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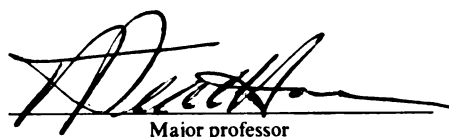
AN ETHOLOGICAL STUDY OF AGGRESSIVE-ASSAULT  
BEHAVIORS AND AGGRESSIVE-ANGER BEHAVIORS  
IN ADOLESCENT MALES

presented by

Rebecca S. Rude

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Counseling, Educational  
Psychology, and Special  
Education

  
Major professor

Richard L. Featherstone

Date March 1985



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AN ETHOLOGICAL STUDY OF AGGRESSIVE-ASSAULT BEHAVIORS  
AND AGGRESSIVE-ANGER BEHAVIORS IN ADOLESCENT MALES

By

Rebecca S. Rude

A DISSERTATION

Submitted to  
Michigan State University  
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## ABSTRACT

### AN ETHOLOGICAL STUDY OF AGGRESSIVE-ASSAULT BEHAVIORS AND AGGRESSIVE-ANGER BEHAVIORS IN ADOLESCENT MALES

By

Rebecca S. Rude

The goal of this study was to determine whether aggressive-assault behaviors and aggressive-anger behaviors progress in a sequential pattern, with specific actions occurring before, during, and after these behaviors are demonstrated. It was hypothesized that (a) there are specific behaviors which are observable and measurable, which are characteristic of students in conflict with the teachers and/or other students, and (b) there are specific behavior groups or behavior types which are demonstrated in a developmental sequence as the conflict continues.

To study the phenomena of aggressive-assault and aggressive-anger behaviors, an ethological study was conducted. The description of aggressive-assault and aggressive-anger behaviors was based on 150 hours of observations made over a seven-week period, of students who had a high probability for demonstrating these actions. A group of 45 male students between the ages of 13 and 18 was observed. Each individual was incarcerated for various reasons and placed as a ward of the court, in a camp setting.

The observer made written field notes and used video-tape equipment to record the interactions occurring in the classroom setting. The data were analyzed for identification and sequence of behaviors, events, and duration of aggressive-assault and aggressive-anger behaviors. Discrepancies between aggressive-assault and aggressive-anger incidents were examined to determine if different overt behaviors exist. Each recorded aggressive-assault and aggressive-anger case study was evaluated for patterns within each event. The final determining factors used to label the interaction as aggressive-assault included (a) the victim's nonwilling participation in the interaction; (b) physical contact, i.e., hit, kick, choke, wrestle; and (c) the intensity of the incident as perceived by the victim which was demonstrated by an observable change in the victim's behavior.

The data analyses demonstrated consistent patterns in aggressive-assault behaviors and aggressive-anger behaviors. As a result of the study, the emergence of a new type of assault was identified. The assault has been labeled sniper hits.

There are implications and recommendations for teacher-training programs and teacher-intervention strategies.

TO  
JAMES HALSEY RUDE  
AND  
BARBARA ANN RUDE  
WITH LOVE . . .

## ACKNOWLEDGMENTS

Early one spring morning in 1980 while I was rushing to beat the Los Angeles traffic to get to work, I was greeted by a police officer. After my conversation with the gentleman, I proceeded to drive slowly to work with my ticket in hand. Angry with myself for getting caught, I decided right then that things were going to change in my life. When I got home that night, I started the process that led me to Michigan State University for my doctoral degree. Through the last five years, I've never regretted that decision. No words can describe the knowledge I have acquired as a result of this experience. This knowledge is not bound by books, but oftentimes can only be felt in the heart. It is from my heart that I thank the following friends for their crucial part in this endeavor.

The process of designing an appropriate program to accomplish my educational goals was directed by Dr. Charles E. Henley. Dr. Henley provided avenues for new educational experiences and coupled these with friendship and caring. Two other committee members who played a critical part in my program were Drs. William D. Frey and Charles V. Mange. Their contributions have aided me with my dissertation and future career. The fourth member of my committee was my dissertation chairperson. This gentle man provided me with wisdom, guidance,

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The best way to summarize my most treasured experiences at Michigan State University is to quote a justice of the Supreme Court, Benjamin N. Cardozo. He states that "Like many of the finest things of life, like happiness and tranquillity and fame, the gain that is most precious is not the thing sought, but one that comes of itself in the search for something else." In my search, I serendipitously found three friends, Patricia Kearly, Kathryn Moran, and Cherie Simpson, who made learning together fun!

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In peace there's nothing so becomes a man,  
As modest stillness and humility;  
But when the blast of war blows in our ears,  
Then imitate the action of the tiger:  
Disguise fair nature with hard-favour'd rage;  
Then lend the eye a terrible aspect; . . .  
Now set the teeth, and stretch the nostril wide,  
Hold hard the breath, and bend up every spirit  
To his full height. On, on you noblest English.

Henry V, act 3, sc. 1

## CHAPTER I

### STATEMENT OF THE PROBLEM

#### Introduction

From the day of our birth, most of our lives are affected by organizations. Most of us spend our childhood and adolescence in an educational organization and are employed by an organization once we graduate from the hallowed halls of our schools. Our leisure-time activities are intertwined with organizations that allow us to procure items, engage in social clubs, and demonstrate our beliefs. Organizations place restrictions on our behavior so that we do not infringe on the rights of others. Most official occasions in our lives are somehow sanctioned by an organization. We have become an organizational society (Etzioni, 1964), and the climate in these organizations affects our lives.

Etzioni (1964) posited that the primary purpose of an organization is to be efficient and effective. He stated, "Effectiveness of a specific organization is determined by the degree to which it realizes its goals. The efficiency of an organization is measured by the amount of resources used to produce a unit of output" (p. 8). An important aspect, then, for an organization is the determination of pertinent goals.

Due to the structure of the educational organization, there are many sublevels for which goals are drawn. A schematic picture may present major target goals made at the federal, state, district, school, classroom, and individual levels. According to Duke, Meckel, and Maravich (1980), "schools are confronted with control problems that are more complex and perplexing in some ways than the problems faced by many other organizations, such as factories and commercial business" (p. 3). It was Duke et al.'s supposition that "the control structure of the school must contend not only with employee behavior but with client (student) behavior as well" (p. 3). These control problems may be the root for conflict at all levels of the educational organization and prohibit the attainment of desired goals.

Conflict may exist at the core of the educational organization, and that conflict may be energizing and vital as well as negative. Ultimately, it is how one deals with conflict that determines the measure of success or failure. Educational organizations, like other organizations, are faced with three major sources of conflict. The first source of conflict is environmental (Mintzberg, 1979; Scott, 1981) factors, which include social, political, and economic issues (Dewey, 1959; Wallace, 1982). Intergroup factors such as communication and collaboration (Pondy, 1967; Thomas & Schmidt, 1976; Schmidt & Kochan, 1972) among and between different sectors or programs are another derivation of conflict in the organization. Finally, individual factors (Katz & Kahn, 1966; Smith, 1977), which include role

conflict, are the third possible origin for consternation within a system.

The classroom has all the characteristics of an organization. The classroom's major function, similar to the total educational organization, is to provide quality education effectively and efficiently. Effectiveness in a classroom is measured by the amount and quality of learning stimulated in the setting. Efficiency is evaluated by the cost of resources used to produce the product. An increase in the number of students in a classroom, along with the students' completion of the general curriculum, may be indicators of an efficient classroom. The major sources of conflict in the classroom may be to a finer degree the culmination of environmental, intergroup, and individual factors.

There is one significant aspect that differentiates the types of conflict viewed in the classroom from those in the total organization. That component is the possible and sometimes constant threat of aggressive-assault behaviors from and between students. Aggressive-assault behaviors in the classroom may stem from one or any combination of the three factors contributing to conflict. These disruptive behaviors in the classroom and at school affect the entire organization and the community at large. According to President Reagan, each month 6,000 teachers are robbed, 125,000 are threatened with physical harm, and at least 1,000 are assaulted so severely that they require medical care ("Reagan Vows to Fight School Crime," 1984). These figures are staggering when projected over a yearly period. Conflict or disruptive



behavior in the classroom currently poses a tremendous problem that must be faced by educators.

### Statement of the Problem

Recent reports have indicated that classroom problems involving behavior have reached alarming numbers, particularly at the secondary level (Duke, Meckel, & Maravich, 1980). Further reports have indicated that student behavior problems ranging from lack of discipline, truancy, and disrespect for authority to the use of abusive substances, violence, and vandalism are the major problems confronting the public schools and interfere with the ability of educators to accomplish their objectives (Gallup, 1982). Over the past 14 out of 15 years, the biggest problem of the local schools reported by the Gallup poll has been lack of discipline (Elam, 1983). In 1983, parents were asked to rate the way discipline is handled in their local schools. An A, B, C, D, and Fail scale was used. Fifty-four percent gave a passing grade of C or better; however, 39% gave a D or failing grade, and 7% were undecided (Gallup, 1983, p. 37). This means that two out of every five individuals polled felt the management of classroom behavior was below a "C" standard. When queried as to whether parents would want their children to become a teacher, in 1969, 75% of all respondents answered favorably, but in 1983, only 45% said "yes." The most frequently cited reasons for not wanting their children to become teachers were "(1) low pay; (2) discipline problems; (3) unrewarding, thankless work; and (4) low prestige of teaching as a profession" (Gallup, 1983, pp. 45-46). The issue of lack of discipline may be interpreted to mean that schools

are too lenient, or they are not prepared for a crisis and lack the skills needed for coping with acting-out students. Support of the last assumption may be demonstrated by the increase of requests by teachers and administrators for inservice training dealing with behavior-management techniques and crisis-intervention skills for students who exhibit aggressive-assault behaviors.

Management of students' classroom behavior has become one of education's crucial issues. Essentially, disruptive behavior affects not only the acting-out student but also the classroom, the teacher, the administrators, and the community. "The acting-out student who defies teacher imposed rules or structure, often finds him/herself deficient in key academic skills and frequently functions below grade level in academic achievement"(Walker & Buckley, 1974, p. 3). When a student is disruptive, a teacher oftentimes experiences a lack of control or management of the student and possibly the entire classroom. This could prove to be a source of frustration for a teacher. Educational administrators frequently use classroom management as an index for evaluating teachers (Borich, 1977). Administrators assume and desire that the classroom should be managed in an efficient and professional manner with few instances of conflict. School principals tend to be oriented toward pupils behaving themselves (Knoblock & Goldstein, 1971). Thus, the message is that children's behavior must be controlled; however, the tactics and nuances of this message are left for the teachers to decipher (Knoblock & Goldstein, 1971). The parents, on

the other hand, presume that their child will be provided with an education in a safe environment.

Some of these frustrations and expectations experienced by the employees and clients of the educational organization have been addressed in the literature. The research regarding classroom management is voluminous (Clarizio & McCoy, 1976; Duke, Meckel, & Maravich, 1980; Herbert, 1978; Hewett & Taylor, 1980; Long, Morse, & Newman, 197; Reinert, 1976; Walker & Buckley, 1974). Approaches to dealing with the acting-out student include applications of the psychodynamic, behavioral, biophysical, sociological-ecological, and counter theories. These approaches usually provide techniques for dealing with aggressive or acting-out behaviors of students after the crisis has occurred.

The goal of these approaches is to provide students with a repertoire of socially appropriate behaviors. Yet it appears that a working theory for predicting the occurrences of aggressive-assault behavior does not exist. The inability to predict the occurrence of aggressive-assault behaviors places the teacher in a reactionary position versus a proactive position. The teacher then uses what Simon (1945) labeled a "satisficing model" for decision making. This model suggests that the persons involved in a crisis will quickly choose the first action available that will alleviate the problem. Consideration is not given for the intervention's long-term effectiveness, only to halting the crisis. Another option is the "maximizing model" (Simon, 1945). Maximizing one's decision entails brainstorming about various strategies that may be used to correct the crisis. Ultimately, a plan

of action is developed that may be used by a person/teacher when a crisis situation arises. To accomplish this task in the classroom, it is necessary for the teacher to identify any coinciding patterns in the student's behavior.

Typically, in the ordinary classroom setting, one may experience occasional demonstrations of acting-out behaviors by students. These may include behaviors such as nonperformance of assignments, daydreaming, withdrawal, excessive time out of seat, running around the room, disturbing peers, uncooperativeness in groups, ignoring teacher, noncompliance with adult commands or directions, complaining, arguing (talks back), swearing, stealing, yelling, demonstrating temper tantrums, throwing objects, destroying property, and hitting or fighting (Bullock & Brown, 1972; Quay, Morse, & Cutler, 1966; Walker, 1979).

Upon evaluating the acting-out child's behaviors, one may arbitrarily design a continuum of disruptive behaviors ranging from least to most severe. Nonperformance of assignment completion might be a behavior considered less destructive to a classroom environment than perhaps consistent out-of-seat behavior or student's verbalization of complaints. At one end of the disruptive-behavior continuum, a student may demonstrate behaviors that are offensive and unsanctioned in the classroom, such as talking to peers, making noises, or ignoring teacher requests. These are irritating and obnoxious behaviors, but certainly they do not physically endanger oneself or others. These misconducts may be described as inconvenient acts. According to Kounin (1977), "Inconvenient acts are those behaviors which are disturbing but are

without direct harm to the perpetrator or to others and which do not violate any important moral taboo" (p. 19). Incorporated within this group of behaviors are those actions that often have been labeled "horseplay" or "rough and tumble play." The technical term for these actions is quasiagonistic behaviors. Quasiagonistic behaviors frequently have behavior patterns common to aggressive-assault; however, the intention of the participants is opposite (McGrew, 1972).

The middle of the continuum might include behaviors that are demonstrated when an individual is angry. Aggressive-anger behaviors are a demonstration of emotional reactions of extreme displeasure. These may include such behaviors as yelling, use of hand gestures, profanity, and temper tantrums. Aggressive-anger behaviors do not result in physical injury to either the self or others.

The opposite end of the disruptive-behavior continuum would include the most severe behaviors found in the classroom and on school playgrounds. The most destructive behaviors would be physical altercations or threat of such to another individual, be it student or teacher. While all of the above-mentioned behaviors are a source of challenge to a teacher's classroom-management skills, it is the more severe behaviors that have become a major concern.

Increasingly, teachers are forced to cope with aggressive-assault behaviors. There are numerous descriptions for aggression. However, the working definition that will be used is "behavior that results in personal injury and in destruction of property. The injury may be psychological (in the form of devaluation or degradation) as

well as physical" (Bandura, 1973, p. 5). Assault is defined as a clear and present danger of physical injury. Aggressive-assault behaviors are those behaviors that clearly are threatening to another individual and result in physical injury to either the perpetrator or the victim and/or in property damage.

Upon completing an extensive interview of teachers and parents, Kounin (1977) found that assaults on children by children "were reported more frequently for school than for home. Boys are more assaultive on other children in school in both first and third grades ( $p < .01$ ); and girls showed this same school-home contrast in the third grade ( $p < .02$ )" (p. 19). Kounin posited that successful classroom management involves preventing problems before they get started, not relying on one's ability to deal with them after they have emerged.

To successfully prevent crisis situations in the classroom, numerous variables need to be examined. Primarily, one must question: Before entering a classroom, are teachers adequately prepared to effectively deal with students' aggressive-assault behaviors? It is assumed that to effectively deal with students, teachers must possess the following skills: the ability to implement an appropriate curriculum for an individual (Borich, 1977); the competence to assess a disruptive situation adequately; the faculty to control their own emotional arousal during an aggressive incident (Ginot, 1965; Zillmann, 1979); the knowledge to intervene accordingly (Clarizio & McCoy, 1976); and the understanding that with repeated outbreaks of disruptive behavior

one must evaluate and prepare a plan to avoid being in a reactionary position (Good & Brophy, 1978; Swift & Spivack, 1969).

The first skill to adequately design or implement an appropriate curriculum for the student is of major concern. When the curriculum breaks down, one might predict that there may be some acting-out behaviors exhibited by students (Swift & Spivack, 1969). Assuming that the curriculum is satisfactory, the next focus is directed toward the ability to effectively and efficiently identify the disruptive situation. Cooper (1979) stated that "teachers need to feel that they can predict and control events in their classroom, and . . . are likely to be critical, punitive and inhibit verbal initiations from students who threaten their sense of security" (p. 399). Security appears to be the crux of the issue inasmuch as, if prediction and control provide security for the teacher, the reverse is true when an assaultive incident occurs. In addition, one cannot intervene nor can one develop an appropriate behavior plan without the ability to thoroughly assess the situation. The question then becomes: Are there any predictable behaviors exhibited by students who subsequently become assaultive that would enable a teacher to intervene in a positive, preventive manner?

#### Statement of the Purpose

The purpose of this study was to observe, analyze, and evaluate aggressive-assault behaviors and aggressive-anger behaviors to determine if there exists a sequential pattern of actions before, during, and after these behaviors are demonstrated. Documentation was made of the progression of students' aggressive-assault behaviors from

beginning to end. Supplementing the documentation of the aggressive-assault behaviors was the chronicling of all behaviors that are demonstrated when a person is visibly angry.

Three major benefits may result from being able to identify the potential of aggressive-assault and aggressive-anger behaviors before their occurrence. The benefits include helping teachers become more effective and efficient with behavior management, aiding the teaching profession by adding information to the body of knowledge regarding aggressive-assault and aggressive-anger behaviors demonstrated by students, and reducing the frequency of one major source of conflict within the educational organization, particularly within the classroom.

The identification of aggressive-assault and aggressive-anger behaviors may increase the probability of teachers predicting the occurrence of such behaviors before the situation escalates to a crisis situation. Prediction will allow teachers time (perhaps only moments) to redirect the aggressive-assault behaviors to ones that are more socially appropriate and congruous with the student's general behavior pattern. Thus, if a student has a tendency to demonstrate aggressive-assault behaviors, the teacher may start instructing the use of aggressive-anger, nonassertive, or assertive behaviors as alternatives to physical disputes (Dayton & Mikulas, 1981). Redirection of behaviors may eliminate or severely decrease the possibility of injury to teachers and students alike (Frost & Holmes, 1979). Accurate identification and prediction of aggressive-assault behaviors may permit teachers, administrators, and parents to develop a behavior-management plan



that will provide interventions for precursor, during, and after aggressive-assault behaviors. The establishment of an effective behavior-management plan may enable teachers to maximize their resources, enter the disruptive situation from a proactive position rather than a reactionary one, and increase the likelihood of behavior change in the student.

The identification of aggressive-assault behaviors demonstrated by students before, during, and after the incident may have major implications for the entire field of education. While the severe acting-out or disruptive student is frequently labeled emotionally impaired and placed in a special classroom, aggressive-assault behaviors are not exclusive to these special settings. As previously stated (Duke et al., 1980; Kounin, 1977), there are frequent incidents of aggressive-assault behaviors in the regular classroom at all age levels. The ability to identify and predict students' aggressive-assault behavior patterns will contribute to the general body of knowledge for all teachers.

The third major advantage for one being able to reliably predict the occurrence of aggressive-assault behaviors is that it may aid in reducing conflict within the classroom, school, and overall educational organization. Aggressive-assault behaviors in the classroom affect the following: (a) the perpetrator both positively and negatively due to the consequences of the behavior (Bandura, 1973), (b) other students in the classroom due to the break in continuity of the educational program, (c) the teacher due to a lack of control and

possible long-range effects on their evaluations, (d) the administrator as a result of increased workman's compensation claims from injuries incurred while dealing with students who demonstrate aggressive-assault behaviors, and (e) the educational organization due to poor publicity as a consequence of not effectively and efficiently dealing with their clients.

If a paradigm is perceptible for both aggressive-assault behaviors and aggressive-anger behaviors, the result will be an increase in ability to predict these occurrences. Prediction of aggressive-assault and/or aggressive-anger behaviors will allow a teacher and support staff to optimize their management strategies and intervene appropriately. Additionally, it may mean a change in the perpetrator's behaviors, continuity in the educational program, a sense of security for the teacher, reduction in workman's compensation claims, and a decline in one source of conflict for the educational organization.

### Design

The goal of this study was to determine whether aggressive-assault behaviors and aggressive-anger behaviors progress in a sequential pattern, with specific actions occurring before, during, and after these behaviors are demonstrated. If a paradigm is perceptible for both aggressive-assault behaviors and aggressive-anger behaviors, the results may be an increase in one's ability to predict the occurrence of these behaviors when the initial signs of the pattern commence. Thus it was hypothesized:

1. There are specific behaviors which are observable and measurable, which are characteristic of students in conflict with the teacher and/or other students.

2. There are specific behavior groups or behavior types which are demonstrated in a developmental sequence as the conflict continues.

To study the phenomena of aggressive-assault behaviors and aggressive-anger behaviors, an ethological study was conducted. Ethology is the comparative study of behavior patterns. It originated in zoology. "It is the discipline which applies to the behavior of animals and humans all those questions asked and those methodologies used as a matter of course in all the other branches of biology since Charles Darwin's time" (Lorenz, 1982, p. 1). Its counterpart, ethnography, has its origin in anthropology. Ethnography aims at studying a specific culture, including the verbal behavior (Berreman, 1966; Overholt & Stallings, 1976). While the two differ in their philosophical base, their methodology is basically the same. Hence an ethological study was implemented using the methodological procedures characteristic of ethological and ethnographic research.

The ethological approach essentially was formulated with Darwin's (1982) extensive studies of nonverbal communication (Brannigan & Humphries, 1972). He meticulously described such facial expressions as sobbing, sulking, bad temper, and anger; these procedures subsequently became a central part of ethological studies (Brannigan & Humphries, 1972). According to Tinbergen (1951), ethological studies seek to answer questions regarding causation, development, survival

value, and phylogeny of behavior. "This division into four kinds of questions simplifies many features of studying behaviour and avoids much confusion, particularly between proximate and ultimate causes and between features of learning (development) and features of motivation (causation)" (Blurton-Jones, 1972, p. 8). While ethological studies frequently search for the evolutionary or innate origins of specific behaviors, it was the purpose of this study to first ferret out whether behavior patterns existed, thus focusing on the developmental aspect of behaviors.

One of the features of ethology is "an emphasis on the primary observational descriptive phase of any scientific investigation" (Blurton-Jones, 1972, p. 10). The observed behavior

can be analysed into four kinds of criteria--phenomenological, a unit being all items of behaviour which take the same form; or functional, all items serving the same kind of consequence (a special case of this is all items serving the same biological function); or situational, items occurring in the same situation; or causal, items sharing common causal factors. (Brannigan & Humphries, 1972, p. 42)

The primary criterion used in this study was the phenomenological and situational units of behaviors.

While much research has been completed regarding aggression and hostility, it seems that the phenomenon is seldom studied in the naturalistic setting. To study the stated hypotheses, observations were made of three classrooms. There was an "open classroom" setting which meant there were no closing walls encompassing the individual classes. Because of this setting the observer was able to sit in one position and view the happenings in all three classrooms simultaneously. The

researcher acted as a participant observer and recorded observations by use of video tape and field notes.

The use of film allowed for interobserver reliability (Corsaro, 1982)). The sound-image record (SIR) provided density, a massive amount of information resulting from the actions captured on film, and permanence of record (Grimshaw, 1982). These factors permitted repeated review of sequences of behaviors, which allowed for minute analyses (Blurton-Jones, 1972; Grimshaw, 1982).

Over a period of eight weeks, 150 hours of video tapes and field notes were accumulated. The subjects were 13- to 18-year-old males who had been incarcerated for a variety of reasons. The adolescents lived in a camp setting, and the school facilities were on the same grounds.

#### Limitations and Delimitations

There were seven major limitations to this study. These limitations included (a) the degree to which the site chosen for observation was characteristic of an optimal site for collection of SIR data, (b) the extent to which the SIR data were interpretable, (c) the extent to which the SIR and participant observer were neutral and objective recorders of behavior, (d) the extent to which the participant observer had the ability to operate the SIR equipment and simultaneously collect field notes, (e) the extent to which the introduction of a measuring device altered the naturally occurring phenomena, (f) the extent to which the equipment functioned without faulty performance, and (g) the extent to which a three-hour introductory inservice presented to the

teachers of the research site on March 19, 1983, regarding a hypothesized assault-and-anger cycle affected the teachers' intervention behaviors in avoiding aggressive-assault and aggressive-anger situations in the classroom.

This ethological study was limited to 45 male subjects ranging in age between 13 and 18 years, who were incarcerated wards of the court, living in a camp setting. The results depict the behaviors exhibited by these subjects and cannot necessarily be generalized to other populations.

#### Definition of Terms

The formal definition of terms included in this dissertation is presented here for reference purposes.

Acting-out: Students' behaviors in the classroom setting which "defy teacher-imposed rules, structures, and/or procedures" (Walker, 1979, p. 3).

Aggression: "Behavior that results in personal injury and in destruction of property. The injury may be psychological (in the form of devaluation or degradation) as well as physical" (Bandura, 1973, p. 5).

Aggressive-anger behaviors: Behaviors that are a demonstration of emotional reactions of extreme displeasure. These behaviors do not result in physical injury to either the self or others.

Aggressive-assault behaviors: Behaviors that clearly are threatening to another individual and result in physical injury to either the perpetrator or the victim and/or in property damage.

Agonistic behavior: Behavior which normally produces injury to or flight by the child to whom it is directed, e.g., attack, threat" (McGrew, 1972, p. 22).

Assault: Those behaviors that present a clear and present danger of physical injury by a perpetrator to a victim. An example of an assaultive behavior is when the perpetrator is coming toward the victim with a bat and states that the intent is to harm the individual. In this case there is a clear and present danger of physical injury to the victim, and the situation is assaultive.

Description of properties of interaction: "will comprise the properties of actions of one or both participants and the relations between the actions of the two participants" (Hinde, 1979, p. 329).

Episode and incident: The occurrence of behaviors before, during, and after aggressive-assault and aggressive-anger actions are exhibited.

Ethology: The comparative study of behavior. An analytical distinction of fixed motor patterns.

Inconvenient acts: "Those behaviors that are disturbing and annoying but are without direct harm to the perpetrator or to others and which do not violate any important moral taboo" (Kounin, 1977, p. 19).

Other ending (to an agonistic interaction): "Intervention by an adult while interaction is in progress, or movement by children to outside observer's field of view" (McGrew, 1972, p. 26).

Quasiagonistic behavior: Behavior that has been referred to as "horseplay" or rough and tumble play. "Quasiagonistic behavior resembles agonistic behavior in commonality of some motor patterns, but the two seem to function almost oppositely" (McGrew, 1972, p. 22).

Separate ending (to an agonistic interaction): "Not in close physical proximity (usually further than two feet apart) or engaged in common activity (usually not having interacted in 10 or more seconds)" (McGrew, 1972, p. 24).

Sniper hit: An incident in which the perpetrator, while walking past the victim, hits the victim, and rapidly leaves the scene of the assault.

Together ending (to an agonistic interaction): "In close physical proximity and usually engaged in common activity" (McGrew, 1972, p. 24).



