives or friends)
 7. Income from public charity (from public or private agencies)
-

House Type

(Multiply by 3)

1 - Excellent houses. This includes only houses which are very large single-family dwellings in good repair and surrounded by large lawns and yards which are landscaped and well cared for. These houses have an element of ostentation with respect to size, architectural style, and general condition of yards and lawns.

2 - Very good houses. Roughly, this includes all houses which do not quite measure up to the first category. The primary difference is one of size. They are slightly smaller, but still larger than utility demands for the average family.

3 - Good houses. In many cases they are only slightly larger than utility demands. They are more conventional and less ostentatious than the two higher categories.

4 - Average houses. One-and-a-half to two-storey wood-frame and

brick single-family dwellings. Conventional style, with lawns well cared for but not landscaped.

5 - Fair houses. In general, this includes houses whose condition is not quite as good as those houses given a 4 rating. It also includes smaller houses in excellent condition.

6 - Poor houses. In this, and the category below, size is less important than condition in determining evaluation. Houses in this category are badly run-down but have not deteriorated sufficiently that they cannot be repaired. They suffer from lack of care but do not have the profusion of debris which surrounds houses in the lowest category.

7 - Very poor houses. All houses which have deteriorated so far that they cannot be repaired. They are considered unhealthy and unsafe to live in. All buildings not originally intended for dwellings, shacks, and over-crowded buildings. The halls and yards are littered with junk, and many have an extremely bad odor.

Dwelling Area

(Multiply by 2)

1 - Very high. Residents, aware that this area has a high status reputation, remark that "no one can live here unless his family has lived in the community for at least three generations." The best houses in town are located in such an area. The streets are wide and clean and have many trees.

2 - High. Dwelling areas felt to be superior and well above average but a little below the top. There are fewer mansions and pretentious houses in such districts than in the first. However, the chief

difference is one of reputation.

3 - Above average. A little above average in social reputation and to the eye of the scientific observer. This is an area of nice but not pretentious houses. The streets are kept clean and the houses are well cared for. It is known as a "nice place to live" but "society doesn't live here."

4 - Average. These are areas of workingmen's homes which are small and unpretentious but neat in appearance. In these areas live "the respectable people in town who don't amount to much but never give anybody any trouble."

5 - Below average. All the areas in this group are undesirable because they are close to factories, or because they include the business section of town, or are close to the railroad. There are more run-down houses here because there are people living in these areas who "don't know how to take care of things." They are more congested and heterogeneous than those above. It is said that "all kinds of people live here, and you don't know who your neighbors will be."

6 - Low. These areas are run-down and semi-slums. The houses are set close together. The streets and yards are often filled with debris, and in some of the smaller towns, some of the streets are not paved.

7 - Very low. Slum districts, the areas with the poorest reputation in town, not only because of unpleasant and unhealthy geographical positions--for example, being near a garbage dump or a swamp--but also because of the social stigma attached to those who live there. The houses are little better than shacks. The people are referred to by such terms as "squatters along the canal," and are said to be lazy, shiftless, ignorant, and

immoral. This general reputation is assigned to most people living in such sections regardless of their abilities or accomplishments.