## CHAPTER II

### REVIEW OF THE LITERATURE

Why does man fight? From the beginning of our evolutionary development, man has found reasons to fight. Initially man's need for safety and the procurement of food or essential commodities led him to be aggressive. According to Bronowski (1973), one of the original reasons man organized group fights or wars was for "agricultural theft." Additionally, it has been shown from the Roman gladiators to boxing and ice hockey that man will fight for recreational purposes. Currently, increases in population, high technology, proximity to others, and stress due to financial, employment, and relationship upheavals may all be factors relating to the propensity for aggression in our society. The wealth of knowledge and attention devoted to aggression since the early 1900s perhaps emanates from the fact that man has increased his ability to obtain and use destructive instruments; and that the use of these sophisticated instruments has escalated the consequences of what at one time may have been a simple aggressive action (Bandura, 1973).

Whatever the reason, attempts to answer this question have led to voluminous amounts of research pertaining to aggressive behavior in animals and man alike. The whats, hows, and why-fors have resulted in

numerous definitions and camps of theories about aggression. Some believe aggression to be instinctive, others view it as a drive, and some posit that aggressive behavior is learned through our culture. The issue at hand is not necessarily to determine which camp is correct, for it would be impossible to prove or disprove the theories conclusively. It is to review some of the salient aspects of these definitions and theories which made them notable.

First, a brief description of some relevant literature about animal aggression will be presented. Next, a synopsis will be made of the significant definitions and theories. Finally, pertinent qualitative and quantitative studies addressing aggression in humans will be summarized.

### Animal Studies

When evaluating aggressive actions in animals, one must determine the category, type, and consequences of the attack. Zillmann (1979) believed consideration should be given to whether the aggression is conspecific, between members of the same species; or interspecific, between members of different species. Additionally, the type of attack should be discerned, be it offensive, behaviors not performed in direct response to prior aggressive actions; or defensive, behaviors demonstrated in response to aggressive actions directed at the animal. Finally, the consequences of the aggressive action are evaluated as being either predatory, the partial or complete ingestion of the destroyed animal; or antagonistic, when resolution of some kind is reached with the aggressive behavior (Zillmann, 1979).

Current research has resulted in some conclusions regarding the types of aggressive behavior both conspecific and interspecific in animals. Moyer (1971) posited that there are eight subclassifications of aggressive and hostile behaviors in animals. These destructive-oriented behaviors include (a) predatory aggression, (b) intermale aggression, (c) fear-induced aggression, (d) irritable aggression, (e) territorial defense, (f) maternal aggression, (g) instrumental aggression, and (h) sex-related aggression. Moyer believed that these behaviors are based on physiological differences. He contended that "there are different neural and endocrine bases for each of the above aggression classes" (p. 30).

Zillmann (1979) stated that there is general agreement on the basic functions of conspecific aggression. These functions include: "(a) the procurement of goods, and (b) the safeguarding of reproduction" (p. 65). In Lorenz's (1966) book On Aggression, he presented convincing arguments through objective observations of animals, that the three functions of aggressive behavior are "balanced distribution of animals of the same species over the available environment, selection of the strongest by rival fights, and defense of the young" (p. 43). He stated that conspecific aggression is the greatest of all dangers and that while occasionally in the animal kingdom rival fights result in death to the victim, the aim of aggression is not the extermination of fellow members of the species concerned. This is demonstrated in the way animals approach each other, with ritualized behavior and submissive behaviors when the combatants choose to

terminate any further aggression. Both concurred that each function is not mutually exclusive. According to Zillmann (1979), Lorenz's additional point of balanced distribution actually results in fighting for territory, with the major objective being the safeguarding of reproduction. Ultimately, the goal of these functions is the preservation of the species.

Some predatory or antagonistic consequences of aggressive behavior have been the acknowledgment and use of tools and weapons by animals. Observations of chimpanzees and baboons made by van Lawick-Goodall (1971) resulted in these descriptions: "He was the first chimpanzee we ever saw throwing stones and other objects at baboons that approached and threatened him" (pp. 209-210). Further notes stated, "He may raise his forearm rapidly, jerk back his head a little, run toward his adversary upright and waving his arms, throw stones, wield sticks, hit, kick, bite, scratch, and pull the hair of a victim" (p. 247).

It is the use of weapons that characterizes one of the major differences of aggressive behavior between man and animal. Thus, van Lawick-Goodall's validation that animal primates are using weapons, and descriptions of similarities in fighting, were the first of their kind. According to Tinbergen (1951), "man and the present day primates have only recently diverged from a common primate stock" (p. 205), which may account for the similar aggressive patterns. Additionally, this recent divergence is the reason anatomical and physiological studies are so valuable for human biology (Tinbergen, 1951). However,

man with his sophisticated intellect has far surpassed other conspecific animals in demonstrating a variety of aggressive behaviors.

Relatively speaking, if man has recently diverged from a common primate stock, might it be logically assumed that studies on animals pertaining to aggressive behaviors will aptly apply to humans?

According to Feshbach (1970), "the relevance of animal aggression to human aggression is itself a matter of some controversy because of the danger of drawing loose analogies from animals to human behavior on the basis of superficial similarities" (p. 175). Further, he stated that "it is evident from the animal data that aggression is both species specific and subject to general behavioral influences. Generalizations from an animal species to the human species are therefore highly questionable" (p. 177). Tinbergen (1951) stated that while animal neurophysiology and animal ethology are becoming more consistent, the ethological study of man has not progressed as far and that there still remains a wide gap between the two fields of study and that of the behavior of man. Scott (1969a) agreed with the divergence and further believed that there is not a continuum scale leading from primates to man; thus research on animal aggression, at best, has limited value for modern man. He additionally concluded: "If we are to understand human behavior from the biological viewpoint, we must study human beings as human beings and not try to derive all information from distantly related animals" (Scott, 1969b, p. 129). Lorenz (1982) contended that "the mere ascertainment of a reliable analogy, and therewith of a function common to two behavior patterns in two taxonomically widely

distant forms, is of extreme value" (p. 338). However, the analogous behaviors do not explain where the common function or physiological nature may be (Lorenz, 1982). Finally, ethologist Peter Medawar (1976) stated,

Some human beings are aggressive, to be sure, but it is by studying ourselves and not by studying animals that we recognize this trait in mankind; indeed, it is perhaps not unfair to say that those who know most about aggression in animals are most cautious in imputing any such thing as aggressive "instinct" to mankind. (p. 498)

Hence one must conclude after reviewing the consistency of responses from both ethologists and behaviorists that in order to make definitive statements about man and aggression, we must focus the research on man and not animal primates.

### Definitions and Theories

#### Aggression as Instinctive

The past half century seems to have introduced trends in the explanation of aggressive behaviors. These trends are not mutually exclusive to decades; there exists overlapping across time. However, from each period there has stemmed a current or popular approach to viewing aggression.

There is wide disagreement about the nature of aggression in man. The term "aggression" stems from the Latin root, ad-gradior, which means "I move forward." "The traditional meaning includes dynamism, self-assertiveness, and expansiveness" (Anderson, 1978, p. 12). The term has since taken on the connotation of the negative reaction to the previously mentioned descriptors.

The first theory to be reviewed stipulates that aggression is an instinct. "Instinct implies a set, inborn pattern of behavior that is complete and automatic in response to a given stimuli" (Solomon, 1970, p. 54). Darwin (1909) concurred that instincts are inborn but added a component that incorporates one's ability to adapt to one's environment. He posited that "under domestication instincts have been acquired, and natural instincts have been lost, partly by habit, and partly by man selecting and accumulating, during successive generations which at first appeared from what we must in our ignorance call an accident" (Darwin, 1872, p. 270).

When reviewing the literature of aggression as an instinct, one will find divergent theories subsumed under this category. In 1924, Bernard identified thousands of behaviors that he believed to be instinctive. Among those were instinct to escape restraint, to counter-attack, to fight, to become angry, of destruction, of attack, and revenge or injury for past injury (p. 381). Bernard's contribution was the labeling and listing of behaviors. He did not attempt to explain in any manner how or why these behaviors were instinctive. Other instinctive theories include Adler's (1927) proposal that all human behavior is a result of a need for power and Ardrey's (1966) contention that aggressive behavior is due to what he termed the "territorial imperative" or the need-for-possession instinct. These propositions, however, have not received the acclaim like two other major instinctive theories advanced in the psychoanalytic and ethological fields of study.

As noted by several investigators (e.g., Bandura, 1973; Feshbach, 1970; Solomon, 1970; Zillmann, 1979), Freud's original psychoanalytic theory postulated the existence of two instincts: the sexual instinct and the ego instinct. The motivation for these was the seeking of pleasure and self-preservation and thus the reduction of tension. After World War I, in his later writings, Freud tried to provide an explanation for the sadistic, masochistic, and self-destructive behaviors of man. He revised his instinctive theory to include a life instinct and its counterbalance, a death instinct. The life instinct, Eros, was life enhancing, while Thanatos was the instinct that included tendencies toward aggression and a force whose aim was the destruction of the organism. "In this conceptual revision, aggression became an inborn drive rather than a by-product of thwarting libidinal strivings" (Bandura, 1973, p. 13).

Freud's death instinct and aggressive instinct are controversial and have few true or purist supporters. One element of the theory that has gathered consensus relates to the issue of relief or purgation of hostile or destructive pressures, which is known as catharsis (Feshbach, 1970; Zillmann, 1979). Ultimately, it was Freud's view that "aggression is, in the final analysis, inevitable" (Zillmann, 1979, p. 121).

The other field of study which attributes aggression to instincts is ethology. The first major contributor to the study of ethology was Charles Darwin. In 1872, he published systematic notes describing, as is titled, The Expression and the Emotions in Man and



Animal. Darwin postulated the existence of three principles that aid to illuminate what he termed the "theory of the subject" (p. 28).

The three principles include serviceable associate habits, antithesis, and actions due to the constitution of the nervous system (Darwin, 1872). Basically, the premise of the theory of the subject is that man's actions, both voluntary and involuntary, are a result of nerve-force and become habitual when the mind is induced to a state that produced the first expression or its opposite reaction. Darwin proceeded to vividly describe, among other things, the physical characteristics of rage and anger. His detailed descriptions of human behavior patterns and cross-cultural description of human expression were the first of such recorded. His work must certainly be considered the initial stepping stone for future ethologists.

Aside from Darwin, the primary focus of study for most ethologists has been with animal primates. However, within the last 30 years more consideration has been given to ethological studies relating to human behavior. According to Eibl-Eibesfeldt (1971), "ethologists deal with the observed behavior patterns and label as aggressive every act that leads to a spacing or subordination, even a display" (p. 73). Beyond this simple working definition of aggression, there has been postulated, like Freud, an instinctive theory of aggression from an ethological point of view. This theory is known as the hydraulic theory.

How often have you heard someone comment that he needed to "blow off steam" or had to "get it out of his system" or to "get it off

his chest"? These remarks are the simple basis for what is known as hydraulic theory. According to Lorenz (1966), aggression is spontaneous in that it may occur without stimulation, or in a stimulus vacuum. He posited that "aggressive drive is a true, primarily species preserving instinct" (pp. 49-50). The hydraulic model which Lorenz developed explains the spontaneity of this species-preserving instinct. Zillman (1979) summarized Lorenz's hydraulic theory as follows:

In his energy model of instinctive actions, Lorenz conceived of energy as a liquid stored in a container. Energy is continuously provided through an input pipe. There is a constant flow of energy into the reservoir. The reservoir is drained through an out pipe. The outflow of energy is regulated by a valve that is controlled by a spring. This spring responds (a) to the pressure inside the reservoir and (b) to the pull of external stimulation. The latter is represented by an outside weight that exerts a pull on the valve. Energy exists through a horizontal spout. Dependent on the pressure inside the container, it may drop close to the container (at low pressure) or shoot farther away from it (at high pressure). The energy passes through a scale grid and finally reaches a trough with a leaning, perforated bottom. The holes in the bottom correspond to instinctive actions. Holes in the lower area of the trough are associated with more basic instinctive actions than those in higher areas. The more characteristic forms of behavior are thus advantaged by the downward flow of energy in the trough. The more specific forms are elicited only at high energy levels. (p. 122)

There are many unresolved questions regarding Lorenz's model. These include: Does the energy flow ever shut off? Does the valve ever close or reach some form of homeostasis? Is the drainage beneficial or harmful?

Like Freud, Lorenz viewed aggression as being inevitable. However, through catharsis or the redirection of energies, aggression can be modified. Lorenz advocated competitive sports and physical activities to obtain this release. After evaluating Lorenz's theory, Zillmann (1979) concluded that "Lorenz's proposal of spontaneous and

accumulating instinctive aggressive energy is without empirical foundation" (p. 125).

Another major criticism of Lorenz's work is that he "neglects the role of learning as a determinant of aggressive behavior in animals" (Feshbach, 1970, p. 177). For example, it is purported that a cat's innate instinct will lead it to kill rats and birds. Behaviorist researcher Kuo (1930, 1938) found that by reinforcing appropriate behaviors, cats could be reared to be non-rat-killing animals or even to fear their customary prey, rats and birds. Further, Kuo studied a bird embryo and concluded that the embryo's behaviors were a reaction to stimuli or environment, not innate behaviors (Lorenz, 1982). There was a debate over the embryo study as to the behaviors being learned or innate. After ten years of contemplation, Lorenz (1982) deducted the following:

It was, as a matter of fact, incorrect to formulate the concepts of the innate and the acquired as disjunctive opposites; however, the mutuality and intersection of their conceptual contents were not to be found, as the "instinct opponents" supposed, in everything apparently innate being, really learned, but the very reverse, in that everything learned must have as its foundation a phylogenetically provided program if, as they actually are, appropriate species-preserving behavior patterns were to be produced. (p. 8)

Lorenz (1982) further questioned: "How was it possible that whenever the organism modified its behavior through learning processes, the right process was learned, in other words, the adaptive improvement of its behavioral mechanisms was achieved" (p. 8). In 1961, based on a conditioned reflex known as a feedback circuit, he concluded the following:

Whenever a modification of an organ, as well as of a behavior pattern proves to be adaptive to a particular environmental circumstance, this also proves incontrovertibly that information about this circumstance must have been "fed into" the organism. There are only two ways this can happen. The first is in the course of phylogenesis through mutation and/or new combinations of genetic factors and through natural selection. The second is through individual acquisition of information by the organism in the course of its ontogeny. "Innate" and "learned" are not each defined through an exclusion of the other but through the way of entrance taken by the pertinent information that is a prerequisite for every adaptive change. (Lorenz, 1982, p. 9)

Lorenz (1982) further postulated about the phylogenetically programmed behaviors: "that certain behavior elements, and exactly those that serve as the built-in "schoolmarm" and conduct the learning processes along the correct route, are never modifiable through learning" (p. 9). However,

every "learned behavior" does contain phylogenetically acquired information to the extent that the basis of the teaching function of every "schoolmarm" is a physiological apparatus that evolved under the pressure of selection. Whoever denies this must assume a prestabilized harmony between the environment and the organism to explain the fact that learning--apart from some instructive failures--always reinforces teleonomic behavior and extinguishes unsuitable behavior. (p. 10)

The ethological approach to aggression, more particularly the hydraulic theory of aggression, being instinctive and spontaneous, has generally been abandoned over time. This also holds true for Freud's psychoanalytic theory. As hypothetical forces, the theories seem to maintain prominence. It appears that the primary factor of importance from these theories is the concept of energy and the need to release this energy via some form of activity.

### Drive and Aggressive Theory

The concept of energy is the foundation for the theory of aggression as a drive. In 1939, Dollard, Doob, Miller, Mowrer, and Sears postulated a theory of aggression that has since become known as the frustration-aggression hypothesis. This was the first systematic approach to aggression made by experimental psychologists. The abridged version of this theory still remains effectual in today's research on aggression.

Dollard et al.'s basic premise was that "the occurrence of aggressive behavior always presupposes the existence of frustration and, contrariwise, that the existence of frustration always leads to some form of aggression" (p. 1). It was their contention that initially there is an instigator which "is some antecedent condition of which the predicted response is the consequence" (p. 3). The termination of a predicted sequence is called a goal response. The goal response may range from being a gross motor activity such as throwing a ball or running, to a verbal comment from a peer.

The interference with the occurrence of an instigated goal-response at its proper time in the behavior sequence is called frustration. In order to say that a frustration exists then one must be able to specify two things: (1) that the organism could have been expected to perform certain acts, and (2) that these acts have been prevented from occurring. A goal response reinforces the behavior sequence leading up to it, while interference does not. (pp. 7-8)

Dollard et al. wrote, "The frustration aggression hypothesis assumes a universal causal relation between frustration and aggression" (p. 10). Subsequently, Dollard et al. stated,

The dependent definition of aggression is that response which follows frustration, reduces only the secondary, frustration-produced instigation and leaves the strength of the original instigation unaffected. Frustration is independently defined as that condition which exists when a goal-response suffers interference. Aggression is independently defined as an act whose goal response is injury to an organism. (p. 11)

Three major points are developed in this hypothesis. These include: (a) that aggression is always based on frustration, (b) that frustration always leads to aggression, and (c) that there exists an almost innate relationship between aggression and frustration.

Sears, Hovland, and Miller (1940) somewhat revised the second portion of the frustration-aggression hypothesis and defined aggression as "any behavior, in short, which is intended to injure another organism (or organism-surrogate), or which could serve to injure an organism if it were in range" (p. 275). Then, in 1941, Miller in collaboration with Sears, Mowrer, Doob, and Dollard retracted the claim that frustration always leads to aggression. He rephrased the second segment to read: "Frustration produces instigations to a number of different types of responses, one of which is an instigation to some form of aggression" (p. 338). Miller et al. further stated that "if instigation to aggression is the strongest then aggression will occur. If instigation to other responses is strongest then they will occur before aggression" (p. 339).

Thus the revised frustration-aggression hypothesis is as follows: (a) "Frustration instigates behavior that may or may not be hostile or aggressive. (b) Any hostile or aggressive behavior that occurs is caused by frustration" (Zillmann, 1979, p. 27).

Miller et al. further clarified the issue of whether aggression was innate or learned by stating: "It is not certain how early in the infancy of the individual the frustration-aggression hypothesis is applicable, and no assumptions are made as to whether the frustration aggression relationship is of innate or of learned origin" (p. 340). Later, Miller (1964) reported that "there are built in patterns of human behavior, these patterns may be modifiable enough so that they are disguised by learning but may still play a crucial role in motivating socially-learned behavior" (p. 160). Thus one may conclude that "the frustration-aggression relationship may be learnable without being entirely learned" (Berkowitz, 1969, p. 4).

The frustration-aggression hypothesis further formulated assumptions that could be empirically tested. These pertained to the factors influencing the strength of instigation to aggression, the inhibition of aggression, the displacement of aggression, and the reduction of aggression. Regarding the first of these factors, Dollard et al. (1939) maintained that the strength of the instigation to aggression should have a direct correlation with "(1) the strength of instigation to the frustration response, (2) the degree of interference with the frustration response, and (3) the number of frustrated response-sequences" (p. 28). An example might be that if a child had two toys, he would be less frustrated or angry if one were taken away rather than both toys removed.

In addition to factors affecting the strength of instigation, aggression is also affected by the inhibitory factors. It has been

postulated that "the strength of inhibition of any act of aggression varies positively with the amount of punishment anticipated to be a consequence of that act" (Dollard et al., 1939, p. 33). Thus it is possible that the effects of punishment may reinforce aggressive behavior. Feshbach (1970) noted that "anticipation of punishment may be frustrating and therefore increase the instigation to aggression, while at the same time inhibiting the overt expression of a particular aggressive act" (p. 170). Bandura (1973) stated that the response an individual makes to the frustration is dependent on "the types of responses the person has learned for coping with stress" (p. 53). Further, he stated that "the highest rate of aggressive behavior is found in environments where aggressive models abound and where aggressiveness is regarded as a highly valued attribute" (p. 97).

Consideration has been given to the degree of inhibition and the strength of the aggressive response. Next, Dollard and his colleagues (1939) addressed the issue of displacement of aggression. They hypothesized that "the strongest instigator, aroused by a frustration, is to acts of aggression directed against the agent perceived to be the source of the frustration and progressively weaker instigations are aroused to progressively less direct acts of aggression" (p. 39). Thus they proposed that an individual will instigate aggression toward the primary source of frustration but additionally toward an associated target. These secondary acts of aggression will subsequently weaken the original instigators. "The occurrence of any act of aggression is assumed to reduce the instigation to aggression. In psychoanalytic



terminology, such a release is called catharsis" (p. 50). One might conclude that if individuals are allowed socially acceptable modes of physical activity or vicarious outlets in which to express their aggression, their aggression will be displaced and their frustration lessened. Frost and Holmes (1979) found that displacement activities following annoyance did not reduce physiological arousal, but it did reduce the amount of succeeding aggressive actions against the annoyer. Contributing to this finding are the results of Dayton and Mikulas's (1981) study, which found that assertive subjects recovered more rapidly from an aroused state if the alternatives to the aroused situation were assertive or aggressive. Nonassertive subjects had a rapid reduction of arousal when the consequences were nonassertive rather than assertive or aggressive. "This suggests that for many assertive people assertive behavior is arousal-reducing and thus perhaps reinforcing and for many non-assertive people non-assertive behavior is arousal reducing and possibly reinforcing" (Dayton & Mikulas, 1981, p. 308).

While this theory along with its revisions has been the foundation for voluminous empirical studies regarding aggression, one must question the length of time it takes for instigational effects of frustration to occur. How long can one inhibit the instigator? Could it possibly become a hydraulic effect? How long does the catharsis affect the instigator? If frustration effects are long lasting, are catharsis effects long lasting also? Ultimately what needs to be addressed in this theory is "whether or not observed violent

transgressions occur because of the accumulation of residual instigatory effects of frustration" (Zillmann, 1979, p. 131).

### Learning Theory and Aggression

Thus far contradistinctions of the origin of aggression have included innateness leading directly to aggressive behavior and frustration causing an aggressive drive which culminates in aggressive behavior. Both of these theories seem to be based on the action of aggression. Somehow, via instinct or drive, aggression is acquired and inevitable. Subsumed within both of these theories, not certainly at their origin but somewhere along the way, learning plays a role in aggression (Darwin, 1909; Eibl-Eibesfeldt, 1951; Feshbach, 1970; Lorenz, 1982; Miller, 1941).

It is learning theory and, yet one step further, social learning theory that has accumulated prominence and acceptance as a systematic analysis and approach to aggression. Both of these theories will be reviewed.

The literature on learning theory as related to aggression is extensive. The major issues covered in the literature relate to whether the continuation of aggressive behavior is a result of the desire to attain rewards, to alleviate aversive stimuli, or to inflict injury, or a result of incentive theory. Also, the literature has examined the use of punishment as a deterrent. A thorough review of studies pertaining to these issues was presented in Zillmann's (1979) book titled Hostility and Aggression. For the purpose of this paper, a

synopsis of Zillmann's summary will be made, highlighting the salient points of interest in these areas.

The fundamental concepts of learning theory, i.e., the use of contingent reinforcement or aversives to modify a stimulus, are functional for all behaviors including aggression. Zillmann (1979) concluded that in regard to human aggression, "the alleviation of aversions and the attainment of rewards are largely appraised on intuitive grounds. As a consequence, it is often unclear whether reinforcement is negative or positive, and statements about the nature of reinforcement can be misleading" (p. 178). He found that the "alleviation of aversion potentially reinforces both successful aggression and submission" and that the "attainment of rewards tends to selectively reinforce successful aggression" (p. 178).

In analyzing the reinforcement value of the infliction of injury, the results have primarily been negative. Zillmann's (1979) summary stated the following:

- (1) Signs of damage failed to reinforce aggression. With the possible exception of intermale aggression, signs of damage proved to exert a strong inhibitory effect on later aggression.
- (2) The victim's experience and expression of pain failed to reinforce aggression.
- (3) Witnessing an annoyer suffer seems pleasing, whereas witnessing a neutral person suffer seems disturbing.
- (4) There is no evidence whatever that could be construed as support for the notion that signs of damage and expressions of pain are inherently reinforcing. (p. 190)

Zillmann's research of the studies pertaining to incentive theory and aggression concluded that aggression is strongly reinforced with the attainment of both tangible and nontangible rewards. It is difficult to determine the exact nature since it is mixed with both

positive and negative reinforcement elements. He recapped findings proving that "marked sex differences seem to exist with regard to the reinforcement value of both tangible and nontangible rewards" and that "the social approval and encouragement of aggression promotes aggressiveness" (p. 197).

Difficulties arise when discussing punishment as a deterrent to aggressive behavior merely due to semantics. For the purposes here, punishment will be referred to as aversive control.

Zillmann's summary of the use of aversive control as a deterrent included the following salient results from research studies:

1. Aversive stimulation that cannot be perceived as manipulated by persons or institutions to control the respondent's behavior suppresses the behavior that precedes and that apparently precipitates such stimulation. Aversive control in humans functions analogously to aversive control in subhuman species. Its effects on behavior can be strong and persistent, similar to the effects of reinforcement. The research evidence does not support the view that the aversive control of human behavior is ineffective and necessarily maladaptive.

2. Hostile and aggressive behaviors are under aversive control. As long as the aversive control cannot be perceived as manipulative or does not involve stimuli sufficiently intense to prompt defensive aggressive reactions, aversive contingencies tend to suppress hostility and aggression.

3. Aversive control becomes ineffective as contingent aversions are matched or dominated by simultaneously operating reinforcement contingencies.

4. Aversive stimulation perceived as manipulative by persons or institutions to control the respondent's behavior does not necessarily produce effects similar to those resulting from aversive stimulation not perceived in this way.

5. If aversive stimulation is perceived as legitimate or is recognized as ultimately beneficial by the respondent, manipulative aversive control may function analogously to nonmanipulative aversive control.

6. If aversive stimulation is perceived as unjustified and arbitrary by the respondent, it is likely to promote rather than suppress hostility and aggression.

7. Little is known about the effects of the punishment of transgressions. The perceived legitimacy of such punishment again

seems to be of great importance. Physical punishment, because its legitimacy is generally questioned, is not likely to be an effective punitive measure; if such punishment is regarded as a violation of legitimacy, it should prompt hostile and aggressive reactions. Strategies employing mild positive punishment and negative punishment or transgressions together with the reinforcement of constructive responses appear to be the most effective in the curtailment of hostility and aggression.

8. Threat of punishment may suppress hostile and aggressive behavior if the respondent perceives it as likely that the threatened contingency can and will be enforced by the threatener. (pp. 220-221)

As previously stated, the principles of learning theory are well accepted as an explanation for the origin and instigators of aggression. Using learning theory as a basis, Bandura (1973, 1976) incorporated those major premises into what is known as the social learning theory of aggression. He believed a theory on aggression should explain "how aggressive patterns are developed, what provokes people to behave aggressively, and what maintains their aggressive actions" (Bandura, 1976, p. 204). Bandura's social learning theory accomplished this task by defining the origins, instigators, and regulators of aggression.

The social learning theory definition of aggression includes: "behavior that results in personal injury and in the destruction of property. The injury may be psychological (in the form of devaluation or degradation) as well as physical" (Bandura, 1973, p. 5). Bandura also took into consideration the effects of these acts on the victim. Aggressive behavior, unlike other social behaviors, is the one area in which the spectator does not have to be a willing participant. In fact, "the behavior that is punishing for the victim can, at least on a short term basis, be rewarding for the aggressor" (Bandura, 1973,

p. 2). Also, the labeling of aggression is based on a variety of factors. There are incidents in which one behavior may be labeled as aggressive and in another setting the behavior may be considered appropriate. An example may be the use of a knife as a weapon versus the use of a scalpel during surgery; or in the classroom environment, wrestling would be deemed inappropriate, yet on the school yard it might be viewed as rough and tumble play.

The social learning theory identifies three origins for aggressive modes of behavior. These origins are observational learning, reinforced performance, and structural determinants.

Observational learning is the foundation of aggressive modes of behavior. Through observing the behavior of others, one may acquire strategies or a plan of action that will imitate or exceed the particular behavior modeled (Bandura, 1973, 1976). However, observation alone does not guarantee that an individual will respond aggressively. What occurs is that the individual who is reinforced for aggressive behavior will predictably behave in the same manner in the future because these actions become associated with pleasant feelings; conversely, the individual who is punished for aggressive actions will decrease those behaviors. The structural determinants that interact with this process involve the acquisition of the aggressive behaviors and the social factors that determine whether an individual will use the aggressive modes previously modeled. This is reliant on whether the individual determines that the behaviors have some functional value and whether the behaviors are positively or negatively sanctioned by their culture.

There are three major modeling sources of aggressive behaviors that are influential. The modeling influences come from the family, the subculture, and via symbolic modeling (Bandura, 1973, 1976).

The family is one of the prominent sources from which aggressive behaviors are modeled (Bandura, 1973, 1976; Sears, Rau, & Elpert, 1965). Additionally, Bandura (1973) reviewed a study he conducted with Walters in 1959 and reported that "some of the most aggressive boys came from families in which both parents demanded, instigated, and condoned assaultive behavior" (p. 95). Unwittingly, through physical punishment of children who perhaps have hit another child or committed another transgression, one models disciplinary actions that are aggressive (Bandura, 1973).

The subculture is another significant influence of modeling aggressive action (Bandura, 1973, 1976; Polsky & Kohn, 1959). "The highest rates of aggressive behavior are found in environments where aggressive models abound and where aggressiveness is regarded as a highly valued attribute" (Bandura, 1973, p. 97). "In these aggressive subcultures status is gained primarily through fighting prowess. Consequently, good aggressors are the prestigious models on whom members pattern their behavior" (Bandura, 1976, p. 207).

Studies have indicated that a higher incidence of aggressive modeling exists among delinquent than nondelinquent boys (Glueck & Glueck, 1950; McCord, McCord, & Zola, 1959). An example of where we teach individuals that aggression is a positive form of behavior is in the military services. Within this subculture individuals are

reinforced to fight and kill for the cause of freedom and nationalism. It has been shown with soldiers returning from wars that a resocialization process is necessary to reestablish the individual in the mainstream of society.

The third source influencing aggressive behavior is symbolic modeling. Symbolic modeling is provided via mass media. Bandura (1976) believed that "it is not uncommon for people experiencing appropriate inducement to pattern criminal activities after ingenious styles portrayed in the mass media" (p. 208). This is exemplified in the rash of airplane hijackings, peaceful sit-ins modeled after Gandhi's nonviolent resistance (Bandura, 1976), which progressively turned violent (i.e., Kent State), and a robbery identically patterned after one described in Trevanian's book titled The Eiger Sanction. However, mass-media modelings quickly lose their impetus due to the development of effective countermeasures, the discrepancy between anticipated and real consequences, and the behavior losing its attractiveness through overuse (Bandura, 1976).

In addition to explaining how aggressive patterns are acquired, the social learning theory addresses how they are activated, i.e., instigators of aggression. Social learning theory postulates that "most of the events that provoke people to aggress, such as insults, verbal challenges, status threats, unjust treatment, and inciting actions, gain this activating capacity through learning experiences rather than from genetic endowment" (Bandura, 1976, p. 211). The instigators of aggression include modeling influences, aversive



treatment, incentive inducement, instructional control, and bizarre symbolic control (Bandura, 1976).

Social learning theory identifies four processes by which modeling influences can motivate aggressive actions (Bandura, 1976).

The first mode is called discriminative function, in which an individual who has been reinforced for a particular behavior will repeat the behavior. The second mode is

aggressive conduct that is regarded as emulative and therefore unencumbered by restraint. Whereas aggressive modeling is primarily instigational, it serves a disinhibitory function in the case of injurious behavior that is fear provoking. Because aggression usually incurs severe punishment costs, both instigational and disinhibitory processes are likely to be involved. (Bandura, 1976, p. 212)

The third modeling mode of instigation is emotional arousal, which is a result of watching others aggress. The fourth mode involves stimulus-enhancing effects. According to Bandura (1976), "modeled activities inevitably direct observers' attention to the particular implements being used. This directive attentional influence may prompt observers to use the same instruments to a greater extent, although not necessarily in an imitative way" (p. 213).

In social learning theory, instead of frustration generating an aggressive drive that is reducible only by injurious behavior, aversive treatment creates a general state of emotional arousal that can facilitate a variety of behaviors, depending on the type of responses the person has learned for coping with stress and their relative effectiveness. . . . Different forms of aversive stimulation often have dissimilar behavioral effects. Therefore, in the social learning analysis injurious behavior is related to different classes of aversive antecedents. (Bandura, 1976, pp. 213-214)

The different classes of aversive antecedents include physical assault, verbal threats and insults, aversive reduction in the level of reinforcement (when discrepancies exist between observed and experienced outcomes, discontent generally occurs), and thwarting of goal-directed behavior (Bandura, 1973, 1976).

The last three instigators include incentive inducement, instructional control, and delusion control (Bandura, 1973, 1976). Since humans have the capacity to cognitively project behavior outcomes into the future, the demonstration of aggressive actions frequently is a result of anticipated positive consequences. The instigator is reliant upon the incentive inducement or anticipated rewards rather than the possible negative punishment (Bandura, 1976).

It has been found that

by rewarding obedience to directives and punishing noncompliance, orders eventually acquire eliciting power. After this form of social control is established, legitimate authorities can successfully command aggression from others, especially if actions are presented as justified and necessary and the agents possess strong coercive power. (Bandura, 1976, p. 218)

The power instructional control holds over individuals is exemplified in Milgrim's (1974) research, which demonstrated that some adults will administer increasingly stronger shocks when commanded, regardless of the victim's pleas to halt. Additionally, history has demonstrated via the proceedings from the Nuremberg trials, the Tate/La Bianca trial, and the happenings at Jamestown that some people will follow directions with little consideration of the consequences.

Delusional control is the last instigator identified in the social learning theory. It has been postulated (Bandura, 1973, 1976)

that in addition to external instigators, aggressive behavior results from some outrageous symbolic control. An example of this is the attempted assassination of President Reagan by Hinkley. The motivation that led Hinkley to his action was assumed to be based on his falling in love with an actress and his deluded thoughts that the killing of the President would gain him favor in the actress's eyes.

The origin and instigators of aggression have been summarized according to social learning theory. The third and final aspect of social learning theory deals with the maintenance or regulators of aggression. The four major regulators of aggression are external reinforcement, punishment, vicarious reinforcement, and self-reinforcement (Bandura, 1973, 1976).

The direct external reinforcement (Bandura, 1976) contributing to the maintenance of aggressive behavior can take the form of tangible rewards, social and status rewards, the alleviation of aversive treatment, and the expression of injury (i.e., when hurting an individual in some way benefits the aggressor). Punishment can also sustain aggressive behaviors by being either inhibitory or informative. The vicarious reinforcement of aggression is based on the premise that seeing aggression rewarded in others will increase the probability of one trying on new behaviors and, conversely, seeing it punished will decrease one's tendency to behave aggressively (Bandura, 1973, 1976). The last regulator of aggressive behavior is self-reinforcement. This can either be self-reward or self-punishment for aggression. These take the form of reconstructing the aggressive incident to minimize

one's role, thus resulting in a palliative comparison; justifying aggression in terms of higher principles; displacement and diffusion of one's responsibility to the action; dehumanizing the victim; attributing blame to the victim; misrepresenting the consequences; and gradually becoming desensitized to the actions and consequences of aggression (Bandura, 1973, 1976).

The social learning theory of aggression addresses the origin, instigators, and regulators of aggression. The social learning theorists' fundamental premise is that people are taught to act aggressively and through one's family, subculture, and mass media are reinforced in various manners to maintain these behaviors. While one may learn to be aggressive, obversely it has been demonstrated that one may also learn to be nonaggressive (Montagu, 1978). Cultures such as the Fore of New Guinea (Sorenson, 1978), the !Kung of the Kalahari Desert (Draper, 1978), and the Inuit of the Canadian Arctic (Briggs, 1978) have all taught their children to be nonaggressive through redirection of activities. This is not to say that these individuals are immune to aggressive actions, but that these actions are generally exhibited toward objects or animals and not toward other tribe members.

Heretofore, prevalent information regarding animal studies and the pertinent theories and definitions of aggression--instinctive, drive, leaning, and social learning--have been summarized. The intention was to provide background information on the salient issues in this area. The final section examines the literature relating directly to the observational studies of children and aggression.

### Related Studies

A spectrum of measurements has been used by social scientists to determine the origin, instigators, and maintaining causes and factors of aggression. The research ranges from observational studies to experimental studies, with indirect techniques such as interviewing somewhere in the middle (McGrew, 1972). Wright (1960) reported that, of the 1,409 empirical studies conducted between 1890 and 1959, there were only 110 observational studies performed. Of these 110 observational studies, only three pertained to the adolescent school-aged student, whereas the remaining empirical studies used a fairly even distribution of subjects in the preschool, school, and adolescent age range. The main reason cited for use of preschool children in observational studies is that when the child is young, he exhibits more natural behaviors in front of observers (Wright, 1960). Among the observational studies conducted, only 12 dealt with the issue of aggression. Eleven observational studies pertaining to aggression used subjects in the preschool age range, whereas only one observational study on aggression viewed adolescent subjects.

The first recording of an observational study of human behaviors has been attributed to Darwin (1872). He conducted a cross-cultural study that resulted in descriptors used to characterize rage and anger. Some of Darwin's more graphic findings are as follows: heart beat and circulation affected, face reddens, face becomes purple, veins on forehead distended, respiration affected, chest heaves, nostrils dilate, nostrils quiver, mouth froths, hair bristles, frown on

forehead, eyes glare, eyes glisten, eyes protrude, lips protrude, lips retract, snarling, flow of tears, spitting, yelling, slapping, pulling objects, shaking objects, stamping, jumping up and down, hitting with the hand, etc. His chronicling of representative human behaviors and patterns was the first of its kind and the foundation for further studies.

Repeatedly, observational and empirical studies of preschool children have shown that boys consistently demonstrate a higher number of physical aggressions than girls (Dawe, 1934; Green, 1933; Jersild & Markey, 1935; Kounin, 1977; McGrew, 1972; Sears, Rau, & Elpert, 1965; Siegel, 1956; Walters, Pearce, & Dahms, 1957; Werry & Quay, 1971). Moreover, McGrew (1972) found that "all-male interactions tended to be agonistic or quasiagonistic in nature, mixed-sex interactions were 'genuinely' agonistic, and all-female interactions were usually nonagonistic" (p. 116-117). Most quarrels begin over the possession of an item or result in injuries to objects rather than another person (Blurton-Jones, 1967; Dawe, 1934; Muste & Sharpe, 1947; Sears, Rau, & Elpert, 1965). The frequency of physical assaults decreases around the age of three years (Dawe, 1934; Jersild & Markey, 1935); however, as the age increases, there is an increase in the aggressive and retaliative behaviors exhibited (Dawe, 1934; Green, 1933; Jersild & Markey, 1935; Muste & Sharpe, 1947). Werry and Quay (1971) found a decrease in disruptive behaviors around the ages of five and six but noticed a slight increase at age eight. The mean duration for observed quarrels by Dawe (1934) was 23 seconds, while McGrew (1972) found that

the mean duration of agonistic-quasiagonistic interactions was 12.9 seconds. Hitting, pushing, and pulling were found to be the three predominantly exhibited aggressive behaviors (Dawe, 1934; Strayer & Strayer, 1976; Werry & Quay, 1971).

The effects of environment and the family are determinants of whether children will use aggression to settle disputes (Bandura, 1973, 1976; Muste & Sharpe, 1947; Sears, Rau, & Elpert, 1965). McKee & Leader (1955) found that children coming from lower socioeconomic families have a higher propensity to be aggressive. One study found that upon reviewing the background of students referred for acting-out and aggressive behaviors, there consistently was a history of separation or divorce in the family (Felner, Stolberg, & Cowen, 1975). Also it has been found that the gang leaders of incarcerated juvenile delinquents tend to be more aggressive and hostile in order to impress their peers (Polisky & Kohn, 1959). While the issue of environmental influences was discussed in the section on social learning theory, it is further addressed here due to the effect it might have on the population in this study.

Another issue of concern is that of supervision. Are children aggressive due to lack of supervision or because they know a fight will be stopped when an adult is present, thus making it safer in one sense to be aggressive? There have been some controversial results regarding the demonstration of aggressive behaviors with and without the presence of an adult. Siegel found that when an adult was not present, anxiety and aggressive actions decreased (Siegel, 1957; Siegel & Kohn, 1959).

However, it has also been found that there are fewer disruptions in structured teacher-present activities than with structured teacher-absent activities (Pastor & Swap, 1978; Patterson, Littman, & Bricker, 1967). Yet if the activity is unstructured, there are fewer disruptions if the teacher is absent than if the teacher is present (Pastor & Swap, 1978).

A major emphasis of the ethological research on aggression has been concerned with the existence of dominance hierarchies. "The usefulness of a dominance hierarchy comes from its power to help explain a group's social behavior or from its power to provide organization to otherwise puzzling behavioral phenomena" (McGrew, 1972, p. 122). It has been found that linear dominance hierarchies may be a useful tool in predicting conflict situations in preschool children (McGrew, 1972; Sluckin & Smith, 1977).

The research reviewed thus far has primarily been time-sample and event-sample observational studies. Adjunctively, the results from some experimental studies have been included. Focusing on the observational studies, one finds that the observations were all of preschool children, excluding the study conducted by Polsky and Kohn (1959). The observational periods varied from 40 30-second sessions (Green, 1933) to an extended study over three years, for three three-month sessions. The difficulty with most of those studies was that the descriptors were either nebulous (e.g., "inactive pursuits" [Green, 1933], "bodily attack," and "moderately assertive" [Patterson, Littman, & Bricker,



1967]], or inferential ("undirected energy" [Dawe, 1934] and "competes for status" [Walters, Pearce, & Dahms, 1957]).

While certain traits have been identified as existing during an aggressive incident, there are a few studies that have described in minute detail facial expressions and gestures (Blurton-Jones, 1967; Grant, 1969; McGrew, 1972). McGrew (1972) studied the existence of dominance hierarchies in preschool children as determined by win/lose interactions. In this study he compared 237 agonistic-quasiagonistic with 65 nonagonistic interactions. Each behavior pattern had a concise definition to describe the label. Of the 13 behaviors McGrew identified as possible agonistic interactions, three coincided with Blurton-Jones's (1967) findings. These three behaviors were back, "the trunk is extended at the hips so that the head and shoulders move backward" (McGrew, 1972, p. 99); pull, "the arms are flexed toward the body, usually the chest, thus drawing an object or person toward the body or vice versa" (McGrew, 1972, p. 80); and verbalize, which is the vocalization of sound. Blurton-Jones (1967) also found walk to be a consistent behavior demonstrated during agonistic interactions.

These two studies (Blurton-Jones, 1967; McGrew, 1972), along with Grant's (1969) and Brannigan and Humphries's (1972) accurate facial and gesture descriptions, have resulted in standardized definitions for some behavior patterns. These definitions are critical to the present study and were used as the framework for the evaluation of all behaviors (Appendix A).

Beyond the defined behavior patterns, there is only one theorist who has postulated the existence of stages in actions of aggression. Bovet (1923) described the five stages when individuals fight. In Bovet's stages of individual fights, he delineated five phases: verbal provocation, first assault, the scuffle, anger, and respite.

Verbal provocation involves teasing, shouting of insults, name calling, threats, and ultimatums which culminate in a challenge, such as "If you don't do this, I'll do that." The first assault is when the adversaries gradually approach each other; "after insults come stones, then blows with a stick, and then the scuffle, starting with kicks and punches and leading up to the moment when the adversaries hurl themselves on each other, grapple, and throw each other down" (p. 22). The scuffle in which the adversaries quickly engage is characterized by the desire to attain a position of advantage. This is accomplished by pushing or tripping the opponent and being in the top position, thus enabling the aggressor to deliver blows. Anger, or the fighter-enraged stage, is when the fighter has pinned his adversary and then proceeds to bite or scratch rather than hit his opponent. According to Bovet, "these actions are not considered 'good form' in war" (p. 24). The final respite stage occurs after the first physical encounter and the combatants are again face to face. "After this respite they resume their mutual insults, or set to again without delay, belabouring each other, or grappling hand to hand. In this way they may condense one or two of the stages" (p. 25). While the study conducted by Bovet has

theoretical and data limitations, he attributed the causes for fighting to instincts.

The literature review consisted of briefly identifying important aspects of animal studies and the most relevant definitions and theories on aggression. Additionally, research pertaining more directly to this study was reviewed. Generally, the literature has addressed origins, instigators, mediating factors, and remediating techniques for aggression. The most significant investigations, however, are the ethological studies which present definitions for patterns of behavior. Even with this, the issue of predicting an assaultive incident due to the co-occurrence of behavior patterns before, during, and after the assault was not mentioned in any of the studies reviewed.

## CHAPTER III

### DESIGN

The demonstration of aggressive-assault and/or aggressive-anger behaviors from one individual to another is to a degree one type of interpersonal interaction.

Most research on social interactions and relationships has been paradigmatic, in the sense that it has involved taking one theoretical model or set of postulates, based perhaps on classical or operant conditioning, or on the concepts of norms or of complementary needs, and seeing how far it would go. (Hinde, 1979, p. 7)

According to Hinde (1979), research needs to provide a description of relationships, a categorization of their properties, and classification of these properties so that we can convert our limited knowledge and experimental findings into generalizations that have specific ranges of validity. This would involve "the identification of relations between behavior and events inside or outside the organism which precede, accompany or follow it" (Hinde, 1966, p. 4). A relationship implies the existence of some reciprocal interactions between two people, involving an interchange over a period of time. The interchanges have some degree of mutuality, such that the behavior of each takes into account some degree of the behavior of the other, yet this reciprocity of interchanges does not imply cooperation (Bandura, 1973; Hinde, 1979). The most severe interactions that do not require cooperation

are aggressive-assault behaviors. These interchanges along with aggressive-anger behaviors were the primary concern of this study.

### Hypotheses

To study the phenomena of aggressive-assault behaviors and aggressive-anger behaviors, an ethological study using ethnographic research principles was conducted. The objective of this study was to determine whether aggressive-assault behaviors and aggressive-anger behaviors progress in a sequential pattern, with specific actions occurring before, during, and after these behaviors are demonstrated. It was hypothesized that:

1. There are specific behaviors which are observable and measurable, which are characteristic of students in conflict with the teacher and/or other students.
2. There are specific behavior groups or behavior types which are demonstrated in a sequence as the conflict interaction develops.

### Method

#### Subjects

The description of aggressive-assault behaviors and aggressive-anger behaviors was based on observations made of students who had a high probability for demonstrating these actions. A group of 45 male students between the ages of 13 and 18 years was observed. Each individual was incarcerated for various reasons and placed as a ward of the court, in a camp setting. The school program and camp program were

administered by separate agencies. The school program functioned year round.

### Setting

The field study observations of the students' interactions were conducted in the school environment. The reason was to observe the students in a setting to which they were most accustomed. The most naturalistic setting in this case was the classroom. Since most human behavior is influenced by the setting, the naturalistic environment assists in providing consistency to the behavior (Wilson, 1977).

The school classrooms were situated on the camp facilities. There were eight classrooms. The classrooms consisted of a gym, a vocational-education center, a computer classroom, a driver education classroom, and the learning center (lc). The learning center (Appendix B) was a large, rectangular-shaped room that provided space for four of the general education classes and had one general meeting area. Each class was divided by a floor-to-ceiling portable wall. The entrance to each class was an approximate 8-to-10-foot open space. Students could view their counterparts in other classrooms; thus it was not uncommon for a student in classroom 1 to yell a comment to a student in classroom 3.

The main school office was next to the learning center, and it had two observation windows. These windows jutted out in an "L" shape. From the apex of this "L," one could clearly observe the happenings in three out of four of the classrooms. A table and chair were situated within three feet of the shorter observation window/wall. The

participant observer daily set up the camera on this table and situated herself back in the corner. Any student entering or leaving the learning center passed in front of this area or was in plain view when the camera was rotated on its axis.

The physical climate of the learning center was dependent on the weather in general. If it was cold outside, one wore a coat inside the learning center; if it was hot outdoors, the same prevailed indoors. Finally, the students were on a six-period program. During the transition period to the next class, the majority of the students were required to pass through the general meeting area of the learning center.

#### Procedure

The basic method used in the field study was participant observation. Observations were made over a seven-week period from May 21, 1983, through July 15, 1983. Three weeks involved viewing students from 9:00 a.m. to 12:00 noon and from 1:00 to 3:00 p.m. For four weeks, during summer school, observations were made from 9:00 a.m. to 12:00 noon. During this seven-week period, the students were observed for 150 hours.

In this study the field worker was a passive participant observer. Using the strategy of "polite refusal" (McGrew, 1972), interactions with the students were minimized. Upon entering the learning center the students would proceed to their designated classrooms. At this time many salutations were directed toward the

field worker. Occasionally students would ask information questions about the field worker or questions regarding school work. The students were informed that the field worker was observing how their teachers taught, i.e., the strategies used when the teacher was or was not present in the classroom. The majority of questions were ignored by the field worker. Any responses given were brief, typically directing the student back to the teacher.

The observer's field notes recorded summaries of happenings in the classrooms. To further enhance and supplement the observations, the use of video-tape equipment was employed to record the interactions occurring in the setting since it is difficult for either observer or the SIR equipment to completely record the description of a behavior sequence (Marler, 1966).

Sound-image records. The SIR equipment used was a Sony 3600 reel-to-reel video-tape recorder and camera. A Sony TV zoom lens was attached to the camera. The zoom lens provided a view of single-classroom occurrences at one time and, with adjustments, allowed for close-up shots of individuals. However, the zoom lens limited to some degree the viewing of minute details. One-half-inch black and white Scotch video tape was used for recording the data.

The equipment was placed as unobtrusively as possible on a cart and a table in one corner of the learning center next to the west wall and observation window/wall. Thus both the camera and the primary observer were visible to the students. The camera was positioned such that classrooms 1, 2, and 3 could be observed. Two microphones were



hidden in the learning center area, one between classrooms 1 and 2 and one near classroom 3.

The locked-off-camera (LOC) mode was used. This is the dominant recording mode used currently (Grimshaw, 1982). Essentially, the camera was immobile but was turned on its axis to focus on various parts of the learning center. The field worker would focus the camera on a classroom that had students who were demonstrating off-task behavior, out-of-seat behavior, or verbal bantering with peers or the teacher or on students who were commonly the victims of others' abuse. If there were possibilities of aggressive-assault behaviors or aggressive-anger behaviors being exhibited in two classrooms simultaneously, the camera would be focused on one class and the field worker would write descriptions of behaviors being demonstrated in another class. Occasionally the camera would be scanned across the learning center to pick up the general activity in the center. During transition periods, when the students transferred from one class to another, the camera usually was focused on one of the entrances to the learning center.

Video recordings were made the entire time students were in school, with the exception of approximately three hours when the machinery was faulty. There were approximately three to six minutes of "down time" at the end of each video tape when the participant observer was required to change video tapes.

Narrative observations. The collection of SIR data employing the LOC mode was supplemented with narrative recordings, or field notes

by the observer. The primary purpose for collecting pencil-and-paper narrative recordings was that one could not guarantee that when students did demonstrate aggressive-assault or aggressive-anger behaviors they would do so in the learning center. The taking of field notes gave the observer freedom to move around the premises, not being restricted solely to the learning center, where the camera was positioned. Typically, students who demonstrated aggressive-assault and aggressive-anger behaviors were escorted to the broom closet and a counseling session, termed by the school an "adjustment," was held between one or more teachers and the student(s) involved in the disruptive actions. The narrative recordings allowed for the accumulation of data during all aspects of an incident, unrestricted by location. Occasionally the observer would make a judgment that the immediate turning and focusing of the camera on a particular incident had the possibility of escalating an incident. Under these rare circumstances, the observer would rely solely on the narrative recordings.

The field notes were also used as markers when reviewing the SIR data. The descriptions of behaviors provided landmarks on the video tapes. This allowed for direct comparison of written and SIR data. Corsaro (1982) stated,

When using more than one collection technique (e.g., field notes, AV recording), data obtained at one point in time with one technique can serve to identify dimensions in the settings, which are then sampled using another technique at a later point in the research. (pp. 152-153)

The numbers registered on the video-tape player were recorded in the field notes, thus allowing the viewer to find any specific segment of the tape readily.

Data collection. The initial stage of data collection consisted of receiving permission from administrators and teachers to use their classrooms as the site for the study. Additionally, the participant observer interviewed the teachers and administrators to gather preliminary information about the school, the behaviors of specific students, and any overall concerns about behavior-management techniques used when aggressive-assault and aggressive-anger behaviors were exhibited. These discussions revealed that 21 assaultive or disruptive incidents had occurred between January 1, 1983, and May 19, 1983. Some teachers expressed reticence to be video taped. Teachers presented concerns about the open classroom environment, the lack of a time-out room, the visible confrontive or facing-off behaviors from students, and the general behavior-management program for the school and camp setting, stating there was a lack of support on the part of administration.

Using field notes and SIR equipment, data were collected over a seven-week period. The procedures followed over these seven weeks included:

Week 1: The observer, with the assistance of SIR, narratively recorded the happenings in the classroom. The video-tape recorder was set up and was in operation daily from 9:00 a.m. to 3:00 p.m. Reliance on the video-tape recorder was limited to allow for the desensitization

of the students to the recording device (Grimshaw, 1982). The video tapes were used to establish intraobserver reliability between the field notes and the video-tape recordings. One 30-minute video-tape segment was used as the primary data source for the first week.

Week 2: Field notes and video-tape recordings were made. The field notes were the primary source used for data evaluation for week 2. The adjunct use of the video tapes further established observer reliability. The daily use of the SIR equipment provided one more week for the students to become desensitized to the camera.

Weeks 3 through 7: SIR data and field notes were collected. Since the LOC technique was employed, field notes were used as a supplement for happenings out of the range of the camera. All data collected over the seven-week period were used for evaluating patterns in aggressive-assault and aggressive-anger behaviors.

### Analysis

The data collected were analyzed for identification and sequence of behaviors, events, and duration of aggressive-assault and aggressive-anger behaviors. Discrepancies between aggressive-anger and aggressive-assault incidents were examined to determine if different overt behaviors existed. Each recorded aggressive-assault and aggressive-anger case study was evaluated for patterns within each event. The generalizability of any emergent theories of behavior patterns occurring during each event was then tested by examining analogous instances indexed in the aggregate of recorded materials (Erickson, 1982).

A doctoral graduate student from Michigan State University acted as an independent judge. The independent judge was trained to observe and count defined behaviors from segments of the video tapes. Given ten video-tape segments, a comparison of behavior counts was made between the independent judge and the primary observer. A Pearson product-moment correlation coefficient was used to provide a predictive measure of the variability between the judges (Hays, 1981). The formula that was applied is as follows:

$$r_{xy} = \frac{N \sum_i x_i y_i - \left( \sum_i x_i \right) \left( \sum_i y_i \right)}{\sqrt{\left[ N \sum_i x_i^2 - \left( \sum_i x_i \right)^2 \right] \left[ N \sum_i y_i^2 - \left( \sum_i y_i \right)^2 \right]}}$$

The correlation coefficient between judges was .9975. The highly significant results of this correlation represent the relative performance between judges, given training and well-defined observable behaviors.

### Reliability and Validity

Ethological and ethnographic research occurs in the natural setting. The studying of human behavior presents many problems, one of which is that the behavior exhibited is never static. Due to this, the issues of reliability and validity are more questionable in the qualitative versus the quantitative studies.

Replication and design were the two major problems in regard to internal reliability in this study, particularly the issue of

interrater reliability (Le Compte & Goetz, 1982). In this instance replication was controlled since each sequence of actions of aggressive-assault behaviors and aggressive anger behaviors was treated as an individual case study. The design and interrater reliability issues have previously been addressed.

Le Compte and Goetz (1982) referred to five major problem areas that need to be addressed by ethnographers to enhance external reliability. These include "researcher status position, informant choices, social situations and conditions, analytic constructs and premises, and methods of data collection and analysis" (p. 37).

The first concern, researcher status position, refers to the extent to which the observer is a participant in the study. The observer in this study took the role of a passive participant, and involvement with the subjects was limited to morning greetings, occasional nods, and rare responses to questions directed at the observer. The issue of informant choices refers to those who provide data. In this study informants were limited to record access regarding the frequency of aggressive-assault incidents and occasional teacher interpretation of disruptive situations. The next point in question, social situations and conditions, refers to the open classroom environment and the interactions within that environment. The matter of analytic constructs and premises refers to the ability to replicate the study. Since each incident is dealt with singularly and a comparison of co-occurrences made, the replication issue of the study is minimized. The final concerns for external reliability are the methods of

data collection and analysis. The issue of data collection is controlled by using both field notes in situ and video-tape recordings. Further, control for agreement of observations by using an impartial judge and determining interrater reliability by applying the Pearson product-moment correlation coefficient provides a measure of reliability.

The degree to which a measure accurately assesses the characteristic or phenomenon it claims to measure is labeled validity (Borg & Gall, 1979). In this type of study, validity may be its major strength (Le Compte & Goetz, 1982). The claim that ethnographic work has high internal validity is derived from the data-collection techniques used (Erickson, 1979; Le Compte & Goetz, 1982). The inclusiveness of the descriptive richness and the demonstration of interrater reliability of the ethnographic work contributes to the validity of the study (Erickson, 1979). The source of data collection--participant observation, over an extended period of time, in the natural setting--"reflects the reality of the life experiences of participants more accurately than do contrived settings" (Le Compte & Goetz, 1982, p. 43). Finally, the use of SIR allows for the repeated review of each taped aggressive-assault and aggressive-anger incident. The analysis of this ethological study is therefore subject to continual reevaluation.

## CHAPTER IV

### FINDINGS OF THE STUDY

The observations reported in Chapter IV are the culmination of video-tape and field-note data collected from May 21, 1983, through July 15, 1983. During this period, the students were observed for 150 hours. The denouement of the analysis of the video tapes and field notes is a total of 23 case studies. Each case study varies in complexity and intensity as perceived by the victim and demonstrated by a change in the victim's behavior.

The social learning theorists claim that aggression may in fact be the only interaction that does not require willing responsiveness on the part of the victim (Bandura, 1973). Additionally, aggression has been defined as "behavior that results in personal injury and in destruction of property. The injury may be psychological (in the form of devaluation or degradation) as well as physical" (Bandura, 1973, p. 5). Upon reviewing the data, there were literally more than a hundred incidents in which the students were physically involved with one another. The decision to label one interaction as aggressive-assault, one as aggressive-anger, and another as quasiagonistic took much deliberation. The final determining factors included (a) the victim's nonwilling participation in the interaction; (b) physical



contact, i.e., hit, kick, choke, wrestle; and (c) the intensity of the incident as perceived by the victim, which was demonstrated by a change in the victim's behavior that could be observed by the field worker. The term "victim" is used purposefully since the student is adversely affected by the interaction.

The case studies presented are categorized into four distinct groups. These are aggressive-assault, aggressive-anger, sniper hit, and quasiagonistic incidents.

There are 14 case studies of aggressive-assault behaviors. Each study demonstrates behaviors that are clearly threatening to another individual and result in physical injury to either the perpetrator or the victim and/or in property damage. These individual case studies were classified as a demonstration of aggressive-assault behaviors largely due to the reaction of the victim, the intensity of the hitting, fighting or damage created, the reaction of the teachers who were responsible for breaking up the fight, and the judgment of the field worker. One must carry this point a step further. It is true that the above-stated definition for aggression includes psychological injury; the only means this writer had to evaluate the effects of injury was via the victim's observable behavior. Thus, if the victim had previously been quiet and then began to act-out after willing or nonwilling participation in an aggressive-assault incident--or vice-versa, if the victim had been active within a group and then withdrew--the change in behavior would be noted as a possible result of the conflict interaction. The consistency or deviation of behavior as

demonstrated by the victim then determined the status of the interaction, i.e., aggressive-assault, aggressive-anger, or quasiagonistic.

Four individual case studies of aggressive-anger behaviors were clearly demonstrated during the seven weeks in which data were collected. These have been defined as aggressive-anger behaviors since there was a demonstration of emotional reactions of extreme displeasure. The behaviors displayed may have included yelling and the exhibition of temper tantrums but did not result in physical injury to either the self or to others. In each incident a teacher was required to intervene to some extent.

Many students were hit in physical encounters, but not all students perceived the hits as aggressive actions as demonstrated by their subsequent behavior after the physical contact was made. These interactions that involved physical contact between two or more persons, sometimes including common motor patterns of behavior such as wrestling and light hitting, were labeled as quasiagonistic behaviors. Quasiagonistic or "horseplay" behaviors resemble aggressive-assault behaviors in many ways, yet the purpose of the interactions is opposite (McGrew, 1972). The students involved in quasiagonistic behaviors separated laughing or light-heartedly teasing one another. These quasiagonistic behaviors present a challenge for the teacher and staff working with the student, but by no means were the behaviors threatening. It was the intensity as perceived by the individuals involved in the interaction, as displayed in the victims' changed behaviors and as observed by the field worker, that demarcated quasiagonistic from

aggressive-assault. There were incidents that initially appeared as if they would be quasiagonistic on the part of one of the participants, yet quickly changed from fun to fury because there was an unexpected hit, or an expected hit was too forceful. In order that one might discern between aggressive-assault and quasiagonistic behaviors, the first case study presented is an example of quasiagonistic behavior.

The writer labeled the final pattern of behavior "sniper hit" incidents. These incidents followed the same sequence of pattern: (a) an assailant approaches a victim; (b) the assailant hits or pushes the victim with force, as demonstrated by the reaction of the victim (i.e., the victim flinches, pulls backwards, loses his balance, etc.); and (c) the assailant departs the immediate area quickly. The reason this is termed sniper hit is that it is a surprise attack. The reaction of the victims varied to some degree. The victims were always startled, but their subsequent behavior ranged from continuing with their initial task to chasing after the assailant. Another variable was the proximity of the teacher and the teacher's intervention with the assault. Typically, however, since these are surprise attacks, the teacher never sees the hit. There are four case studies of sniper hits presented in this chapter.

The case studies are formatted in the following manner. First, the studies appear in chronological order. The dates of the incidents have been omitted, yet one must not assume that each of the events occurred on separate days since, as in Case Study 16, there are actually eight different incidents that took place within a 45-minute

period. Each case study begins with a brief description of the setting. This is followed by the field-note and tape-analysis data. These two pieces of data are interspersed and appropriately labeled. Next, each case study is summarized, noting significant behaviors that have been demonstrated.

To maintain anonymity, each student's name was changed. Every use of the name Andy, Steve, and Phil means that the student in that particular setting was unknown to the observer. Teachers are referred to as T1, T2, T3, etc., and counseling staff from the institution are referred to as CS. The initials C1, C2, C3, and C4 indicate classroom 1, classroom 2, etc., whereas lc and lct represent learning center and learning center table, respectively. The numbers scripted next to the text of tape analysis are reference numbers from the video-tape data. Each of these numbers represents 2.5 seconds of time. Also scripted next to the text of field notes within brackets is the time the event was occurring.

There is a drawing (Appendix B) of the learning center that may be referred to while interpreting the student's passage through the learning center. Additionally, the definition of terms used for analyzing the facial and body movements may be found in Appendix A.

The following case studies are the descriptions of quasiagonistic behaviors, aggressive-assault behaviors, aggressive-anger behaviors, and sniper hit interactions that occurred at a school setting among adolescent males aged 13 to 18 years who were incarcerated for various reasons.

### Case Study 1: Quasiagonistic

The first case study is a demonstration of quasiagonistic behavior. Within a two-hour period, Dan had physical contact with five different students. The important issue here is that while the students may have flinched or moved away, there was not an immediate change in their behavior. Dan did not appear to be angry, but he had a difficult time maintaining behavior that was acceptable by the teacher. These are the types of behaviors that present a challenge for skillful teachers. School is just beginning. The students have been in their homerooms and are in transition to period 1. There is much activity going on in the center.

### Tape Analysis

00        Dan is entering C2. Five students are in the classroom; one is by the pencil sharpener, one is sitting at the desk near the sharpener, and one is seated next to the teacher's desk. Jim is standing on a chair which is placed next to a portable cabinet.

07        Dan is standing while he takes off his coat. Jim is standing on the chair reaching for some papers that are on top of the tall portable shelf.

15        As Dan approaches, Jim jumps down from the chair. Dan walks over to Jim and makes a counter-clockwise forearm sweep with his left arm and hits Jim on the head. Jim backs up, flinches, and moves to the right side of Dan but does not depart. Jim stands beside the chair with his back against or close to the wall.

18            Dan standing on the chair pulls posterboard material off the top of the cupboard.

22            T approaches Dan and Jim and begins to talk.

27            T leaves area.

28            Jim begins to leave the area, and Dan while holding posterboard in his hand reaches out and taps Jim on the shoulder with the board. Jim hunches over and departs from area with his back to Dan.

35-36        Dan steps down from the chair.

44            Dan walks out of C2 with the posterboard in his hand. Dan is off camera.

67            Dan walks to the camera, pointing to the posterboard in his hand. He begins a commentary as if he were a news broadcaster.

83            Off camera. Dan then walked back to the desk in C2.

89            Dan sat down. Leaning back in the chair, both of his feet are off the ground.

91-92        Dan put his feet down and then lifted them off the ground again.

97            Dan picks up papers from the corner of the desk top and begins to shuffle through them. His legs are bent and his body is turned left, away from camera.

111          Dan bounces his legs and shifts them to the right. They are still bent at the knees.

112          Andy gets out of his seat.

114          Dan looked in direction of camera. He is still shuffling papers.

115 Dan's legs are straight as he sits at the desk.  
117 Andy walks over to Dan.  
119 Camera is moved off Dan and over to C3.  
145 Luke is sitting in a chair at the learning center table.  
147 Dan walks over to the learning center table and passes between the chair in which Luke is sitting and the table. He proceeds over to Tom, who is sitting at the 1ct next to the wall. Off camera.

### Field Notes

Dan throws paper to the top of the bookshelf and misses. Dan walks over and picks up paper. Dan walks over to Tom sitting at 1ct and starts slapping Tom lightly on head, across face, and walks back to room.

### Tape Analysis

153 Dan passes by the camera with a side-stepping motion and goes back to C2. Dan takes five steps swinging arms out and around from body rather than straight forward and back. He then changes to a bouncy gait with elbows bent, upper arm parallel to the ground, and forearm perpendicular to the ground. Using his right arm, Dan grabs Peter by the arm and with his left arm in a circular motion, lifts his hand to Peter's head. Dan starts rubbing the student's head with his hand. "This here is a clown fool." Total physical contact 3.6 seconds. Dan releases Peter and moves to an individual desk.  
159 Dan is off camera; moved to southeast wall in the room.

306        Dan is standing by the filing cabinet in C2. He is pulling papers out of files, feet about eight inches apart.

323        Dan is sitting in a chair. The chair is tilted back on two legs. His feet are moving, he stops and puts them flat on the ground. He then moves his knees inward and outward. He is thumbing through a book.

342        He shifts his feet to the ground and leans forward such that the chair rests flat on the floor. Dan puts the posterboard in front of him, making it impossible to see his face.

348        Dan's feet are on the ground. Tilting back in the chair, only the toes of his feet touch the ground. He lifts both feet completely off the ground, moves feet toward each other two times, and then places them down, the outside edges of his feet making contact with the floor.

360        Dan got out of his seat and left C2.

361        Dan is off camera.

#### Field Notes

T2 starts to speak, ". . . Dan, I'm going to ask you. . . ." Dan replies, "I ain't doing nothing to you. . . ." Dan states, "I can do what I want. Shut up." Dan left the room, walked to the door of the 1c, then to C1 and back to his desk. Dan said to T1, "Hey, what are we doing today?" Dan walks to his chair in C2 but does not sit down. He then walks over to the portable.

T2 walks to C3 and talks to Dan. T2 and T3 are talking to Dan. Dan states, "I don't care what you want. . . . just sitting." Dan is



sitting in a chair. One teacher says to Dan, "Well get your life together. . . . Have you done any work at all?" Dan, "Aaaaaaahhh, noo."

### Tape Analysis

372 Dan walked back to his desk, picked up his jacket which he dropped on the floor and put it on the back of his chair.

376 Dan walked out of C2.

387-88 Dan entered C2 with T2 and T3 following. As Dan walks to his seat, he makes an exaggerated step, lifting his leg up such that from the thigh to the knee the upper leg is parallel to the ground; the heel of the foot comes within five to eight inches of his buttocks. As he moves around the east end of the table, he glances at T3. There is a smile on his face. Dan then glances downward while he sits down in his chair.

390 T2 is talking to Dan. Dan is sitting in the chair and has the chair tilted backwards. Dan gestures with his left arm and then hands T3 a piece of paper.

406 Both Ts walk away. Dan makes an audible whine/cry.

407 T3 returns to Dan.

408 Dan puts a piece of paper in a book.

410 Dan stands up. He then does the following: picks up books with both hands and transfers them to his left hand; using his right hand, he puts the pencil he is already holding behind his right ear, he then places the books down on the desk top, and picks up his jacket.

While putting his jacket on, he removes the jacket from the back of the chair with his left hand, swings the jacket in front of his face and upward, with his arms upward and straight in a "V" formation he slides his arms in the jacket sleeves. He then adjusts his jacket and shirt. Dan then picks up his books and posterboard.

417        Dan left C2 with T2 and T3. They went to the broom closet to have an adjustment conference.

### Field Notes

[TAPE 423]    Moved to broom closet. "We're going to be short and sweet. Now stop playing with the water. Come on over here, I want to talk to you." Dan states, "Don't put your hands on me. Don't put your hands on me. Do you see, you put your hands on me?" Dan at sink playing with water. Dan, "Don't put your hands on me." Pacing, he picked up a broom, putting the pole end in the sink. Dan started putting objects in the sink, then turned the water on. T3, "Turn the water off and listen to me, you just want the attention Dan." Dan calls out, "Hey Mr. M." T3 turned off the water. Dan walks toward the door, T3 is in the way. Dan grabbed a mop, moved it up and down. Dan says, "Does that thing come down?" T3, "Now don't be messing with that." Dan starts tapping glass, moved to sink and turned water off and then on. Dan continues, "Why you . . . I'll slap you both. . . . Don't put your hands on me. Hey I'll slap." T3 said, "Then put the plunger down." Dan replies, "I don't have to." Dan picked up a bottle off the shelf, turned the light off, and continued to walk around the room. T asked if Dan had a problem. Dan shut the door, walked back to

sink. T3, "Would you rather. . . ." Dan puts his hand out, "Why you touching me?" T3 and CS, "Do you understand the purpose . . . you need to know the situation." Dan, "You know what she's taking notes on; on me."

[10:12] Dan in C1 back to camera. Dan walks back into 1c from hall. Bob came over to camera and looked in. T3 directed Bob to task.

[10:15] Dan is lying on two chairs in C1.

[10:18] Dan got up and left class.

[10:20] Dan returned to class.

(397) Dan hitting/playing with Kent in C1.

### Tape Analysis

372 Camera moves from C2 to C1. Seated are T1, Andy, Steve, Rich, and Kent. Kent is sitting on a chair at the circular table. Both feet were resting horizontally on another chair. He placed his feet on the ground and was looking toward the direction of the camera.

375 Dan enters the 1c and approaches Kent. Dan stands facing Kent but is looking in the direction of C3. With his left hand, Kent reaches and holds onto Dan's left coat jacket sleeve at the wrist. Kent looks up at Dan and smiles. Using his right arm, Dan makes a sweeping motion and encircles Kent's neck. Kent's chin is in the crook of Dan's elbow. Dan's lips are pursed, and the lips separate showing teeth. Kent simultaneously leans forward and to the left, Dan follows with the movement. Both come to an upright position. Kent is sitting

and Dan is standing and leaning against the wall. Pause. Kent is holding onto Dan's right hand and lets go of his left sleeve.

379 Dan then moves his right arm and again encircles Kent's neck. Kent begins to hunch slightly forward and Dan's body follows with the movement. Dan then encircles Kent's neck with left arm and with his right hand in a fist, he hits Kent on the back playfully five times. The elbow is raised and the arm is bent at a 90-degree angle, the forearm moves back 45 degrees and then follows through to make contact with Kent's back. Dan releases and stands up, takes one step backwards with his right foot and with his left foot takes a side step and moves away from Kent. Dan then walks around the circular table and to the left side of Kent; he picks up a piece of paper with his right hand and then walks to the T's desk.

387 Dan sits at T's desk for 23 seconds.

396 Dan walks over to the bookshelf and takes some paper from the top shelf. He then walks to south wall in C1, three steps and a turn and walks toward an individual desk on the north wall of the class.

399 Dan is off camera; he can be heard in background saying, "I'm going to read a short story." Interchange between T1 and Dan. Dan begins to read orally. He can be heard at least 20 feet away.

415 On camera; Dan is sitting in a chair facing the middle of the learning center at the individual desk. His chair is tilted backwards, balanced on two legs. Dan's feet are flat on the floor, knees are bent and legs are spread. His left hand, wrist, and forearm are resting on

his inner thigh, fingers are on the chair. He lifts the heels of his feet off the floor, balancing on the balls of his feet.

426        A student from C3 tells Dan to "Shut up." Dan gets out of his seat.

#### Field Notes

[10:25]    Dan stepped out in the hall talking to Mel from C3. Dan calls, "Hey Mel, come here."

(435)       Both walked to LC door, easy swing, hit, leg up, horseplay-ing. Dan returns to his chair and Mel comes over to him. Dan cries out as Mel leaves, "I owe you now, wait till you come back to the cabin."

#### Tape Analysis

430        Dan returns to his chair and is thumbing through a book. The chair is tilted back on two legs. His heels are off the ground.

437        Dan puts his heels flat on the ground as Mel approaches. The chair is level on the ground. Mel enters C1 and walks over to Dan and begins to talk to him. Mel's right arm is bent at a 90-degree angle as he approaches Dan. Mel's right arm comes up in front of his body and makes a counterclockwise forearm sweep, shoulder height, palm open and contacts Dan one time on Dan's left shoulder. Mel quickly turns and walks away with his back to Dan. Dan remains seated and calls out, "Wait till you get back to the cabin." Dan shifts in chair and leans back on two legs once again.

488 Dan gets out of his chair. He is holding the book in his hand as he walks out of view of the camera.

495 Dan returned to C1 and walked over to T, then to bookshelf and then to individual desk. He sat down and began to shuffle papers.

498 Dan is sitting at a desk.

### Field Notes

[10:27] Dan picks up books and leaves room. In C3, Dick has papers in his hand and pops them off the top of Phil's head.

[10:30] Dan has returned to class and is sitting in the corner. His left leg is bounding up and down. There is a book in lap. Gradually he scoots the chair he is sitting on up to the desk.

[10:33] Transition to next class. Dan is out of view of the camera.

[11:25] Dan is presently in C3. He is standing in front of the filing cabinet, and walks over to Steve and starts playing. Dan picks up a chair and swings it around Steve's head two times. Two teachers come in, and Dan picks up books and leaves. T3 walks over to Steve. Steve puts his head on the table. T3 says something to Steve. Steve replies, "No." T3 repeats comment to Steve. Steve repeats, "No." Steve lifts his head up off the desk and stands up. He walks to the filing cabinet and pulls out work materials.

### Summary of Case Study 1

1. Before the first adjustment, Dan was seated for a period of 00:04:35 and was out of his seat walking around for a period of 00:12:47.

2. After the first adjustment, Dan immediately walked over to his friend and continued with his quasiagonistic behavior. From this point until the class transition at 10:30, Dan demonstrated in-seat behavior for 00:07:20, and out-of-seat behavior for 00:14:00.
3. Dan's out-of-seat behaviors were exaggerated body motions. His verbal comments to others might be labeled as irritating. His in-seat behaviors included constant body shifts, foot movement, and automanipulation of materials.
4. This is a demonstration of quasiagonistic behavior. Dan's physical interactions with students were light hits and pretend kicks. The threatening comment he made to Mel was said with a teasing tone. Dan's interaction with Mel was not a sniper hit, since both students had been "horseplaying" seconds before. None of the students acted as if they had been injured, hurt, or were upset. The final horseplay incident with Steve in which Steve placed his head on the desk was due to the teacher's reprimand. Steve then returned to task.
5. One crucial aspect of this case study is Dan's comments while he is in the broom closet during the adjustment. He repeatedly demanded not to be touched. This is only the first of many similar requests from students.
6. This event occurred during the first week of data collection. It was evident that Dan was cognizant of the field worker.

### Case Study 2: Assault

This case study is clearly a demonstration of aggression-assault not only due to the physical interaction but additionally due to Nash's reaction. The students are in the process of transition from period 2 to period 3.

#### Tape Analysis

00 Nash is standing near the south wall in C1. He is asking T1 a question regarding an adjustment. Dylan approaches Nash. As Dylan approaches, Nash steps back against the south wall.

04 Dylan puts his hands around Nash's neck. The thumbs of Dylan's hands are in the front middle of Nash's neck (choke hold). Nash turns to the right; simultaneously using his right hand, he succeeds in breaking the hold. They separate and Nash punches at Dylan. Nash's hands are in a fist, he strikes first with his left hand, followed with a right, a left, and another right punch. Dylan uses his right arm to block any hits from Nash. Dylan encircles Nash's neck; his left forearm is placed under Nash's chin. Nash goes into a crouch and Dylan bends with Nash's body motion. Dylan puts his right hand on the midsection of Nash's back and pushes Nash forward; he releases the neck hold and uses his left hand on the back of Nash's pants. Dylan pushes Nash down to a prone position over two chairs. As Dylan is pushing Nash, Rick, who is sitting in one of the chairs, quickly gets out of his seat.



04 Nash is prone over two chairs; his fingertips are touching the floor. Dylan is bending over him holding onto Nash's shirt and pants.

05 T1 verbally and physically intervenes by lightly touching Dylan on the arm.

08 T1 is still standing next to the students trying to verbally get control of the situation. T3 appears and verbally intervenes. Dylan releases Nash.

09 Dylan begins to walk around the circular table. As he starts to pass T3, T3 puts his arm out and Dylan saunters into it. T3 turns, and both T3 and Dylan walk into C2. Nash is getting up from the prone position and sits on one of the chairs.

12 Nash cries out, "Ahhh, Ahhh." He is sitting on a chair that is at the circular table.

13 Nash stands up.

17 Dylan is in C2 with T3. Dylan is standing and constantly moving/pacing while T3 talks to him. Dylan picks up some books.

19 Nash sits down by the circular table.

22 Nash combs his hair.

33 Nash begins automanipulation with his fingers and a ring on his left hand. His eyes are focused on his hands.

35 Dylan leaves the learning center carrying his book.

46 Nash glances up to look at Andy.

50 Nash continues to fumble with the ring on his finger.

57 Nash glances upward. (29)

58 Nash glances down. (28)

59 While sitting on the chair, Nash bends over and begins to adjust his shoe.

67 He makes a comment to another student sitting at the table.

72 Nash shakes his head "yes" in response to a comment.

85 He stops the automanipulation of his hands. Nash pushes his chair away from the table and is talking with another student about the incident. Nash leans back in chair and then sits upright.

100 Nash begins to manipulate the ring on his finger and the book lying on the table in front of him.

115 The automanipulation ceases.

117 Nash yawns and stretches.

120 Nash takes off his jacket.

128 Nash begins to manipulate an object with both hands. He then puts his left hand to his face. He continues to hold the object in his right hand.

137 Nash has his hand on the desk, picks up a pencil with his right hand and is holding an object in his left hand.

138-142 Nash takes a pencil from someone who is off camera and begins to write.

143 He is holding a pencil in writing position while he manipulates an object in his left hand. Pat comes over and talks with Nash.

176 Nash gets out of his seat, walks around the circular table so that he is in front of the camera, and starts belly dancing.

181 Nash returns to his seat.

182 Nash manipulates an object; he then places in his mouth.  
Nash is holding a pencil in his right hand; however, he is not writing.  
Rick is sitting next to Nash and occasionally blocks the camera view.

202 His hand is moved away from his mouth.

206 Nash is sitting up straight in chair.

210 Nash's upper body leans forward, and he begins to write.

212 Nash stops writing and glances in the direction of the 1c doorway (to left).

215 Nash removes the object from his mouth.

216 Nash shifts his body such that he is sitting up straight.

221 Nash stretches both arms upward.

223 Nash shifts and sits up straight.

229 Nash begins to write.

230 Nash has stopped writing.

231 Nash tilts his head backwards and then brings it upright.

233 He starts to write; he is looking down toward his paper.

239 Nash looks up.

243 Nash begins to talk with Rick. During the conversation, he constantly manipulates his book and pencil.

252 Nash lets out a loud laugh. He continues to manipulate the book and pencil.

264 Again Nash laughs, leaning back in chair. Nash's behavior continues in this fashion; his hands are constantly moving or gesturing as he talks with other students. He frequently raises his head and glances around the area. He will stretch and yawn, or adjusts his

clothing. He rarely sits still for longer than four seconds. Over an eight-minute period, Nash appeared to be on task for two minutes.

411 Nash stands up and walks over to the front of the camera and begins to dance.

429 Nash returns to his seat, leans back in the chair, then bends over to adjust his shoe or to look under the table. He continues to manipulate objects on the desk in front of him, or on his body. He fixes his hair and repeatedly brings his hand up to rest upon or touch his face. Again he is unable to sit still. In this next eight-minute segment, Nash was on task for one minute.

617-622 Nash is involved in a conversation with Rick.

624 Nash stands up, his left hand is in his front left pocket. He proceeds to adjust his shirt and pants as he converses with Rick.

647 Nash starts making a basket shot with an imaginary basketball. He sits back down and continues to talk with Rick.

### Summary of Case Study 2

1. Nash had been having a difficult morning and was requesting to have an adjustment with T1. Later he leaves the room and seeks out T5 to make the same request.
2. The antecedent behaviors of Dylan were not observed.
3. The event occurred during an unstructured setting.
4. Immediately preceding the event, Dylan was standing and moving.
5. The total time of physical contact between the students was 00:00:10.
6. There were four closed-palm hits and one choke hold.

7. After the physical contact, Dylan demonstrated standing, walking/pacing behaviors.
8. After the physical contact, Nash remained seated 00:25:00 out of a 00:26:00 period. He demonstrated a constant automanipulation of his hands, not stopping for more than a five-second period. He appeared to be on task for a 00:03:00 period. Nash engaged in conversation for 00:03:52.
9. The ending was "other" with a teacher intervening. Teacher proximity was within five feet.
10. The total time from the assault (since the prebehaviors are not available) to the point where Nash begins to make basket shots (more typical for his behavior) was a 00:26:00 period.

### Case Study 3: Assault

This case study is an example of an assailant's behavior immediately after the assault. While Dylan and Nash were fighting in classroom 1, Dick was fighting in C3. I heard the hit but was too late to observe that segment of the assault. However, Dick was standing immediately after he hit Andy. The students were in the process of changing classes from period 2 to period 3 when this fight occurred. Dick has been removed from the classroom, and an adjustment is being held in the shop.

Field Notes

[10:47] An adjustment is being held in the shop area due to an incident in C3. Andy and Steve are horseplaying in the background. Dick is sitting on a tractor. T3 is talking and summarizing the situation. Dick gets off the tractor and moves to chair/stool. Dick starts rubbing his eyebrows, tapping his fingers on the chair, and then puts his hand on face. Dick moves his thumb across his index finger. He puts his bent elbow near his knee, free by approximately four inches, his hand is placed on his face. He shifts his elbow to rest on his knee, his eyes are directed downward. He looks at me, eyes focused down, and looks at me again. T3 asks, "What is it you want from this program? Do you know?" T3 repeated question. Dick responds, "Yeah, I know. . . ." For 15 seconds his eyes are focused down, 43 seconds eyes up, face in up position. T5 asks, "Are you going to go back and finish up algebra, yes or no. Yes or no." Dick responds, "No." Dick gets off of the stool and walks to the left about five feet, turns left, walks three to four feet, turns left and walks another six feet. T5 is walking beside him. Dick walks back to the stool. He begins to lightly tap the locker with his foot. Two CS walk in the shop. As they approach, Dick gives the locker one strong kick. He picks up and starts manipulating a piece of rubber that was on top of the workbench. Next he picked up a chair and turned it upside down, legs pointing upward on top of the table/bench. Dick started playing with the clamp on the workbench with his right hand, his left hand was in his pocket. He shifts and places both hands in his front pants pocket.

His feet are situated one on top of the other. He changes positions with his feet, his head is down. Dick continues to switch the position of his feet. T5 dismissed Dick. Dick stands and walks back to the class. During the adjustment with Dick, Nash from the other incident came into the shop to ask T5 for a positive adjustment. T5 sent him back to class. T3 led Dick to C4.

[11:04] Dick sat down, his back is to the camera. He appears to be working. Dick is the only student in C4.

[11:09 to 11:20] Dick is quiet, sitting at T4's desk and appears to be on task.

### Summary of Case Study 3

1. Dick was standing immediately after he hit another student.
2. The ending to this episode was an "other" since there was teacher intervention. The teacher proximity is unknown; however, the teacher observed the incident.
3. The event occurred during an unstructured period.
4. During the adjustment, Dick demonstrated pacing behaviors.
5. During the adjustment, Dick demonstrated automanipulation behaviors.
6. During the 17-minute adjustment period, Dick was perpetually moving.
7. During the adjustment, Dick kicked an object one time.
8. The total time for the entire segment viewed (i.e., from the sound of the hit until Dick appeared to be working on task) was a 00:23:00 period.

Case Study 4: Anger

This case study is an example of aggression-anger. Tim directs his anger toward objects rather than people. At one point Tim pushes T3. Since T3 did not react as if he had been assaulted, he had not been assaulted.

Tape Analysis

211 Enter Tim. He is not on camera, yet his conversation is audible.

233 Tim walks over to T3's desk and lays a piece of paper on top of the desk.

240 T3 says, "Hey, if you want to talk. . . ." T3 comments about Tim being angry.

248 Tim is partially sitting, leaning against the small filing cabinet. His buttocks are resting on the edge of the cabinet. His hands are in front of his body. His right hand is holding onto his left wrist. He is staring straight ahead.

260 Tim is sitting on the small filing cabinet and has put both feet up on the seat of an individual desk chair. He slaps his leg with his left hand, and a cloud of dust appears and fades.

264 Tim stands up, walks over by the bookshelf, picks up and begins to put on his jacket. T3 approached Tim. Tim is facing the wall, his body is turned slightly to the left away from T3. Tim is shuffling papers and shifts his body weight from one foot to the other.



Field Notes

[11:27] (289) T3 is talking with another student, "Nash, I want that chair down in the appropriate manner." Count 5 seconds, Nash puts the chair back. T3 is talking with Tim, who is upset about an incident with his parents. Nash immediately put chair back on two legs. In the middle of conference, Andy from C1 started talking. T3 stops talking to Tim and again asks Nash to put the chair down.

Tape Analysis

296 Tim is talking with T3; during the discussion T3 interrupts and reprimands another student. As Tim speaks, his elbow is bent, his hand is approximately at shoulder height, and he is shaking his hand in a right/left direction. Tim is discussing a call from his parents. His face is turned away from T3's.

318 Tim glances at the camera.

319 Tim's head is in a downward position, not giving T3 eye contact.

328 Tim lifts his head, glances toward the camera and then turns left. He took two left side steps and backed up over to the small filing cabinet.

329 He sat on the small filing cabinet.

330 Tim picked up a book and started looking at it. He still has not given eye contact with T3. T3 has followed Tim and continues speaking.

335 T3 continues talking to Tim. Tim is looking down at a book.

343 T3 walks away from Tim.

347 Tim put the book down. His foot is on the individual student desk and he is adjusting his shoe. Both feet are resting on the chair, his back is curved over, and his hand is on his knee.

364 Tim puts his feet on the ground, his hands are holding onto the edge of the small filing cabinet, he is leaning against, not sitting on, the edge of the filing cabinet.

375 Tim stands and is walking toward the middle of C3. T3 said, "Tim come here." Tim responds, "No, I'm walking out." Tim leaves the room. Camera is focused on C4.

#### Field Notes

Nash is talking in a loud voice. Tim replies in a loud voice, "Yeah, I'm going to kick this chair." Tim kicks the chair and walks over to C4. T1 follows and then Tim comes back to class.

#### Tape Analysis

387 Tim walked over to C4 back into C3 and over to the far west wall by the small filing cabinet. He is standing erect. He starts to manipulate the book lying on the shelf.

401 Tim takes four steps toward the divider, makes a half turn and takes three steps toward an individual chair. He sits for a second and then gets out of his seat.

408 Tim walks over to the divider and leans against it with his back toward the camera.

407 Tim is manipulating an object in his hand. One hand is on the edge of the divider. With his right hand he hits his left upper arm to brush something off his sleeve.

422 Tim takes at least six steps toward T's desk. As he walks he checks his back pockets. First his right hand felt his right back pocket; then his right hand touched his left back pocket.

424 Tim approaches the far west end of the divider next to the tall filing cabinet. Tim is manipulating a ball of string in his hand while he leans against the divider. T3 approaches and requests Tim to perform a task.

#### Field Notes

T3 asks Tim to do something for him (441). Nash sticks his tongue out at Tim. Nash then threw a pencil at Tim. T3 moves Nash's chair. Nash comments, "All right T3, all right T3." T3 talks to Nash. Nash is looking at papers. Tim is throwing objects in the trash can.

#### Tape Analysis

443 Tim glances in direction of camera.

446 Tim still is automanipulating the ball of string. Tim engages in verbal banter about "pink" with Nash.

472 Tim started the task which T3 assigned, alphabetizing some folders.

500 T3 switched his approach to Tim from serious discussion to humor. Tim still is on task, with occasional comments to Nash.

519 Tim completed the task, returned the folder to the tall filing cabinet, and closed the drawer. Standing, he walked a couple of steps to the bookshelf next to T3's area and spoke with T3. He then turned and walked toward the teacher's desk. He sat on the edge of the teacher's desk, his head is down and his back is to the camera. He turned his head to the left to look at Nash. T3 has moved over to his desk and is standing in between Nash who is sitting in a chair and Tim who is sitting on the edge of the teacher's desk. As T3 spoke, Tim moved his right hand to his side and behind back; he tossed a pencil at Nash. Tim then repeated the same process with a second pencil.

563 Tim got up and walked to the opposite end of the room. He is off camera.

#### Field Notes

[11:43] (550) Tim moved over to a chair, sat, and then tipped a desk on the floor.

#### Tape Analysis

588 Tim sat in an individual desk that is stationed along the south wall of the room. He comments, "I wanta fight man, . . ."

599 T3 has walked over to Tim, sits next to him and tries to talk with him. Tim turns his back on him and then gets up from the desk.

600-07 Tim is walking around the room.

607 Tim is sitting on the edge of the divider. He is talking with T3, who has followed Tim to that area.

627 Tim gets off the divider and walks out of the room.

632 Tim walks in from the portable and leaves the learning center heading for the gym. He enters the gym.

645 Tim walks out of the gym door.

### Field Notes

Tim walked to the shop area. Tim pushed T3. Tim said, "Get off my face," while standing by the shop door. Tim walked through door leading to the second door and outside. He stopped between the two doors. Tim is against the wall. He moves to the door. T3 responds, "I'm not grabbing you." Tim, "Yes you are . . . move." T3 says, ". . . You're already pissed off." Tim claims, "You're damn right I am. . . . I don't care. . . ." Tim is facing outdoors; his back is to T3.

[11:54] Tim walked back with T3 to class. Tim sat next to the filing cabinet on the divider. Tim held some papers and then placed them on the divider. He started to play with a pic/comb, and then proceeded to crease and tear the papers. Tim then began wrapping paper around the comb and tossing paper scraps on the floor. Next Tim combed his hair. He has his leg on the divider, and is leaning back against the filing cabinet. He finished preening and again started tearing and folding small pieces of paper. The issue is a problem with T7. T3 asks, "Do you want to talk about T7?" Tim responds, "Later." Tim continues to sit on the divider, his feet are still.

[12:05] Tim remains seated on the divider, his feet are still. All of the students have returned to their cabins and are preparing for lunch.

[12:07] CS calls to Tim. Tim, "I ain't goin'." He remains sitting quietly, not moving, eyes down looking at pic, he taps the pic on his fingers. T7 walks over to Tim and says, "Let's go." Tim gets off divider and walks out of the building with T7.

[12:09] Tim left with T7.

#### Summary of Case Study 4

1. Tim walks into C3 angry.
2. Tim demonstrates walking/pacing behaviors.
3. Tim demonstrates automanipulation and/or constant body movements.
4. Tim kicked a chair and dropped a desk on the floor. This is a demonstration of injury to an object.
5. Tim would not give eye contact.
6. Tim physically turned away from T3 when T3 tried to assist.
7. T3 remained in close proximity to Tim.
8. Tim pushed T3 back away from him. He made statements that he did not want to be grabbed.
9. This anger incident occurred during a structured period.
10. After Tim pushed T3 (small physical encounter), he returned to class, sat down and continued with automanipulation for approximately 00:09:00. He then became very quiet with little or no movement.

Case Study 5: Sniper Hit

The following case study is an example of a sniper push. The students are just entering the learning center from their homerooms.

Tape Analysis

00        Camera is on C1. Kent is staring in the direction of the camera while he manipulates a deck of cards with his hands.

57        Rich walks over in front of the camera. Students are instructing him to pull off his cap. Smiling, he hops backwards. Kent puts the ace of spaces in front of the camera. Students move on to class. Chairs are still on top of the desks.

68        The camera is moved from C1 to C3. T3 is sitting at his desk in C3. Andy is standing near, within three feet of T3, and to the right side of the desk. Luke is next to Andy and Kent is standing about one foot behind Andy and Luke. Kent continues to hold and manipulate the deck of cards. Luke is holding a brush in his hand, elbow is bent, forearm is at a 45-degree angle to the elbow. The forearm comes down, the brush comes close to or lightly taps Kent on the back. From the camera angle it is difficult to discern whether there was actual contact. Luke turns and leaves the area. Andy is facing Kent; he also begins to leave the area. Andy uses his left hand to make an inward forearm sweep toward Kent and grabs Kent's right upper arm. Andy then using his right hand makes contact with Kent on the chest and pushes Kent backwards. Andy, keeping Kent to his left side at approximately a 90-degree angle, leaves the room. Kent originally had his back to the camera. When he was pushed, his body turned to the left, facing the

direction Andy took as he departed. Kent moved backwards two steps upon the impact of the push. His hands, originally at waist level, moved upward to a ready position to protect himself (i.e., out in front of his body). The left hand is raised to shoulder level, fingers are separated, right hand is raised to mid-chest line, both hands return to waist level as Andy departs.

74-75 Kent walks four steps forward, following Andy. Kent's lips are closed and pressed tightly together. T3 beckons Kent over to his desk. After listening and talking briefly with T3, Kent turns. His mouth is moved in toward the center (small). He leaves the area.

#### Summary of Case Study 5

1. The assailant was standing and moving.
2. The attack was a surprise.
3. The assailant immediately fled the area.
4. The victim's reactions were demonstrations of aggressive facial and body characteristics.
5. The victim started to pursue the assailant.
6. The ending was "other" due to teacher intervention. The teacher was within five feet of the incident.
7. The incident occurred during an unstructured period.
8. The total time of physical contact was 00:00:02.
9. The total time for the entire incident from the assailant's approach to Kent's departure was approximately 00:00:10.



### Case Study 6: Assault

The following case study is an example of aggression-assault. This study is unusual due to the duration of the incidents. The same student was involved in two major assaults which required that the student be physically contained for lengthy periods of time. This case study begins at 9:00 a.m. and the student is still in an aroused state as demonstrated by his pacing/walking behaviors at 3:45 p.m. The majority of the analysis is based on field notes. However, immediately after the morning incident, Dan returned to the learning center and was video-taped for a 30-minute period. I'm not sure that any description can adequately portray the anguish expressed on this student's face.

The setting is the learning center. Dan had wanted to make a call to his mother and needed his CS's assistance. The CS refused to oblige Dan's request since he had neglected to comply with some of the CS's requests. This is probably only one of the issues that led up to this assault.

### Tape Analysis

130        Dan's laugh and voice are audible in the background (not on film).

281        T2 and Dan are in C2 standing near the blackboard. T2 is talking to Dan. Using his right hand, Dan tries to grab a piece of paper out of T2's hands. Dan is holding a small stack of books in his left hand. His legs are apart as he stands facing T2. T2 does not relinquish the paper; Dan lifts and lets go of the paper when his hand reaches shoulder level. He twists his body right and with his right

hand points toward the learning center tables and says, "Right over there. . . ."

284 Dan turns and walks toward the learning center tables, still carrying his books.

285 Dan is off camera. Dan's discussion with CS is on the audio part of the tape. He wanted his CS to call his mother, but the CS decided against calling since Dan did not follow through with a task the CS had requested. Dan had a continual conversation with various people, yelling into the other rooms or across the learning center to get information such as, "Where's the trash can?" He is off camera.

402 Dan, "I don't know, nope, nope. . . ."

418 Dan is out of seat, walked in front of the camera and went over to C2.

428 Walked back from C2 with a magazine in his hand.

432 Dan is out of seat again and returned to T2's desk. Dan is standing about one foot away from T2. His feet are approximately 6-8 inches apart. He shifts his weight to the right foot, his left foot is perpendicular to the right with an 8-10 inch distance in between. He turns his left foot and shifts his weight, rocking side to side seven times. Pause. Dan then rocks forward with his knees slightly bent one time. Legs and body are straight and he leans forward two times. Constantly turning pages in the magazine, an average of one page per half second. Dan does not give eye contact to the teacher.

441-442 Dan's face is turned toward T2. Dan states, "I'm not doing my work, so give me a poor for today."

442-445 Dan is looking down in direction of the magazine.

445-446 Dan is turned toward T2, but T2 is looking down at an object on the desk.

450-458 No eye contact with teacher.

454 Dan leaves the magazine on T2's desk and walks around to the front of the desk, touching the top of a globe which sits on the desk as he passes. Dan walks to the chalkboard, stops, his hands are in his pockets, he removes his right hand and points to the chalkboard. Dan turns approximately 45 degrees when T2 directs a comment to him. Dan walks toward T2's desk, T2 is standing behind the desk. Dan has his left hand in his pocket and his right hand is at chest level and gesturing as he speaks.

458-466 Dan is talking to and looking at T2.

466 Dan turns away from T2.

468 Dan walks toward the learning center doorway. Off camera.

504 Dan returns to the learning center and walks over to the learning center tables, turns left and proceeds over to the south end of T2's desk. From the end of the learning center table to T2's desk, Dan took five steps in 3.7 seconds.

505 Dan stops, turns, and is standing sideways to T2's desk. T2 is looking at Dan and talking with him.

508 Dan turns toward T2, who is sitting at the desk. T2 looks down at papers on desk. Dan removes objects from his coat pocket, looking at his hand he searches for one object and begins to clean his fingernails.



classes and coming into the hallway. Dan got hit in the nose while struggling.

[10:02] Struggling, CS started talking. T starts talking, "We need to relax. We need to go where there is more privacy."

[10:04] Dan is quiet for 20 seconds, struggle. Dan, "I'm going to class and talk to somebody else. I'm not going to talk to any of you." Dan is still in a prone position.

[10:11] He is calm for 30 seconds.

[10:12] Toes are moving, eight seconds of foot movement.

[10:13] He is calm. Dan repeats, "I want to talk to someone in my second hour class."

[10:14] His foot starts moving again.

[10:15] Dan, "I don't want to talk to ya." T is talking in a calm voice, ". . . get up and go to another area."

[10:17] Dan wants to go to second hour class. Gimme issue.

Struggling. Dan, "I, I want to talk to Kent. I'll sit in the gym, but don't grab me when I get up." CS says, "Wait." Dan demands, "You'll don't grab me." CS, "No conditions, all is that you do what you're asked, that's the condition." Dan replies, "I told ya what I was goin' to do. I was goin' in the gym." CS, "That's not what I asked." Dan, "Told you I was going in the gym!" Dan continues talking, ". . . you'll . . . Kent . . . shit . . . I'm not going to no fuckin' cabin." Dan covered up his ears. T3, "Don't be covering up your ears." Dan replies, "I'm still listening."

[10:21] Dan sits up and puts on his shoes. Dan shouts, "Man don't grab me! I'm just getting my shoes."

[10:22] Dan walked into the gym. He sat on the bench, picked up lotion and put it on his hands, rubbed his hands together and repeated procedure. T said, "Dan, are you ready to talk to Kent?" Dan, "I don't want to talk to him right now."

[10:24] Dan continues rubbing hands, he puts his hands in his pocket. He pulls out something white and begins fixing his finger cuticles. He then puts on more lotion.

[10:25] Dan is still rubbing his hands, fitting fingers together, fingers locked, rubbing thumb, hands closed, extended, rubbing the top of his hands. Kent entered gym. Dan said, "Sit down, have a seat." Dan got up and both boys walked across the gym.

[10:27] Dan sat down, talking to Kent. Dan is playing with his fingers. One leg is bent, one leg is extended. Dan is standing up. He is showing his hand to Kent. His hands are clasped together. Dan's back is to staff for 40 seconds. Moved and put one knee on the bench, one arm on the wall, standing. Started combing his hair. Dan is talking to Kent, ". . . then as . . . she . . . she . . . school. . . " Kent changed the subject. Dan lifted Kent's hat, said something about his hair. Kent talking. Dan, "I know."

[10:34] Dan still standing, pulled something out of his pocket. Some movement, rocking back and forth. One foot in front of the other, rocking for five seconds.

[10:37] Dan sat on the bench, his back is to the gym door and he is talking to Kent.

[10:39] Dan gave a high-pitched laugh. His feet are still, moved left foot to tilt on wall. Shifted and put right foot at a tilt.

[10:41] Laughing. Dan's hand is on Kent's shoulder. He is whispering in Kent's ear when CS opens gym door.

[10:42] Sitting shoulder to shoulder, voices are low. CS staff walked over to Dan, put hand on both of Dan's shoulders. Dan got up and leaned against the wall. Cw talked and walked away. Dan sat down. Dan put his hand on Kent's shoulder. Dan is playing with his hand. Both got up and are walking west toward the end of the gym. They turned and walked south to the other end of the gym. He leaned against the wall and then stood up straight. Elbows are bent, hand in front, hands to pockets. Pulled something out of his pocket. They started walking again.

[10:47] Walking to weights. Kent picked up a weight and proceeded to do arm swings 7 to 10 times. Dan picked up a weight, did a curl three times, and then put them down. Walked forward and back to weights, fixing one large weight. Everyone walked out to the grassy slope and sat down.

[11:03] Adjustment outside on the grassy slope. ". . . something in school. . . ." T5, "Everyone knows the reason why." Kent, "Go ahead and tell him." T, ". . . define problem." Dan, "I don't care." Dan is standing, takes steps back to staff, "I'm not. . . ." Standing

sideways to staff, eyes focus away from staff. Dan, "I'll figure things out for myself."

[11:01] Dan is facing staff and has a pencil in his hand. He turned his back to staff, paced eight steps, looking at his hand. Dan, "I don't care what . . . does. I don't care what . . . does. I don't care what . . . does." Dan took seven steps back, two steps to the side, made a half turn and stepped back two steps. Dan walked off with Kent following at [11:07].

Returned to 1c and rewound Tape 1 change to Tape 2.

[11:20] Tape 2. Dan and Nash are both just in from adjustments.

[11:34] C1; T1 and two students. C2 has T5 and two students. C3 has T3 and two students; one of the students is Nash, who just returned from an adjustment. At the 1ct are three students; one is Dan in from adjustment.

[11:39] Nine students total in 1c with one teacher.

### Tape Analysis

11:20

9:37 to 10:20 for approximately 43 minutes Dan was contained by staff. For one hour he was in either the gym or outside. He returned to the learning center upon his request.

00 Dan is sitting at 1ct. Camera is moved over to his area. He laughed and moved out of camera range.

09 Dan is sitting with chair tilted back. His arms are perpendicular and away from his body, resting on the divider that is directly behind his chair. As the camera focuses on him, he laughs,



turns his face to the left and starts to move his chair out of camera range. His mouth first lifts on the left side (sneer) showing his teeth and then moves to an open mouth as he emits a laugh.

11 T3 approaches Dan and gives him a folder. Dan says "no" two times to T3 as he tries to hand Dan the folder. T3 responds, "No what, I thought Mr. M said you were going to come to class." Dan responded, "I was coming to class, but I ain't say I was working." Dan's hand is resting with the palm cupped on the lct.

18-19 Dan took the papers from T3. Dan dropped the folder on the top of the lct.

23 Dan opened the folder and turned one page. Bob came over and put his hand in Dan's pocket. Dan commented: "Get out of my pocket, what you trying to steal? Golly. . . ." As he speaks his lips are 'curled at the corners upward.

28-29 Left hand in pocket, Dan removed an object from pocket and transferred it to his right hand.

34 Again moved chair out of camera range. Can see Dan twist in the chair two times, then moved completely out of view. Dan's chair is facing C2. Verbal conversation with other student continues. T3 walks over to Dan.

50 Standing on his right side, places his left hand in the middle of Dan's back and with an open palm, pats Dan's back two times.

53 Dan is out of seat and walks over to T's desk in C2. He takes five steps in 2.3 seconds, from lct to C2-T's desk. He takes at least one other step that is not on camera. As he walks over, he leads

with the right side of his body a bit more forward than the left side. The left arm swings while he walks but his right arm is held in front of him. He stops standing next to T5 and extends his right hand.

56            Dan shakes hands with T5, who is sitting at desk. There are 19 up and down movements of the hand.

62            Dan releases hand. He touches something on T's desk with his left hand, turns and as he begins to walk back to C3 rather than walking around the wastepaper basket, swings his left leg over it. T3 is standing next to Dan as he returns to class.

63            Dan returns to C3, walks to the filing cabinet, picks up a hand calculator and then walks back to 1ct. His left arm is bent as he holds the calculator, the right arm is swinging freely.

73            Dan sat in seat at 1ct and began to push the calculator buttons.

76            Intention speak. Eyes directed toward calculator and continues to push buttons.

78            Upper smile and audible laugh.

79            Talking, focus on paper.

84            Rubs left eyebrow with his left index finger and looks around. Stops talking.

85            Rubs left ear with his left index finger.

86            Glances around.

87            Glances down at work. Head tilted down over paper. Mouth open, lower lip protrudes beyond upper lip.

90            Glances up, mouth in same position.

92 Lips closed and tight, upper lip protrudes over lower lip, chin tucked back, eyes on calculator, fingers continue to push buttons with his right hand.

96 Glances around.

97 Glances down.

101 Glances up at T3 to left and back to paper. "What..." to T3. Left elbow is resting on the table top. Basically there is no movement. The wrist does not make contact with the table.

102 Glance down to paper. No verbals.

105 Right shoulder lifts up and down.

106 Dan is glancing down at paper, continues to push buttons, straightens fingers, constant finger movement, but he is not writing.

112 Glance up to left.

113 Twitch upward of sneer, on right side of mouth, look down. Continues to move fingers and focus down at his paper.

121 Right finger rubs in a downward motion from middle of chin to end.

125 T3 comes over to Dan's side and Dan makes an audible random noise. He turns his head slightly away from T3 and continues to glance down. His chin protrudes slightly and then returns to a down position. He makes random lip motions, lips are separated, but there is no vocalization.

126 Automanipulation continues.

129 Talks to another student.

131 Mouth open, bottom lip protrudes outwards, talks to Bob.

133        Looks up at camera and says, "Uhun, trying to get slick  
Ms. Rude . . . hello" and waves to camera. Eyebrows were raised and he  
lowered them as he looked up. His mouth was open while he was talking,  
went to a full upper smile, lips close, smile, and talking. Dan waves  
four times and then continues to manipulate the calculator. Some  
talking.

140        Picks up books and sets them down. Starts talking with Bob.  
Drops object on the table, shuffling papers.

149        Tosses a piece of paper on the divider, misses the top.

150        Picks paper off floor and tosses it on top of the divider.  
Talking, laugh with a full open mouth. Looks to the right, mouth  
closes with the corners and lips tight, eyes are narrowed. Lips  
separate, lightly close, separate, corners pulled back and lifted  
slightly upward. Mouth parted, then closed, corners of lip are  
downward.

159        Sits back in chair, leaning chair back on two legs.

160        Sits forward in chair, shuffling papers. Face and eyes look  
glazed.

162        Audible sigh, shifts chair forward.

163        Puts hands in pockets and leans back in chair. Pulls object  
out of right pocket and fumbles with it. Talking to a student on his  
right, "I know so get out of here." Glance right, mouth corners are  
down.

166 Fumble with object held in right hand, lays left wrist and hand on left inner thigh. Laughs, full open mouth as he tilts backwards.

167 Turns head to far right and responds to another conversation that is going on in Cl. Smile on face that momentarily switches to a sneer with the left upper lip up, then lips close.

168 Dan turns his head forward, then to the right. His mouth is open, purses lips forward and then opens mouth such that the lip corners are back and upper teeth are visible. Body turned forward in chair.

170 Dan turns his upper body and head to the right and is talking to someone.

171 Dan turns his body forward. Smile is with an open mouth, he closes it, upper lip curls up then down. He starts talking to himself while he manipulates the calculator holding it in his left hand and pushing buttons with his right index finger.

184 Dan's left shoulder is raised, his right shoulder is down. He shifts his shoulders and moves his right shoulder back while he turns his head to the right. He straightens his head.

185 Dan turns head back-right then straight again. He then calls to a student and lifts his right hand to approximately shoulder level and with his index finger, bending it at the second joint, fingertip up, motions twice for the student to come over to him.

190 Lips are in down position.

191 Talking to a student at the lct.

202        Body shift, continuously turning pages. Constant movement of head from right to forward and back again. Constantly talking to self or others.

213        Looks left in direction of teacher and asks a student in C3, "What's happnin' . . ." Repeats question to student. Paper shuffle continues along with glancing from right to his work and back right.

241        Says to Hal, "I'll get Nash for ya." Nash hears comment and says, "You ain't gonna get Nash nothin'." Dan turns left and glances at Nash and replies, "Oh, keep thinking'."

241        Head looking down at work, talking and pushing the buttons on the calculator. Talking about hurting someone and turns his head in the direction of Nash. Picks up papers and continues to talk to students at 1ct. Discusses how he got another student in the shower room.

265        Mouth movements of raising and lowering upper lip, like a sneer. Lips close and then repeats motion. He still is fumbling with papers in his hand, looking at them and then all around.

268        Bob talks to him, right eyebrow lifts and Dan laughs, lips are pulled way back such that the laugh sounds and looks strained. Talking to student at 1ct, he continues to shuffle papers. Discussing the ribs served for dinner.

287        Stands up, right hand remains stationary on desk top. Dan takes two steps, body is leaning forward over the table.

290        Dan sits back down, instantly picks up paper, puts it down, adjusts chair and then picks up papers again. He continues to talk,

smiling and laughing during the discussions. Arms and hands constantly moving. Continuous upper-body shifts from left, straight, right, straight, etc. Hands continuously fumbling with papers. Picks them up, straightens them, taps them on the table top.

366 Bob comes over to talk with Dan.

368 Dan leans his back against the chair.

371 Dan turns body to right and tilts his chair back and continues to talk with Bob.

380 Rubs his nose with his left hand, lips are closed and pulled backwards, then sniffs.

383 Talking and emphasizing a point, with right-hand index finger pointing downward, other fingers closed in a fist, he raises and lowers hand five times. He puts his left hand in his pocket.

385 Left hand out of pocket, pushes buttons on calculator which is on the table, rubs under his left eye, manipulates calculator. With the chair tilted back, he rocks back and forth. When not talking, his mouth resting position is with lips separated.

391 Body shifts forward, sitting forward in chair, upper body leaning over the table. He continues to talk with student at lct. Lips closed, mouth corners flash back and then forward. As he talks the right upper lip lifts, almost like a twitch. Constantly looks around, nervous laughing. Leans down close to table and then lifts upper body back up, shoulders rounded. Repeats same and then turns upper body and head to the left.

427        Manipulating papers in front of him. Continues to look around and talk to people throughout the lc.

438        Dan gets out of seat. Off camera.

444        T3 follows after Dan.

471        Can hear Dan laughing in the background.

473        Dan returns to seat. T3 is walking near him. Mouth open, lips parted, closed, corners of mouth pulled back, bottom lip protrudes slightly, he then has his mouth resting for a moment, closes eyes, opens his mouth as if to let out a cry, at the same time starts to turn face down toward table top and covers face with left hand. Left hand makes contact with his face above his eyebrows, left thumb on left brow and fingertips on right brow. Two times he moves fingers and thumb slightly inwards, rubbing, then brings hand down across his face and off the tip of his chin. Dan shakes his head from right to left simultaneously. He turns his face right in direction of lc door and camera.

474        Dan turns a piece of paper over.

475        Tim comes over the sits next to Dan. Puts papers down, body shifts, leans back in chair and starts smiling at Tim. With his right hand reaches to touch Tim's hair, and sweeps his hand from the center of Tim's head out to the right.

480        Shuffling papers again. Tim asks what the papers are. Dan replies, "Oh some personal papers for my court. . . ." Dan sits back in chair, left hand to ear. His facial expression is still, eyes are focused downward, chin tucked down, head then turns to the right as



both young men look at rip on Tim's pants. Dan asks how the pants ripped. Dan is looking at Tim, his eyebrows flash upward, eyes open wide and then go back to looking like slits, his mouth is opened and starts a broad smile. Tim responds.

488        Laughing at Tim's response, Dan tilts his head back so that the neck is completely stretched out, tilts back in his chair. Drops chin down, smiles and pulls lips backward with the corners down. Left hand is in pocket and he starts searching for its contents, right hand grabs the left front panel of the jacket. His eyes shift to the left side of his jacket. Chair comes down, he begins to laugh again, he leans forward, puts both forearms on table top from elbows to wrist, the left arm crosses over the top of the right, bends head down and touches forehead on arms, lifts head up, shifts body back in chair.

490        Body and chair tilted back, left hand is holding onto the edge of the table, he watches Tim as he stands up and moves off to the right. Mouth is open, broad smile, his eyes close and then open with eyebrows raised, left hand is removed from table edge and in lap, moves back to table edge. Laugh, pause, laugh, head is tilted back, eyes closed, motioning with right hand he says, "Come back here. . . ."

492        Dan looks downward, mouth closed, no smile, he looks blank and sad.

493        T3 sits down and begins to talk with Dan. Face is covered by T3. Dan rocks back and forth in his chair, left hand on table edge. T3 wants Dan's work.

498 Dan out of seat and over to filing cabinet. T asks Dan a question and Dan responds, "Yes." Off camera.

509 Dan passes in front of the camera on way to office to run off paper for T3.

574 Dan reenters lc and returns to the table. He is holding a pencil and writing on the paper that is in front of him.

588 Turns to the right and makes a statement to someone behind him, then looks back down at his paper.

591 Lifts his head and tilts it to the left, glances to the right, straight and then right again, with his left-hand fingers separated, he rubs his chin, touching near his lips he moves his fingers downward, repeats three times. His eyes are dropped and his mouth is partially open in a neutral position. He then focuses on the camera, eyes become animated, widen and his mouth moves to an open grin, close and then open grin.

594 Laughs, points with his right hand and turns forward in chair, talks with a student and then looks at his work.

598 With his left hand he rubs his hand across his nose while he turns his head up and to the right, then leaning over paper, chin approximately five inches from table top, he looks back down at paper.

601 Lifts head up and looks right and then back down to paper.

603 Shifts body upright in chair, still looking at paper, tilts head to the right and back. Face close to paper, left hand resting on table top.

611 Looks up at student at end of table, turns right and makes a comment to another student, continues to write on paper.

Tim is leaning with the upper part of his body on the divider, forearms and hands are resting on the divider, chin is resting on his hands. Tim knows he is on camera. Tim makes a comment to Dan. Dan in play gets out of seat, his right arm goes over past Tim's head and grabs Tim's side. Dan leans over the top of Tim; with his left hand in a fist Dan hits Tim in the back three times. As Dan hits, his whole body bounces up and down double time with each hit. Dan then moves to the side of the divider, still holding onto Tim. Tim is starting to stand up, and Dan moves his right arm around to Tim's front chest and up around his neck. Dan's left arm is on Tim's back. Dan is using enough pressure to make Tim lean backward, his knees bend and he starts going to the floor. Dan comments, "We gotta make it look good for the camera." T3 is right there and breaks up the physical contact just as tape ends. Total physical contact on video: 10.1 seconds.

### Field Notes

[12:00] End of Tape 2. Dan went to Ss in C3 and physically picked him up. Dan walked out of the 1c and while in the hallway leading to the outdoors, he grabbed Nash two times. Reason for this is partially due to Nash getting Frank in trouble. He grabbed Nash, let go and walked back to the cabin. While at lunch it was reported that Dan put his hands around Nash's neck.

[12:45] Physical restraint of Dan on the front lawn of the learning center. There are three staff restraining him. Reason for restraint

per T5: Dan was walking to class and T5 told Dan that they would get his work and he could work in the cabin. Dan started walking away, still proceeding toward 1c. CS walked over to Dan and told him to stop. CS touched Dan on the shoulder. Dan hit CS on the chin. Dan was restrained. Dan is struggling. Someone stated, "No biting."

[12:59] Dan is prone, his back is on the grass. Struggling, left arm is moving.

[1:00] Movement of left arm, whole body is struggling.

[1:02] Six staff are restraining Dan, two people on each leg. Dan is kicking. They released Dan's legs and he started kicking.

[1:05] Legs are still. Breathing is rapid and noisy. I'm about ten feet away from Dan.

[1:08] Resting. Struggling with arms, kicking. Dan is making major body movements with his legs. Staff are sitting on his legs. Resting 9 seconds, struggle 2, rest 27, struggle 10, rest 15, struggle 2, resting 32, struggle 1, rest 5, struggle 13, resting 32, struggle 1, resting 2, struggle 1, resting 11, struggle 6, resting 12, struggle 28 seconds.

[1:14] Dan is trying to bite and kick. Middle person got off, now there are five staff on Dan. Struggling 14 seconds, resting 2, struggling 2. One staff person got off his left leg. Another staff person has a light hold on the right leg. Dan struggled and there was a new hold put on him.

[1:18] Struggling 10, resting 3, struggling 13. Dan's hands are clenched.

[1:22] There are five staff restraining Dan, one on each leg, one on each arm, and one at the head. The staff person on the left arm moved to straddle the middle. Dan struggled so one more staff person moved to the left arm. Now there are six staff on Dan. Dan is making whining sounds. His face is flushed and red. Dan started to cry. Bit staff person on the arm. Staff remained calm. Staff person to Dan, "Did that help you Dan?" Repeated same statement three times. Then staff said, "I was willing to trust you."

[1:24] Struggling, resting 55 seconds, struggling 1, resting 27, struggling 13, resting 15, struggling 13, resting 73, struggling 1 second. Dan's face is flushed.

[1:32] Resting for 60 seconds. His head is turned right, then to left. Resting 7, struggling 4, resting 14 seconds. Turned head from left to right. He lifted his head up off the ground and looked at me. Resting 4, turned head left, resting 1 minute and 45 seconds.

[1:35] Staff person in the middle tried to get up. Dan struggled 1-2 seconds, staff stayed on the middle. Resting 7. Legs are being lightly held. There are two staff on the arms. The middle staff got off, movements made by Dan. His hands are clenched. One leg person got off Dan's left leg and started talking to Dan. "If we let you go, do you promise not to take no swings or . . . ." Dan got up and started walking. Dan pushing, ". . . want to walk." Staff hold onto arms. Dan, "I'm not going to hurt someone. I just want to be by myself. I just want to be by myself. I don't want to be with nobody, I just want to be by myself." Eight staff are around. Now four staff

are holding Dan, who is sitting. Two are on the arms and two on the legs. CS, "Let's stand up." Dan, "Let go of me, let go of me." CS, "What ya gonna do?" Dan, "I'm gonna stand up." Dan standing, leaning with his back against the west outside wall of the 1c. Seven staff are standing around him. Dan is playing with his fingers. Dan, "You wanta fight?" CS, "I don't want to fight ya, never did, but I'm not gonna allow you to hurt me." Dan, "You wanta fight now?" Dan, pushing back and forth. Dan's hands, fingers clasped in each other. One hand on wrist. CS took hold of Dan's arms and Dan started to struggle. Dan, "I'm not going to hit nobody." He pulled out a comb and started combing his hair. Dan, "I want my pen." Repeated two times. Dan, "That's all I want, I want my pen. Where's my metal thing?" Dan is surrounded by CS and teaching staff. He is leaning against the 1c wall on the outside fiddling with the metal piece (gimme issue).

[1:58] Dan walking toward the 1c door, CS blocking the way. Dan turned and started walking south. Dan, "I'm going somewhere. I'm going somewhere and be by myself. Leave me alone. Leave me alone. Leave me alone. Leave me alone. Leave me alone." Staff is blocking Dan from walking off. CS holds his arms, Dan started to struggle to get staff's arms off of him.

[2:00] Dan was taken down to the ground by staff. Dan, "I was walking away to be by myself." T5 talked about me going. Dan, "I didn't want to, I walked away and you grabbed me." CS, "When I place my hand here what did you do?" Dan, "I socked you in the jaw." Dan sat up. Discovered he had a bump on his head. Dan, "Do you think that

will bother me? It ain't hurtin' me," repeated three times. Hands are loose, Dan stood up. Dan, "Don't grab me," repeated two times. "Don't touch me," repeated nine times, "and you won't get hit."

[2:15] Both hands are in his pants pockets. He is standing next to the wall. Moved hand to his head and back to his pockets, now he is playing with his fingers. Dan is standing still, "I want to walk up on that hill and be alone." Dan started to move through staff. "Please don't push." Dan, "There you go grabbing me." Dan standing and leaning against the wall.

[2:25 approx.] New staff came on duty and came over to the lc. Dan pulled the pen out of his pocket and is drawing on his finger. He walked off with new staff person. Dan walked over to dorm and stood with three people. Moved from dorm door and started walking down the road with one staff. Dan put his hand on his eyes. They are walking side by side.

[3:45] Dan and staff walked back to the dorm and entered.

#### Summary of Case Study 6

1. Dan demonstrated out-of-seat and pacing behaviors before the aggressive-assault. In a 00:22:00 segment, Dan was out of seat for 00:16:00.
2. Dan did not give eye contact to the teacher before the aggressive-assault.
3. Dan initially hit the CS one time, which resulted in his being physically restrained. The restraint lasted 40 minutes. After the

containment, Dan again demonstrated pacing and moving behaviors for at least one hour.

4. When Dan returned to the learning center, he appeared to be in a daze. While seated, his hands and body were in perpetual motion. His facial and body characteristics were ones typically defined as aggressive (Grant, 1969).

5. Dan proceeded to physically attack Nash two times.

6. Upon returning from lunch, he hit a CS in the jaw.

7. Dan perpetrated four separate aggressive-assaults during a three-and-a-half-hour period.

8. For a second time, Dan was physically contained for 50 minutes.

9. When Dan was released, the first thing he wanted was to walk and be alone.

10. Dan walked/paced for 01:15:00 after the second containment.

11. Staff's first intervention strategy was to touch or grab Dan. When having verbal interactions with him, many staff persons spoke, sometimes simultaneously.

12. Dan continually requested that staff not "grab him" during and after the containments.

13. It is difficult to conclusively state that the first initial signs of this incident began at 9:00 a.m. The quasiagonistic behaviors that Dan demonstrated two days before may have been precursors for this blow-up. The incident did not end at 3:45 p.m. when Dan returned to the dorms. Indeed there were periods of time in which he rested.



These short spurts are described in the field notes. The following day (weekend), Dan again had a major aggressive-assault incident which resulted in his removal from the camp setting. What can be noted is that Dan started precursor behaviors to the aggressive-assault at least by 9:00 a.m. and that at 3:45 p.m. he rested for a period. Thus that part of the case study, with its ups and downs, lasted 06:45:00.

14. Muscle relaxation is incompatible with assaultive behaviors, and as the field notes and tape analysis described, Dan was not relaxed when he returned from the first incident.

15. In many respects Dan was the person controlling the event. On various occasions he demanded people, objects, and freedom to walk, and the staff complied with his requests.

#### Case Study 7: Sniper Hit

This is an example of a sniper hit. The tape analysis is the preamble of Luke's behavior before his sniper attack. The attack occurred during the transition from fifth period to sixth period.

#### Tape Analysis

328 Luke standing in C3 and brushing hair. Horseplay with Rich. Rich is waving his hands in front of Luke's face. Luke is smiling. Luke is walking around room, brushing his hair, throwing the brush up in the air, then more brushing.

350 Transition: T3 says, "Good bye Luke, I'm trying to get you outa here without you. . . ." Luke turns and walks away. He is off camera.

363 T3 is near bookshelf on west wall. Reenter Luke. Luke walks over near T3.

366 Luke moves off camera.

372 Luke has returned to C3. He is tossing the brush in the air. Luke walks over to divider, picks up a knitted cap and is twirling it on his left hand. He is holding the brush in his right hand.

378 Luke puts the hat on the divider and begins to stuff a wad of paper in it.

380 Luke has moved completely off camera.

#### Field Notes

[1:25] Rich took Luke's brush again (340)--Transition.

[1:35] During the transition, Luke walked up to a student, hit him in the chest, and departed immediately for the gym.

#### Summary of Case Study 7

1. The assailant had been walking around for at least one minute before the "hit."
2. The assailant had been involved with quasiagonistic play before the assault.
3. The assailant was standing and moving before the attack.
4. The assailant hit the victim one time.
5. The assailant departed quickly.

6. The ending was "separate," both students were at least two or more feet away from each other. Proximity of a teacher was unknown.
7. The time of attack was during an unstructured movement through the learning center.

### Case Study 8: Assault

This case study demonstrates an aggression-assault incident. The aggressor enters from the portable so there is no baseline available for the antecedent behaviors. The fight occurs during a transitional period.

### Field Notes

390-410 John was walking to the portable. He was looking back over his shoulder in the direction of the C1. He was not paying attention to where he was going. Tom entered the lc from the portable. As Tom walked through C4, he bumped into John with his left shoulder. John turned and kicked with his right leg. Tom kicked with his right leg. T9 broke up the interaction.

### Tape Analysis

404 Transition still in progress. Tom comes quickly walking through the door between C4 and the hallway connected to the portable. John is moving from C2 to the portable. As he walks to C4 entrance he turns his head back to the right, looking at something, takes one step looking forward, then three steps looking back over his left shoulder. He then takes one step forward and collides with Tom. Tom has been in

the room 2.4 seconds and is facing John, while John, still preoccupied, is not looking in Tom's direction. Tom has a jacket hanging over his left arm as he enters the lc. As Tom passes John, his right shoulder hits John's left shoulder. John's shoulder is knocked back, and his left hand sweeps forward toward Tom. At the same time, John shifts weight to his right side, makes a half turn, and kicks Tom using his left leg. The kick is high and lands on Tom's side near his waist. Tom is loud and verbal, but it can't be discerned. It sounds something like "Get out fool, get. . . ."

405 Tom, who was facing west at contact with John, makes a half turn to his left after they connect shoulders and as the kick lands, he is now facing east. Tom takes two steps forward while he simultaneously transfers the sweater from his left arm to his right arm. Tom kicks at John with his left foot. Just as he approaches John to kick, T9 walks through the door and has moved between Tom and John. T9, with open-palmed hands, makes contact with Tom's chest and pushes him backwards. Tom takes two steps backwards, turns right, and walks out of C4.

407 Tom leaves the lc. John goes into portable.

408 T9 follows after Tom.

#### Summary of Case Study 8

1. Tom was standing and moving before being assaultive.
2. Tom had been in the room 2.4 seconds before making physical contact with John.
3. The event occurred during an unstructured period.

4. John responded to the physical contact (being hit on the shoulder) with physical contact. There was one hit, shoulder to shoulder, one kick, and another attempted kick in this interaction.
5. The ending was "other," with a teacher intervening to halt the fight. The teacher was within five feet of the incident.
6. The total time of physical contact between the students was 00:00:04.
7. The total time for the incident beginning with Tom's entrance into C4 and Tom's departure from C4 and the 1c was 00:00:07.

#### Case Study 9: Sniper Hit

The students and teachers have just completed their daily homeroom meetings and are entering the learning center. It is approximately 9:00 in the morning. This case study is an example of a sniper hit.

#### Tape Analysis

0-14      Transition from homeroom to class. Kent, Luke, and Nick are walking into the learning center from the trailer. All three students stopped in C4 to talk. All three students were out of view of the camera. As they proceeded to their respective classrooms, one student commented, "You didn't get that on film did you?" Then Don enters the learning center from C4 and calls Lee: "Hey, Lee." Lee replies, "Whach you want man?" Lee, who is standing in front of C2, begins to walk toward C4. Meanwhile, Luke has walked over toward C1. Luke turns

around and is walking next to Lee, on Lee's left side. Luke suddenly hits Lee in the stomach. Luke used his right hand, forearm was perpendicular to his body, his hand moved in a parallel swing from Luke's center body outward. Lee chased after Luke and barely grabbed Luke's jacket. Luke stumbled, recovered, and then moved quickly into the trailer. Lee followed Luke for a few more steps and stopped the pursuit as he reached the entrance to C4. Lee turned around and walked back toward C1.

#### Summary of Case Study 9

1. The sniper is standing and moving.
2. The sniper made a surprise attack.
3. There was only one hit.
4. The sniper departed quickly.
5. The victim pursued the sniper.
6. There was a separate ending to the incident. The proximity of a teacher is unknown.
7. The incident occurred during an unstructured period.
8. The total time for the entire interaction between Lee and Luke was 00:00:04.

#### Case Study 10: Assault

The students are in class period 2. The class has been in progress for almost a half hour. This case study is a demonstration of aggression-assault. The prime actors are Tom, Rich, Steve, and Kent. Kent has been demonstrating quasiagonistic behaviors most of the

morning. He has been behind a filing cabinet for seven minutes and has just stepped out from his hiding place.

### Field Notes

[998] Physical encounter. Tom shouts at Steve, "Stupid, shut up man." Rich stands up and goes over to Tom. Check tape. Tom leaves the room. Lee followed.

[10:14] Steve left the room to find Tom, checked the restroom, gym, and then the janitor's closet. Rich walked out and opened the door to the janitor's closet. Both walked back to the circular table. CS physically brought Tom back into class.

### Tape Analysis

982 Camera moved to C1. Kent is by the pencil sharpener; Steve is sitting, yawning and stretching at the circular table. T1 is sitting to Steve's right. Rich was standing near Tom, who is seated at the desk by the north wall. Rich walks away from Tom. Standing by the circular table, Rich glances right in the direction of C3 for a couple of seconds and then sits down. Kent walks over to the circular table from the pencil sharpener.

986 Close-up of Kent. Can see Rich's leg movements. As Rich sits at table, knees are bent; he moves his legs from an outward to inward position six times, body shift, pause, three times quickly and pause for 11 seconds.

995 Kent looks up from his work in direction of Tom. Rich makes five in/out leg motions. He is still on task.

997           Can hear Tom in the background saying, "Stupid, stupid."  
Rich shifts his shoulders upwards on the first stupid and then drops  
them back down on the second stupid. Tl is standing behind the T's  
desk, looking down at papers.

998           Tom is sitting in a chair near the north wall of Cl. Steve  
is sitting at the circular table, his body is facing west. As the  
camera shifts to view Tom and Steve, one can see a glimpse of Steve's  
right arm retreating to his center-front body. His arm rests momen-  
tarily on the desk top. Steve then reaches his right hand out, he  
appears to be holding a pen, and points it at Tom's face. Steve is  
smiling. His legs are bent at the knees. After the first full visible  
arm reach, Tom says, "Aaaahh." Steve, who still is smiling, looks down  
at table, up at Rich, and then back to Tom. Simultaneously, Steve  
moves his legs to center and out again 11 times. Tom says, "Aahh," one  
more time and Steve then reaches out teasingly to grab Tom two more  
times. With each reach from Steve, Tom repeats "Aaahhh." As Steve  
reaches, Tom pulls his head back. As Steve's arm returns to the center  
of his body, Tom says, "Aaahhh" and sticks his chin out, stretching his  
neck. Steve's legs move from right to left four more times. The  
arm/hand motion is the same all three times. The arm is stretched  
outwards at shoulder level and bending at the elbow; the hand swings up  
at about a 70-degree angle and toward Steve's chest, almost like an  
exaggerated come-here motion. Tom is sitting about four feet away from  
Steve; his head is turned to the right. Tom looks at Steve, looks  
forward, looks at Rich, looks forward, and then looks at Steve.



Immediately after Tom says the first "Aaaahhhh" sound, Rich pauses for 3 seconds and then moves legs inward and outward 9 times in 7 seconds. Body shift of Rich as he turns to the left and gets out of his seat as Tom says the fourth "Aaahhh."

1002 Rich is standing behind Tom. Rich's right hand is holding onto the top of a chair, and the left hand is holding onto the edge of the carrel. Rich pauses in this position. Tom is still seated and is facing east. Kent then gets out of his seat and moves over in front and to the right of Tom. With the repeat of the fifth "Aaahh," Rich grabs Tom around the chin and neck from the back with his right hand and on Tom's head with his left hand. Tom jumps out of seat and turns to face Rich. Kent is standing on Tom's right side. Steve is seated, still smiling. Kent is smiling.

Tom is standing with his right foot approximately two feet in front of the left foot. His right hand is to his side, palm open, his left arm is extended downward front center with a slight bend at the elbow; the palm is open. Rich is facing Tom, his left foot is approximately eight inches in front of the right, his body is turned to a side angle. Rich's left hand sweeps inwardly up; he then pulls it toward him and with a straight extended arm, index finger pointing, he puts his finger within two to three inches of Tom's nose. Tom, using an outward to inward motion, open palm, slaps Rich's forearm. Rich's forearm moves in a circular motion and returns to pointing his finger once more in Tom's face. Tom slaps the arm one more time, using an outward to inward open-palmed motion. After Tom hit Rich the first

time, T1 moved from the desk three to five feet, and is standing next to Tom. T1 puts a hand on Tom's left forearm. On the second hit/slap, Kent moves in between the two students and, holding onto Rich's right upper arm with his left hand and placing his right hand on Rich's back, right side, moves Rich backwards and to the right, toward the circular table.

1003 Tom quickly leaves the room.

1004 Kent directs Rich to the circular table and Rich sits down. Kent is standing behind him. Kent pats Rich on the back one time and then rubs Rich's shoulders, five times. Rich's left upper arm raises to shoulder level and his forearm swings backward. Rich says, ". . . man, cut this shit out." Kent stops the shoulder rub but then with his right index finger in pointing position, he pokes Rich on the neck. Rich's left shoulder flinches up and he moves slightly to the left. As Steve watches there are four in-and-out leg movements.

1005 Rich leans his body over as if to continue his work at the table. Rich's head is almost level with his shoulders; his back is to the camera. As Kent moves around the circular table, he places his right pointed index finger on Steve's eye. Steve sits, not moving. As Kent walks behind Steve, his pointed index finger slides back along Steve's temple, all five fingers over Steve's forehead and then the index finger crosses over Steve's closed left eye and down his cheek. There are no leg movements by Steve while Kent is sliding his finger over his face.

1006.5 T1 follows after Tom. One can hear pounding in the background. Kent has picked up a large piece of posterboard and is playing around with it.

1007 Rich shifts his body upward, head comes up and he turns his head over his left shoulder to see what is happening. Rich makes five body shifts in seven seconds. Steve is also looking in direction of the 1c door. Kent is unfolding some paper. Rich and Steve are not attending to Kent.

1009 Rich turns his head back around and looks down at his work. His legs move twice, still for 6.4 seconds, and then move in and out 13 times in 6.8 seconds.

1011 Kent throws the paper on the circular table. Both students flinch their shoulders, lifting their heads and upper bodies vertically. Instantaneously, Steve gets out of his seat.

1012 Kent sits down at circular table and Steve leaves area. Rich slides his left hand over his head.

1013 Rich turns left in his seat and is facing the direction of the 1c door. Kent gets out of his seat.

1014 Kent has gone over to T's desk and is starting to hide under the desk. Rich continues to look in the direction of the 1c door.

1015 Kent is crawling under the T's desk. Rich's right foot movement; two times, pause, two times, pause, two more times.

Conversation in C3 from one of the students: "Why don't ya go out there and help . . . go get that kid man (Rich looks in direction of C3), he's beating on somethin' man, why don't ya go get him man."

1017 Rich out of seat and walks toward 1c hallway. Pounding stops in the background.

1021 Rich returns to the 1c, walks back to circular table and sits down. T1 follows. T1 walks over to desk and instructs Kent to move. Kent is rolling on the floor. Rich's leg movements: 35 leg movements in 32 seconds. His upper body appears to be in position to write. His back is to the camera, so it is impossible to distinguish if he is on task. Pause, no leg movements for 14.5 seconds, then seven leg movements and body shift as T5 comes over to circular table.

1023 Steve returns to class.

1025 Steve sits down at the circular table. He rubs his face with his left hand.

1030 Kent is out from under T's desk and has a fly-swatter. Tom enters the 1c and makes a comment. Rich has taken the fly-swatter and says, "I'll swat your head with this fly-swatter."

1035 Tom is on camera. A CS has encircled Tom's arms and chest with his arms. He is escorting Tom to a desk near the south wall in C2.

#### Tape 2

60 Tom is sitting in the corner near the filing cabinet with the CS. Rich, rather than sitting directly up to the table, has shifted and is sitting sideways. Essentially, his back is turned away from Tom. If he were sitting forward he would be facing Tom. Rich appears to be on task. Kent is on task while he occasionally plays

with the fly-swatter. Steve is on task. Tl is sitting between Steve and Rich.

114 Rich shifts in chair, his legs are still. He is still slightly turned to the left, away from Tom. He appears to be on task.

153 Tom is seated. He constantly makes noises and faces and occasionally he works with CS's help.

195 Rich is off task, tilting the chair to the right on two legs. He is making faces in front of the camera.

197 Rich got out of his seat and walked over to C3.

206 Tl calls Rich back, then walks over the directs him back to class.

224 Rich seated at the circular table, facing forward. He is on task.

265 Rich gets out of his seat again.

270 Rich walks over to C3. Tl followed and brought him back to class. Rich is looking in the direction of C3.

290 Rich gets out of his seat once more and returns to C3. He is standing by the divider with a group of students.

312 Rich returns to class. Rich continues to be distracted and demonstrates in- and out-of-seat behavior until transition for the next class.

#### Summary of Case Study 10

1. There was a possible annoying stimulus, i.e., Tom's noises.
2. The assailant, Rich, demonstrated a high frequency of body movements just before the assault (30-40 within one minute).

3. Rich was standing and his arms were away from his body.
4. Rich initiated the assault by grabbing Tom's neck and head.
5. Tom, who had been seated, responded by jumping up and taking a defensive stance to protect himself.
6. Tom hit Rich twice. Tom immediately departed from the area and began to pace around the school building for at least 00:01:30. Tom was physically escorted back to the room and continued with a high frequency of body movements.
7. Rich had a high frequency of body/leg movements subsequent to the physical encounter (83 within 00:01:00). Rich's hand movements were not visible. He sat for a total of 00:06:00.
8. Rich started walking around, demonstrating in- and out-of-seat behavior for five minutes.
9. There was an "other" ending to the interaction since there was intervention by a student and a teacher. The proximity of the teacher was within five feet.
10. The incident occurred during a structured period.
11. Total time of physical interaction, 00:00:04.
12. Total time of cycle approximately 00:20:00.

### Case Study 11: Assault

This case study is a demonstration of aggression-assault. The incident occurs during the transition from period 2 to period 3. This is not a sniper hit because there was an interchange going on between the two students before the attempted assault.

Field Notes

[10:30] (392) T3, "Andy, sit down." Andy walked to C3, to the divider, to C2 and back to the divider in C3. He sat down and is writing. (406) T3 is having an adjustment in C2 with Bud.

[10:35] Bud sat for a few seconds. Rich put his head around the corner and said, "What'd he say?" Bud shrugged and walked into class (440). Bud hit Chris; T3 is talking to Bud in the hallway.

Tape Analysis

315 Bud is sitting on the divider. T3 calls to Bud. Bud stands up and starts dancing.

323 Camera on C1. Rich has one foot on a chair and is tilting the chair backwards. T1 is standing next to him. Can hear T3 tell Bud that they need to have an adjustment.

368 Rich gets out of his seat to investigate the adjustment that is being held between Bud and T3 in C2.

371 T3 is talking with Bud. No T in C3.

372 Students in C3 are off task. They are talking and throwing wads of paper.

397 Close-up of counseling session between T3 and Bud. Bud automanipulating with hands while T3 is talking to him. He is looking down at his hands, his feet are still.

406 T3 returns to class. Bud remains seated.

411 Bud returns to class.

419 Transition begins.

427 T3 in class, trying to get students to sit down before leaving for transition. Transition is in progress.

429 T3 calls outs, "Hey, Bud," and walks toward the middle of the lc.

430 Chris is facing T3 saying, "I want an adjustment man, I ain't touching him." Chris's arms are hanging next to his side. He is holding a work-out bag in his right hand. Bud comes up behind Chris. Bud's elbows are about three inches away from the side of his body. His hands are hanging downward, open palmed. Bud makes a comment. Chris turns as Bud is approaching him, and with his forearm perpendicular to his upper arm, elbow next to his side, Chris touches Bud's stomach. Chris says, "You're a liar man." Bud makes an out-to-center forearm sweep with his right open-palmed hand, trying to hit Chris in the head. Chris flinches his body to the right while he raises his left forearm and blocks the hand from hitting him. T3 is now standing within three feet.

432 Bud turns left and quickly leaves the lc (4.1 seconds). Chris and T3 follow directly after Bud. Chris's lips are pulled back; his upper teeth are visible. As Bud passes one student, he turns sideways with his back to the camera; one can only see the knee of Andy come up as if ready to kick Bud. Bud has his left arm bend at the elbow, and it appears as if he is ready to protect himself. The kicker stops and Bud continues out of the lc and comes face to face with T5.

440 Bud, Chris, T3 and T5 are talking in the lc hallway. Transition is still in progress.



454 Tom goes over to lc door to watch the adjustment. CS is also there. Tom turns and calls CS as if to remind him to follow.

Summary of Case Study 11

1. Bud had been demonstrating some inappropriate behaviors, as indicated by T3's initiation of a counseling adjustment.
2. An issue of conflict had developed between Chris and Bud, as reflected in Chris calling for T3's assistance and claiming that Bud was a liar.
3. The event occurred during an unstructured period.
4. Bud was standing and moving around the learning center just before the assault. His arms were down by his sides, palms open.
5. Chris made physical contact with Bud.
6. Bud hit Chris immediately after Chris touched Bud's stomach. Bud hit one time, making contact with Chris's forearm.
7. Chris flinched to the side to protect himself.
8. Bud fled from the incident.
9. While Bud separated from the incident, the teacher promptly intervened; thus the incident had an "other" ending. The teacher was standing within five feet of the incident.
10. The students did not return to the learning center; thus the aftermath behaviors were not recorded.
11. Total physical contact between two students was 00:00:02.
12. Total time of the incident from the first to the second adjustment with Bud was 00:03:47.

Case Study 12: Assault

This case study is an example of aggression-assault. The students are in second period. Tom has just come over to C3.

Tape Analysis

949 Camera switched to C3. Nathan sitting in chair in front of T3's desk. Left foot is on the desk and right foot is on the floor. He leans over to talk to Bud.

957 Nathan starts to adjust his shoe. He puts left foot down on the ground, is leaning over and is fixing it.

967 Nathan sits up and puts his right foot on the desk top and left foot is flat on the ground. He is holding a brush in his right hand, transfers it to his left hand. Scratches or adjusts the sweat band on his left wrist, using his right hand. He then scratches his face with his right hand. Nathan then scratches his belly, transfers the brush back to his right hand, and then using his left hand adjusts his sweat band on his left wrist.

971 Camera is shifted off Nathan. Can hear Tom in background.

Audio:

972 Andy: "Which way you goin' man?"

Tom: "Right here."

Steve: "You was actin' stupid . . . ain't going to bed at night again."

973 Tom: "No I didn't, I wasn't acting stupid out there."

Camera is shifted to direction of conversation.

974       Nathan: "... Bitch, I'll bust your face." Nathan is walking rapidly in direction of Tom, his lips are curled in and pressed tightly together. He turns the corner of the divider and has his left hand on the counter as he walks by. He swings his right arm in a clockwise motion, hand is in a closed fist, comes up to shoulder level, and extends arm forward with force. He hits Tom on the upper arm. Instantly after hit, his lips are pulled tightly over his teeth; his mouth is open. It took 1.7 seconds for Nathan to move from the end of divider into position to hit Tom. It took 4.6 seconds for him to return to that same position after the hit.

T: "Hey, are you on building?"

Tom: "That's a drop."

975.5       Nathan pauses at the end of the counter and holds his right hand up in a fist to eye level. He shakes his fist toward Tom; Nathan's eyes are wide open and he says: "No that's a rock." T starts to make a comment about his building level.

Tom: "No, that's a drop."

976       Nathan walks back to T3's desk, picks up his brush which he set on the desk top and sits down, knees are bent open about 50 degrees, hands holding brush are extended between his legs, he turns his body slightly to the left and stares directly at Tom, making more verbal comments.

Andy: "You're always trying to get someone dropped."

977       Unintelligible due to various people talking at once.

978        Nathan turns away from Tom and starts brushing his hair using his right hand. He puts his right foot up on the top of the desk. Tom starts walking away. Nathan is looking at Tom as he walks toward end of divider counter. He stops brushing his hair.

          Nathan: "You'd better stop saying my mama, I'll bust your face."

979        Nathan shifts brush to left hand.

980        Tom is talking. Nathan shifts brush back to his right hand and is wiping his left hand on the side of his pants. He tilts his chair backwards at the same time. Verbals still going on.

981        Tom walking back to computer, his face is turned toward Nathan and away from the camera. A CS is directly behind him. The CS is suggesting that Tom sit down and do work. T comes over and starts giving Tom an assignment.

          Tom: "Watch someone hit you, you don't like it."

          Nathan: Comments are unintelligible.

          Tom: "He just trying to be a dog. I ain't no dog."

          Nathan: "He was saying about my mama again I'm gonna bust you."

          Tom: "Shut up."

          Nathan: "Say somethin to me then." Nathan is staring at Tom, his left hand that is holding the brush slightly jerks upward when he makes this comment. Tom makes a comment about having to go get something out of his locker. Nathan turns his head forward, away from Tom, and starts brushing his hair again.

984 He then looks right over to Bud, who is looking at a magazine. Nathan points to something on the page.

985 Nathan puts his right foot on the floor and leans his upper body over to the right to look at the magazine with Bud.

987 Nathan shifts back to the left and leans against the back of the chair.

988 Nathan gets out of his seat and is walking out of 1c. He makes a comment about Tom behaving himself. Tom replies, "No, I ain't." Andy tells Nathan not to worry at least two times. Nathan leaves 1c and goes to gym. Off camera. Tom is sitting in a position where he cannot be video-taped.

990 Tom is talking and making strange noises.

1009 Tom is quiet for 13 seconds. He then starts talking in a loud voice to people across the room.

1029 Tom: "I feel sick . . . . Can I go to the restroom, I gotta spit. I'll swallow. . . ."

1031 Tom gets out of his seat. CS tells Tom to "hurry up."

1040 CS gets out of his seat to find Tom. Can hear Tom's voice in the far background.

### Field Notes

[10:06] 990's Nathan stood up and came over to Tom. With his right hand he delivered one hit to Tom's arm. Nathan walked back to his chair. CS came over and started to intervene. T3 removed his class to the gym. Nathan was playing basketball.

### Summary of Case Study 12

1. Nathan demonstrated some automanipulation with his hands before the assault. Nathan was seated but not working on task.
2. As the conversation with Tom continued, Nathan quickly stood up and walked over to Tom.
3. Nathan hit Tom one time.
4. Nathan immediately turned and began to leave the area.
5. Tom makes verbal comments to Nathan, and Nathan responds aggressively.
6. Nathan demonstrates automanipulation with his hand.
7. The ending was "separation," with each student at least five feet apart. While T1 made a comment to Nathan, Nathan had separated before any verbal intervention. The teacher was within five feet of the incident.
8. The total physical interaction lasted less than one second.
9. The total incident lasted 00:00:35.

### Case Study 13: Assault

This is a demonstration of aggression-assault. This incident has three phases. Stan first gets angry and hits Pat. He then begins to exhibit what might appear to be quasiagonistic behaviors. However, careful observation of Stan's movements indicates that he is still likely to be aggressive. This, in fact, proves to be true, as he assaults Pat a second time. This incident occurred moments before the transition from last period to homeroom.

Field Notes

[11:58] End of tape. Students are going to their homerooms. Rick and Pat were fighting with each other at the end of the period. Pat kicked Rick. Rick got angry, but T2 broke it up immediately. Pat went to his homeroom and started in with Stan.

Tape Analysis

331 Camera is switched over to C3. T3 is walking over to Pat and Stan. A conversation is going on between Pat and Stan. As T3 approaches, Stan says, ". . . tell this guy that. . . ." As he talks, he steps backwards four steps and gestures with his right hand, pointing toward Pat.

332 Stan is standing in C3 about three feet away to the left of Pat. Pat is seated in an individual desk located on the south wall by the blackboard. Pat is facing north. T3 is standing to Pat's right within two feet and is talking with Pat and Stan. Pat is sitting erect in his chair.

334 Pat looks at Stan, and Stan returns the glance. Stan raises his left arm such that upper arm and forearm are perpendicular; gesturing, index finger is pointed. He then lowers his arm and takes one step backwards, averting eye contact with Pat.

335 Stan is holding an object in his left hand; with his elbow bent he is putting the object up against his lips. Transition to homeroom is just about to begin. Stan is looking away from T3 and Pat. T3 continues to talk to Pat.

335-40 Stan is moving an object in his left hand back and forth either between his teeth or on his lips, chin tucked in, head at a slight angle downward, eyes staring forward. Stan's right arm is hanging loosely to his side, his right hand is slightly cupped, his right foot is 12 inches in front of his left foot. He stands in this position for 10 seconds.

336-41 Pat tilts his head to the left and then puts his left forearm on the desk top next to his chair and lays his head down on his arm. He rocks forward and back twice, then sits up erect. He then puts his right elbow on the desk top and with an open palm rests his cheek on his hand, switches hand position to fist, face still in contact with hand. Left forearm on desk, hand hanging limply over the edge of the desk. He shifts upright in the chair. Pat is still talking to T3. T3 and Pat are fooling around, Pat is holding onto T3's hands.

340 Stan brings his left hand down, his left hand cups around his right hand, which is in a fist. Both hands are at waist level. Stan holds this position for 3.5 seconds.

341 He drops both arms to his side, both hands are in fists, turns; with his right foot he takes one step toward Pat. His right hand is in a fist, forearm at waist level, elbow near his side, he extends his arm forward and punches Pat on the upper arm one time. Immediately after he hits Pat, weight shifts back to left foot, elbows bent, both of his arms come up in fists to shoulder height and shake. He drops his arms down to his side and then middle front.



341 Pat leans to the right away from Stan upon being hit. Pat, who was smiling, now has a facial change and verbally responds, "Hey, man, whatcha do that for?" He leans to the left, tries to stand up but stumbles getting out of chair; T3 is still holding onto one of Pat's hands. This inhibits Pat's ability to get out of the confinement of the chair.

342 Stan is in the position to fight. His right foot is in front of his left, both hands are in fists held at chest level, right hand is a little higher than the left. From his waist up, the body is leaning slightly forward.

343 He sits back down, shifts his body to the left and tries to kick Stan with his right foot, missing. Stan is now standing erect. T3 has moved over two steps, is pointing at and talking to Stan. T3 talks to Stan for 8.3 seconds. He does not talk to Pat. Stan points with his index finger, looking at T3. He then holds his hands in front, center body. As he listens to T3 he starts to make an upper smile; his lips draw back, showing his upper teeth. He is manipulating his watch band. The atmosphere of the incident has the appearance that it changes here from assault on Stan's part to horseplay.

346 Stan turns right, looking down, he walks north toward the divider counter, turns slightly and goes over to the bookshelf on the west wall. Stops at bookshelf and makes a left turn and is now facing Pat.

349 Stan standing near bookshelf, right hand scratching his left chest near his underarm. Glances right. He is smiling/laughing. Stan then says, "Ah, Pat day, pick on Pat day."

350 T3 has talked to Pat, turned and is walking away.

351 Stan picks up a desk, legs of the desk are extended forward, desk is in front of his body at head level. He makes an "arrrrg" sound and moves toward Pat. As he holds the desk over Pat's head he stomps his left foot on the floor. T3 has turned back toward students. Stan moves back three steps.

353 Stan puts the desk back down on the floor. The desk is on his right side.

354 He backs up three steps and is leaning/sitting against the edge of the bookshelf.

355-58 Stan's chin is extended outward, an example of aggressive elements (Grant, 1969), and his right hand, open palm, is slapping his right thigh five times, hard enough that the contact made is audible. T3 is walking around and is now in the southwest corner of the room, actually in the middle and to the side of both students. Pat was not in view due to another student standing in the path of the camera. Pat's hand is up level with his mouth, about six inches away. He curves his hand down on an angle, gesturing. Talking to Stan, he tilts his head to the left, brings his head upright and tilts it to the left again. His facial expression is serious; he is not smiling. The distance of the camera makes it impossible to evaluate eyebrow and eye behavior. Atmosphere changes back to possible assault.

360 Stan's body jerks as he moves from the edge of the bookshelf  
and walks over to Pat.

361 Stan is standing in a threatening position in front of Pat.  
Stan's left shoulder is dropped about four inches from the right  
shoulder. His body is at approximately a 10-degree angle; his head is  
down (can't see his chin), his hands are at his side and slightly  
curved. T3, who is talking to two other students, immediately grabs  
and holds Stan's right arm at the elbow and moves to his left such that  
he is standing directly on Stan's right side. Pat is still sitting in  
the desk, leans as far away to his right as he can, his right hand  
touches the ground. He exhibits an upper smile, lip corners pulled  
backwards, upper teeth exposed. Pat shifts his body, turning his legs  
and the desk to the right, his right hand and forearm gesture upward.  
Simultaneously, T3 guides Stan's arm and Stan takes two steps back-  
wards; T3 moves directly in front of Stan. Stan extends his arm and  
points at Pat with his left index finger and T3, who faces Stan for 3  
seconds, now turns his head to the right, looking at Pat. As T3 stands  
in front of Stan, Pat shifts his body and desk back about six inches to  
the left, such that he is facing straight; he gestures with his left  
hand. Pat starts talking, his voice is raised. Pat's left elbow is on  
the desk top, his forearm and hand are straight and perpendicular to  
the top, his palm is open and his wrist bends, flipping his hand  
downward. Pat then moves his hand to his mouth.

365 T3 has released Stan's arm, he is pointing his finger at Pat, the right side of T3's body is facing Pat, T3's head is turned toward Pat.

366 Stan is still pointing at Pat. Stan moves to his right. Stan is now standing in front of Pat. He continues to point his left finger, arm extended. It now is near Pat's face. Stan's body is at a left angle, left foot in front of right. His upper body is leaning forward toward Pat.

368 Using his left hand, Stan punches Pat on the left upper arm. Stan's left fist jerks upward and back; he takes one step backwards. Stan pauses for approximately one-half second, his left side facing Pat, he walks off to his right.

369 T3 is still standing sideways to Pat and continues to talk to him. Pat looks away, turning his head to the left.

370 T3 talks for five seconds and then turns to the remainder of the students who have moved into the class for homeroom. Pat is sitting with his forearms on the table top, both hands are hanging over the edge of the desk, index fingers and thumbs are touching.

372 Pat is looking in Stan's direction and talking.

373 Both Pat and Stan are off camera.

380 Pat has his right hand over his mouth; the other hand is hanging over the edge of the desk.

387 Pat's right hand moves to side of face; he occasionally talks.

393 Pat's hand is over his mouth.

395 Pat tilts his desk to his right; it is balanced on two legs. He is leaning over, his left arm is on the desk top next to him and his head is lying on his arm. He is looking downward.

397 Students have made comments about Pat's behavior, and now T3 directs a comment toward Pat.

405 T3 touching the right edge of Pat's desk, pushes it down, placing the desk in a flat, upright position. Pat shifts his body over the desk he is sitting in, both arms are folded on the desk top, his body bends forward, he puts his face down toward the desk top, leaving only the top of his head visible. T is discussing how to deal with Pat's behavior with the entire group.

418 Pat's head is still on the desk top. He starts to move his right leg. His foot is not visible, but the movement looks as if the foot is resting on its outer edge and he is moving his foot right and left, thus slightly moving the lower leg and knee.

429 Pat's foot movement stops, head is still on desk top.

432 Pat is partially blocked by CS from camera view. He half sits up, shoulders are bent forward, head is down. T3 makes comment to Pat, "I know you don't want to hear this . . . ." His legs are now crossed at the ankles, arms still folded on desk top.

439 Pat's face is buried in the right crook of his elbow.

458 Pat lifts his head up. Students start exiting from the 1c to their cabin.

460 Pat lifts his upper body, right arm remains on desk top, left hand rubs over his left eyebrow and down the side of his face.

462        Pat's left hand is stationary on his cheek; his head is tilted slightly left.

464        Body shift and Pat gets out of the desk. He walks forward, head down, no eye contact given to anyone. His right hand slides along T3's desk top. He leaves 1c.

474        Stan on film. T3 talking with him and Andy. Stan is sitting, his right hand to his mouth, his left elbow is bent and his forearm is on the desk top. He glances left (T is on his left) and then forward.

484        Stan brings both hands to his head and runs his fingers through his hair. His head is tilted backwards.

486        Stan shifts his upper body upright and forward. His elbows are on the desk top and bent; his left hand is cupped around his right hand, thumbs and index fingers of both hands are touching his lip and chin area on his face. Stan continues to look forward. T is having an adjustment with both students due to a quarrel between them.

501        T3 looks at Stan. Stan turns his head right, his left hand touches his right sleeve and then he folds his arms in front of him on the desk top. Stan looks in the direction of the camera and then looks away.

506        Stan is looking down at his arms; shoulders are curved forward, head is down.

510        Stan's forearms are straight in front of him; he brings his right hand up to his forehead and then starts adjusting his hair. He looks at T3 as he adjusts his hair.

512 Stan's left hand is on the side of his head. His head is angled down, and he is staring straight ahead.

520 Stan starts to scratch his face with his left hand.

525 Stan puts his hand down on the desk top; he looks forward.

538 Stan looks right.

541 Stan lifts his hand, looks at his finger, finger to mouth and bites his nail. He folds his right arm over his left.

550 Stan gets out of seat and leaves lc.

### Summary of Case Study 13

1. Pat was involved with a fight immediately preceding this incident.
2. Stan demonstrated some walking/movement before the assault.
3. Stan demonstrated automanipulation with his hands.
4. Stan is standing but pauses three seconds before he hits Pat.
5. Stan hits Pat on the arm.
6. This segment of the incident is an "other" ending due to teacher intervention. The teacher was within five feet of the incident.
7. Stan continues to demonstrate aggressive behaviors, i.e., his chin and head are extended forward. He hits his leg. He picks up an object to use as a weapon couched in playful terms.
8. Verbal interaction continues between Stan and Pat.
9. Stan approaches Pat in a threatening manner.
10. Stan is standing and moving before the assault.
11. The teacher's proximity is within five feet of the incident. The teacher physically touches Stan preceding the second physical encounter.

12. Stan continues to gesture and move his body.
13. Stan hits Pat for the second time.
14. Stan quickly turns and retreats to another area.
15. Pat's behavior visibly changes. He puts his head on top of the desk and covers his face.
16. The incident occurred during an unstructured period.
17. After the incident, Stan makes one hand or body shift approximately every four seconds.
18. The total time of physical contact for both incidents is 00:00:03.
19. The total time of the incident from the first verbal confrontation to when Stan left the area was a 00:08:30 period. Both students departed for the dormitory.

#### Case Study 14: Assault

The following case study is an aggression-assault example. Dan is demonstrating pacing and quasiagonistic behaviors. The pacing in particular may be an indicator of a future assault. The physical incident is a single slap. The reason this is so clearly an assaultive episode is due to the victim's reaction. The students are in their respective classrooms. The transition from period 1 to period 2 will begin soon.

#### Field Notes

[9:46] Transition. Dan is throwing paper wads in C1's wastepaper basket from the edge of the divider. Dan is pacing around the 1c.



Check Dan's interaction with Jim.

[9:56] Dan pacing to circular table, to blackboard, to Lee at edge of C1, to blackboard in C3, to blackboard in C1. He is standing at T1's desk and writing on the blackboard; he moves around the desk and over to the filing cabinet.

### Tape Analysis

623 Rick and other students are on task; Jim is in the background. He is working on task.

650 Jim sits up from work. His hand is at his mouth.

655 Jim begins to straighten his papers. From the south edge of C1 a wad of paper comes flying through the air toward the wastepaper basket by the teacher's desk, which is in the northeast corner of the room. Jim is sitting in the individual desk placed on the east wall next to the teacher's desk. Can hear T5 in the background calling Dan.

656 Dan on camera for the first time. Shooting baskets with paper wads. He makes a full body stretch; both arms are up and bent at the elbows. He throws with his right hand, taking a step forward with his right foot.

661 Dan walks over to the wastepaper basket; his arms are about six inches away from his sides, elbows slightly bent. Dan's head is tilted down toward the floor as he walks. He bends over at the waist, knees bent, and begins to pick up many wads of paper.

662 Jim gets out of chair.

663 Dan turns from picking up paper wads and with his head tilted down toward the floor, he walks back to his original shooting position.

His arms are out from his body approximately 6-10 inches. His elbows are slightly bent. He brings his hands to waist level, center middle, then back to his sides, still out from the body, the left arm swings in front of his body at least 12 inches. Jim walks to edge of T's desk and with his right hand tosses a piece of paper in the trash can. He remains standing at the edge of the T's desk, watching Dan throw the wads of paper.

664        Dan is now standing at the edge of C1 by the south divider.

665        Dan starts throwing papers again. Five paper wads come flying through the air.

668        T5 while approaching Dan says, "Mr. R." Dan responds, "Man, shut up." T5 repeats, "Mr. R." Steve makes a comment, there is a nervous laugh; Dan replies, "Fuck it, I don't care. . . ." Three more paper wads come through the air. T5 is side by side with Dan. Both are facing north. Jim is still standing at the edge of T's desk. He is holding papers in his left hand. The arm is straight down and to his side. Jim's right hand is on his right hip. He is smiling and his head and eyes move, following the throw and direction of each wad of paper.

669        T5 immediately puts his right hand across Dan's back; not touching the back, he rests his hand on Dan's right top shoulder close to the neck. T5 says, "You come over here, you're disturbing this class, you come back in my area." Dan takes two steps forward, simultaneously turning counterclockwise to the left, lifting his left arm, palm open, elbow bent, forearm straight up. Dan makes a sweeping

motion backwards, making contact with T5's arm on the underside forearm. Dan's head is down, chin is tucked against his chest and his lips are pressed tightly together. T5's right hand slides along Dan's neck and off his back. Dan walks toward the trash can and is off camera for a couple of seconds. T5 follows.

670 Jim starts to move to his right after Dan hits/pushes T5's hand off his shoulder and walks away. Jim emits an audible giggle sound, glances down, and looks back to his right while he continues to walk over to the filing cabinet and files papers.

671 Jim turns from the filing cabinet, shakes his head, moving the hair out of his eyes and walks over to the circular table. He looks down and sees a paper wad on the floor by one of the chairs at the table. Jim grabs the top of the chair with his left hand and pushes the chair up to the table. He switches and holds the top of the chair with his right hand while he bends over at the waist and picks up one of the wads of paper.

672.5 Dan has wads of paper in both hands; as he approaches Jim he transfers the paper in his right hand over to his left hand. As Jim stands up he has his head lifted and is looking up toward Dan. Jim's elbow is bent, forearm perpendicular to the upper arm; he is preparing to give Dan the paper. Dan is facing Jim. They are within one foot of each other. Dan says, "Man, I didn't ask you to pick it up." Using his right open-palmed hand, elbow is bent, forearm raises such that it is almost parallel to the body, Dan swiftly lowers his forearm, slapping Jim on his right hand, which is holding the piece of paper.

Jim's right hand and head jerk down and back up, and his mouth drops open with the physical contact. His face looks surprised.

673 Dan takes paper from Jim's hand, turns left and leaves the area. Jim takes two backward steps and one step to his left side. His hands drop to his sides. He shakes his right hand four times, as if to shake the sting out of it. He looks down and then back up at Dan. Jim's lips are drawn back, his lower teeth are showing only. As he moves backwards his face is out of view for a moment. He then looks down and over to Steve, who has made a comment about Jim being spanked like a baby. Jim shakes his head slightly, "No," lips pursed, and steps sideways heading for his desk which is about five feet away. He makes minimal comments back to students who are responding to the incident.

675 Jim turns left, back to camera and steps between the cupboard and his desk. He makes a quarter turn left and looks left out to the center of the lc. He pauses and lifts his right foot on the seat of the chair. He lifts his pant leg and is manipulating something on his sock or cuff.

678 T6 comes over and puts papers on the shelf of the cupboard next to Jim. Jim is looking down, still manipulating his cuff.

680 Jim sits down, his upper body is bent over, head is lowered, he adjusts his pant leg. He folds his arms in front of him and puts them on the desk top; subsequently he puts his head on his arms, face down for 3 seconds. Steve comes over and makes a comment.

681 He lifts his head and makes a comment back to Steve.

683 Jim buries his head, face down, into the crook of his left elbow.

688 Stan walks near Jim, turns and leaves area.

698 Jim's head has been down for 58 seconds. He raises his head for a brief second and buries it again for another 68 seconds. He shifts his head up, to the side, and finally upright. Total time his head was down 00:01:55. T6 is sitting in the view of Jim.

713 Dan reentered the learning center and is in C3. He has a can of spray paint in his right hand and is over by T's desk talking to a student. He turns and leaves C3. He is chewing gum, his mouth is open. His arms are down, elbows are bent, he is holding objects in both hands. His arms and hands are about six inches away from his body.

714 Dan walks over the C5 and is off camera.

720 Dan is talking to T5 in C4, shaking the spray can of paint; his arms hang down by his side, elbows are close, it looks like he will spray the paint. He makes 11 body shifts while standing there. He moves and his elbows are approximately six inches away from his body.

724 He throws the can of paint from his right hand in the air to his left hand. He walks off, elbows slightly bent and out at least six inches from his body.

729 Dan reenters C4 and is walking around the room picking something up off the floor.

738 Jim is still in seat and looking at a book. He puts the book down.

739           Transition is beginning.

740           Jim puts his book on the shelf, gets out of his chair and walks toward the center of the lc. Just as he reaches the edge of C1, Dan approaches and says, "Where's sucker at?" His left arm is straight, elbow within four inches of his body, with his hand curved; his right arm is up, upper arm horizontal to shoulder, wrist just above shoulder level. He is carrying books in his left hand. He puts the books on the top of the circular table. He is off camera for two seconds and then resumes his throwing position from earlier and begins to throw paper wads into the trash can in C1 again. The paper wads are in his left hand. Transferring individually each wad, he makes an overhanded throw seven times, pauses and then one last throw.

748           He walks forward a couple of steps, turns around, leaving his books on the table, he walks toward C4.

750           He is off camera.

755           Dan passes by camera, walking toward lc door. He is off camera.

791           Dan reenters the lc and walks over to C1. He is pointing/gesturing with both of his hands, constantly walking/pacing as he talks to a student. His elbows are away from his body, ranging from approximately three to six inches; he lifts both hands and adjusts his sunglasses, turns, walks by a chair and moves it and walks some more.

824           Dan in C2 walking around, goes over to the filing cabinet and is leaning against the cabinet looking for folders. T6 walks over by Dan.

842 Dan walks to circular table holding an oblong box and sits down. He manipulates the box and is constantly talking.

849 He is cursing and slams the box on the table top.

850 Dan is out of seat, over to the cupboard. T6 is standing next to him.

862 Dan is walking around C1.

866 Dan puts one foot on the seat of a chair. He removes his foot and starts pacing again. He is never still for longer than two seconds.

#### Field Notes

[10:06] Dan is sitting at T's desk in C1 for the first time. He paced for at least 35 minutes.

[10:23] Dan has been sitting in T's desk now for 17 minutes.

[10:27] Dan gets out of his seat, goes to C2 and begins to play with the overhead projector.

#### Summary of Case Study 14

1. Dan's antecedent behaviors were pacing with his arms away from his body.
2. Dan paced for a 00:11:00 period before the assault.
3. Dan continued to pace for a 00:24:00 period after the assault.
4. Before Dan had a physical encounter with Jim, he in fact had a physical incident with T5. Dan's response to being touched was to instantaneously knock the hand off his body.
5. Dan proceeded to hit Jim within a 00:00:10 period.

6. The incident with Jim was clearly assaultive as demonstrated by Jim's reactions. Jim was smiling and enjoying the entertainment until he became part of the show. His withdrawal behavior back to his chair (i.e., putting his head down on his desk) lasted for almost two minutes.
7. Dan continued to pace with his arms away from his body. Additionally, he began automanipulations with his hand.
8. The ending was a "separation" since the students moved apart without teacher intervention. The proximity of the teacher was within five feet.
9. The total time for the physical incidents, starting with T5's touch and ending with Dan's slap, lasted 00:00:10.
10. The total time for the entire episode, beginning with Dan's first-noted pacing behaviors and concluding with Dan maintaining a seated position for longer than one to four minutes, was 00:40:00.

#### Case Study 15: Sniper Hit

This is an example of a sniper hit. The incident occurred during a transitional period.

#### Tape Analysis

- 290        Lee is talking with T3, T5, David, Pat, and Sherry.
- 302        Pat walked off with T3, hitting his right hand into the palm of his left hand. Pat is smiling.
- 305        Camera is panning C1 and C2.



320 Camera is on C3.

321 Dan walks past camera; he is between the divider and the learning center tables. Pat is sitting at the west end of the lcts.

322 Dan blurs past the camera. He is facing the camera direction, but moving to his right. His right arm is away from his body, the elbow bent. His left arm is extended out. Pat is on Dan's left.

### Field Notes

[10:33] (320's) Dan walked into the lc and over to Pat by the east wall of the lct. Dan hit Pat on the back and said, "I owed you." Dan left the lc quickly. Pat got out of his seat and went to the lc door. He turn returned to his chair.

### Tape Analysis

Pat stands up from chair and watches Dan leave the learning center. A look of surprise is on his face. His mouth is a circle shape, upper teeth exposed. He is staring, blinks, and then sits down. Nearest teacher: 15 to 20 feet away.

323 Pat gets out of his seat and walks from the lct to the door of the learning center. He holds onto the door jamb on either side and looks down the hallway to the left, trying to visually locate Dan. He did not see Dan, so he walked back to the learning center table.

325 Dan and Pat are both out of view of the camera.

369 Pat is sitting with one foot on the divider top. Smiling, he starts talking to someone across the room.

373 Pat staring in direction of C1, his mouth is partially open, upper teeth are visible. He blinks and realizes he might be on camera. He turns his head right, away from the camera and then back left at camera.

375 He bits his lower lip, shifts positions, putting his feet on the ground. He then starts calling to T3. Camera is moved to pan C3.

#### Summary of Case Study 15

1. The assailant was standing and moving quickly.
2. The assailant made a surprise attack.
3. The assailant hit the victim one time.
4. The assailant fled the area quickly.
5. The victim was startled by the hit.
6. This victim tried to pursue the assailant.
7. There was a separation ending. The closest teacher proximity is unknown.
8. The victim recovered quickly as demonstrated by his smiling behavior 00:01:30 later.
9. The total time for the sniper hit was 00:00:05.

#### Case Study 16

The case study has a total of eight different incidents that occurred in a 45-minute period. The writer decided to present this as one case study since each incident interplays with the next. The major issue is territorial. The fighters are Detroit versus Flint students. There are three demonstrations of aggression-anger and five

demonstrations of aggression-assault. The majority of the students knew beforehand that a big fight was "comin' down." The noise level in the learning center was unusually low.

#### Case Study 16A: Aggression Anger

##### Tape Analysis

22            Camera is on C2. Many students are walking around, still coming in from their homerooms. Even with the activity, the learning center is quiet. It is unusual that there is absolutely no horseplay or loud verbal remarks from either Kent, Lee, Nash, or Tom.

87            There are six students in C2, five of whom appear to be on task. T7 is walking around assisting with getting students started.

120           There are six students in C1. Three students are on task.

121           Ron entered 1c and has walked over to C1. He first walks over to the north side of the circular table. He is holding his sunglasses and a tissue and is in the process of cleaning the glasses. Ron then turns and moves south toward Dick. He is about five feet away from Dick when he begins to talk. Dick is sitting at the end of the south wall divider. His chair is tilted backwards on two legs, and he is rocking back and forth. Dick is facing north. As Ron begins to talk, Dick stops rocking; his head is tilted to the right, he is not looking directly at Ron. Ron stops walking and is standing within two feet of Dick's left side. Ron is looking at his glasses while he says, "It seems like you always have somethin' negative (looks at Dick and glances back down at glasses) to say about me." Someone says, "You

do." Ron proceeds, "Every time you say somethin', na na, I'm not gonna say everytime but it seems like it. Ya know, you say you no never try to put nobody down, but you know you be doin' it in your own way."

Dick shakes his head up and down in an affirmation of what Ron said.

At this point much of the conversation becomes inaudible due to the entrance of more students and their talking around the mike.

139 As the conversation is continuing, Rich enters 1c and walks toward C2.

141 Tim is sitting at the circular table and is within two feet of Ron and Dick. Tim is starting to turn and attend to the conversation. Dick's head is still tilted to the right, but he is now looking at Ron. Ron looks at Dick, looks down at his glasses and continues the conversation, "Everytime I say somethin' to you. . . ." Ron takes one step to the right, his right hand is holding the tissue, his arm is bent at the elbow and his forearm makes clockwise circular gesture motions, eight times. The diameter ranges from approximately 3 to 10 inches. He then goes back to cleaning his glasses, he is looking downward. As Ron talks he continually takes small steps backwards, to the side and forward. Ron continues to speak, "I, I always say, say somethin, somthin, somethin, that you needed, that you wanta hear (Dick shakes his head affirmatively two times), or somthin that you know, that somethin between me or that we gonna do. But it seems everytime you say somethin about me, you always got somethin ya know, I'm funny (Ron emphasizes word and simultaneously takes a step backward while dipping his right shoulder forward) ya know (pause, Dick moves his left

arm and looks more toward Ron. He makes two small affirmative head shakes) or (pause), you always got somethin to laugh (Ron takes a step to his side) about somethin I got on, or somethin." Dick, still sitting, turns his head forward, his head is tilted slightly downward and he is holding his hands together between his legs. The conversation took 49 seconds. As Ron started talking he took three steps toward Dick. While the conversation continued, Ron took seven small steps within a two-foot area.

151 Tim is sitting facing Dick, his hand moves from his face, to his leg, to the table top, to his lap. He begins to talk first, most of which is inaudible. He states, "Ya know what, ya know what . . . Ron, . . . playin with him." Tim is accusing Ron of "playin" with Dick. (Ron's response is one of defense and perhaps agitation as demonstrated by his pacing behavior.)

153 Ron still cleaning his glasses blows on them and says, "We not playin with each other, we not playin with each other, . . . we cool, like, like, we got some confusion now, . . . when it's time to go home, we cool." When Ron begins to talk again, Dick tilts his head right and looks up at Ron the entire time he speaks. Ron continues to state that he feels Dick is saying bad things about him, but that they are being "cool." In this portion of conversation Ron's movements become more exaggerated. Dick, looking forward, makes a statement about not caring what people say behind his back. Ron is near Dick again and says while pointing to himself with the stems of his glasses, "I care about what people say about me." This time Dick

responds stating that if he has anything to say he'll say it to the person's face. This conversation took 48 seconds. Ron took 32 steps within a 10-foot area, shrugged four times, blew on his glasses twice, and gestured with his right arm 11 times. The conversation is closing when Rich walks over to the threesome from C2.

171 Rich is standing at the end of the divider between C1 and C2. He leans to his right side toward Dick. He straightens up when T7 comes over to talk to him.

172 Ron puts on his glasses and is no longer talking. He is standing facing Dick, rubbing his left hand with the tissue held in his right hand. Hands are moving constantly.

174 Rich walks off with T7.

175 Tim starts to talk, gesturing with his right hand.

180 Ron turns to his left, takes two steps to his right, and faces Tim.

184 Ron throws his tissue in the trash can that is placed by the divider's edge of C2. He turns his head back and looks at Tim. In 34 seconds, Ron has made seven body shifts or steps.

188 Ron begins to move again. His hands are constantly in motion, either gesturing or rubbing them together. He starts walking around again; the topic of the conversation continues to be "putting people down." In 00:01:56 Ron made 72 body shifts/steps within a 10-foot area. Then T3 calls Ron.

235 Ron walks off with T3 in the direction of C3. Dick remains seated with very little body or head motion.

- 249 Tim turns around in his seat such that he is facing the circular desk.
- 263 Dick, Tim, and Rick are quietly talking.
- 273 T6 is directing the students to get on task.
- 293 Dick is sitting up to the table and all three students are on task.
- 322 Luke walks by the camera, heading toward the 1c door.
- 335 Dick asks T6 a question regarding his work.

#### Case Study 16B: Aggression-Assault

##### Tape Analysis

- 350 The noise level in the 1c is very low. Usually there are loud verbal conversations being conducted between the students at this time of the day.
- 356 Camera is shifted to C2. Rich is sitting in the far back northeast corner of C2. His body is tilted to the right with his right elbow resting on his thigh, his hand is up at his mouth. Rich's left hand is resting on his upper thigh. His right hand moves away from his mouth; he appears to be looking at his nail, then Rich moves his hand back to his mouth.
- 362 Rich turns his body to the left and reaches across his desk. He picks up a piece of string and manipulates it, finally laying it across his lap.
- 366 Rich opens the folder that is on the desk in front of him. He shuffles some papers and then shifts back to his original sitting

position, with his right elbow on his thigh and his right hand up to his mouth.

373 Rich starts talking with Allan, who is sitting to his left, shaking his head "No" a couple of times.

376 Rich is smiling and glances in the direction of T7 and the camera. He is still sitting in the same position. His legs are relatively still.

377 T7 asks Rich to please work on his task.

378 Rich's upper body starts rocking forward and back eight times in 15 seconds. At the same time, Rich picks up paper and is constantly moving his hands.

385 Rich is sitting back in his chair. His right hand is tapping on his thigh.

389 Rich is talking with Hugh, who is sitting in the southeast corner near the bookshelf. He starts rocking forward and back another eight times, manipulating the pen or papers in front of him. One time he glances over toward the area of the camera. Ron is sitting at the table next to the camera.

401 T7 has walked over by Hugh and given him a piece of paper; he then proceeds over to Rich. Rich extends his right hand and takes a piece of paper from T7. T7 then returns back over to Hugh and is speaking with him. Rich then shifts his upper body forward, leaning his left elbow on the desk top, his right hand is holding a pen, the palm of the hand is touching the edge of the chair seat. Rich is looking down at the paper on the desk top.



406 Rich starts making little rocking motions forward and back  
11 times.

411 Comment: The film being used was spliced together. As a  
result, the glue from the splicing clogged the picture drums of the  
video machine and the picture is black. One of the drums starts  
clearing up around 700, so via hand manipulation, portions of the video  
have been retrieved.

501 (Audio only) There is very little conversation. T7 says to  
someone, "Come on, don't fight." The noise level remains low.

The background to this sequence is as follows: It is July  
and there is a direct correlation between the heat outside and the  
temperature inside. Already it is quite warm in the learning center.  
Rich has been sitting in C2. Ron is seated at the learning center  
table located next to the west wall. Over the weekend, both students  
rode for a portion of the time on the same bus as they traveled home.  
During this bus ride, both students were talking with the same girl.  
One student is from the Flint area and the other from the Detroit area.  
It just so happened that the student from the Detroit area was success-  
ful in attaining a date from his young woman. This may be only one of  
many events that have led to this fight. It is Rich's daily pattern to  
walk over to the sink and get a glass of water. This means that he is  
standing directly next to Ron for a few moments, which happens to  
coincide with Ron's and T5's discussion. Another confounding factor is  
that the observer left the learning center briefly, and the first fight  
occurred at that time.

715 Rich gets out of his seat and walks over to talk to Hugh and another student who are sitting next to the bookcase in C2. His elbows are bent and out four to six inches from his body. His forearms and hands move in various positions, up to his face, touching his other hand in front of his body, to his shoulder, bent back up to his shoulder blade. His hands and arms are constantly moving, while he walks around. He stands momentarily near the bookcase and then walks out of C2 toward the direction of the learning center tables.

720 Rich is off camera.

724 Rich has walked back to the center of C2, turns and starts to walk back toward the lct.

726 T7 calls Rich, and Rich turns back toward T7 and walks over to his desk. Rich's fingers are touching the palm of his hands, and he sets the outside of his hands on the desk top. He pauses at the teacher's desk briefly and then walks around to the front of the desk; his arms are down to his sides, with his elbows slightly bent. The elbows are within two to three inches of his body. His right hand comes up to his mouth; he turns and walks toward the learning center tables and then turns back again toward T7, who has asked him a question. He takes two steps back toward T7, turns again, his left hand moves up toward his mouth as he walks away.

731 Rich walks over to the sink for a drink.

736 Ron is talking to T5 about his work. Ron: "So the grade in that class don't even count then, right. Well, can I see about a signature in that class then?"

T5: "No, no, no, no, . . . ."

Ron: "You fucked me up then."

T5: "Hey, Ron, don't/

Ron: "You fucked me up then."

T5: start now."

Rick makes a loud "Heeeeeeeee" noise in the background.

738 T7 has called Rick back to class and there is more talking in the background.

739 T7 looks to his left and gets out of his chair, heading for Ron and Rich. As he approaches, his mouth is open, his elbows are at least six inches away from his sides. As he walks, his mouth closes, his lip corners are turned slightly downward. His right arm is bent at the elbow and the forearm is extended in front to him, not swinging back and forth.

740 Rich says, "Let me go T5." Ron says "Bitch." Rich replies, "Whacha wanta do then, bitch?"

741 Ron starts angrily yelling, "Throw one, throw one, throw one, throw one, throw one." Someone yells, "Let go of him." One can hear chairs falling over and crashing of objects.

742 T6 comes running over from C1.

743 T6 and T5 are holding onto Ron's shoulders and upper arms, and they are pulling Ron away from Rich. As Ron is pulled backwards, he is glaring at Rich, his lips are tight. His chin is extended out and his neck as a result is stretched, his nostrils are flared. Ron continues to say "Throw one," and the fingers on his right hand are

rigid, and spread widely apart. As Ron talks his eyebrows are pulled down and inward toward the center of the nose ridge, his neck is tense. While speaking his face is tense, cheeks are concave, and his lips move in exaggerated motions protruding forward in a pursed movement. The teachers are pulling him backwards, gritting their teeth, lower teeth are exposed, lip corners pulled back. As T5 and T6 pull Ron toward C1, Rick is walking by and he lets out an "aaaahhh" sound as he moves out of the way. Over in the corner, Hugh remains seated in his chair. His hands are in front, wrists are at the edge of the desk, hands are held together hanging downward. His knees are bent and his feet are flat on the floor, legs are separated, he is sitting forward, the desk is tilted on its front two legs. Hugh's attention, in addition to all of the other students in the learning center, is focused on the incident. Before Ron being pulled back, Allan raised his right arm up, elbow is bent as if to cheer one student on to victory. Once Ron is pulled away from Rich, Rick then starts clapping and jumping around. Ron is relentless and says, "Com'on then." One of the staff calls out Ron's name. The first round between Rich and Ron beginning with the verbal confrontation and ending with Ron being pulled away took 17 seconds. There is a 3.5-second pause between the end of the first set of verbal and physical interactions and the beginning of the second round. Rich says, "Throw one."

746 (Audio only) Ron calls out, "Com'on then, throw one."

Rich replies, "I'll bust you up."

Ron continues, "Com'on, com'on, com'on, com'on. . . ."

The students are separated again.

Rich angrily replies, "You a bitch, you on the floor, you on the floor. You a bitch, you on the floor."

Ron responds, "Com'on."

748 Rich is still struggling and is removed from the learning center with the assistance of T3 and T7. Ron is physically contained on the floor. As Rich is being escorted out, he proceeds with the abuse, "You on the floor, bitch. You on the floor. You on the floor, you a bitch, you on the floor." Teachers repeatedly say, "Com'on, it's not worth it. . . ." Round two, beginning with the verbal exchange and culminating with Rich being escorted from the learning center, lasted 23 seconds.

752 Andy says, "Ron, just lay there and relax . . . they'll let you go man."

Ron, "Let me go, man."

Rick starts talking with a Japanese accent, "Watch out for the Sony." Pause.

Ron repeats, "Let me go, man."

Rick then says again, "Watch out for the Sony, restitution, he's restitution." The students laugh.

756 Ron says, "Let me get up man."

758 T5 calls out to Luke twice to get him to settle down.

759 Ron repeats, "Let me go, let me get up man." "I'm cool man."

T5 responds, "Will you stay here?" Ron responds, "Yea."

760 Ron is released. Ron had to be physically contained for approximately 25 seconds.

#### Case Study 16C: Aggression-Anger

##### Tape Analysis

761 Ron immediately turns and starts quickly walking toward C2. His point of destination is the southeast corner of C2, and he is ready to fight Hugh, who is still seated near the bookshelf. T5 following after Ron says, "No, no." He catches Ron by the edge of the south divider for C2. He grabs his arm, but Ron flings his arms backward, shaking T5's grasp loose, and proceeds toward Hugh. Ron's left arm is out away from his body, his elbow is at least six inches from his side, his forearm is extended downward with his hand in a fist. Ron's right arm is closer to his body, the elbow is within two to four inches, with his forearm extended downward and his hand fisted. Andy cries out, "Let him go, let him go." T5 continues, "What is going on? Stop it. You told me." T5 following after, reaches and encircles Ron around the chest to hold him back, right before Ron gets to Hugh. Ron tries to break away again, there is a separation of at least 24 inches between his feet as he struggles to release T5's hold. Both of Ron's elbows are extended outward as he proceeds forward, dragging T5 behind him. Hugh has remained seated and has watched Ron come in his direction. He is sitting back in his chair, and his right hand is up touching his

face. Ron is in front of Hugh, his upper body is leaning forward and his chin is extended outward. T5 turns Ron's body slightly to the right, but Ron continues to stare at Hugh. Ron's chin is still extended forward as T5 gets Ron to turn further away from Hugh. Ron holds eye contact with Hugh. T6 is approaching to give assistance. T5 has moved Ron about four feet away from Hugh. Momentarily, Andy and T6 hold onto Ron's arm. They release the grasp and Ron, facing T5 and T6, tries to break through to get back to Hugh. T5 blocks Ron's path, touching him on the chest with his right hand and Ron's back with his left hand. Ron tilts his head right over T5's shoulder and says, "Bitch, you talk your shit. . . ."

766        T5 holding onto Ron's left upper arm escorts Ron through C4 and out to the portable. As Ron walks, his head starts dropping further and further downward, his right arm is generally away from his body. In the middle of C4, Ron shifts his head up and breaks the hold on his arm. He turns and faces T5. There are two students following behind, and they are standing next to Ron. The discussion being carried on is inaudible. T6 is following approximately five steps behind the others. T5 gets Ron to proceed toward the door. As T6 follows, his arms are away from his body, his head is down. Ron stops at the door and starts to struggle once again. T6 changes his pace, head becomes erect and his arms swing out further from his body as he approaches T5, Ron, and the other two students. Ron is there for only a couple of seconds. Finally, Ron leaves the learning center; his two friends follow along.

771 T6 returns to the learning center. The students are milling around. T6 comments, "Okay, let's quietly go to the second hour, all right."

The aggression-anger behaviors initiated by Ron toward Hugh and culminating with Ron being escorted from the learning center took 00:00:25.

### Case Study 16D: Aggression-Anger

#### Tape Analysis

775 Rich returns to C2. He walks over to his chair, his right arm swings forward with his hand coming up to shoulder level, it swings downward behind his back and then out to his side. Rich is holding a piece of paper in his right hand. The second swing arcs outward at least 12-18 inches away from the side of his body with the follow-through motion of his hand returning behind his back. His left arm is bent at the elbow, and as he continues to walk, drops to his side and is within two to four inches of his side. He stops at his chair and starts adjusting his clothing. Rich pulls out a shoelace and stretches it out, manipulating it for a moment.

779 Rich lifts his right foot up on the seat of the chair and begins to lace his shoe. Transition is in progress, and the learning center is still unusually quiet. Rich glances up three times as he adjusts his shoe. Dylan enters C2, walks directly over to the desk near Rich, and stands there, seemingly looking at something on the desk top. Bud entered C2 along with Dylan, but he stopped and is standing



in the middle of the room, approximately six to eight feet away from Rich. For the fourth time, Rich glances upward; as he does, he focuses in Bud's direction. Phil has just entered C2 and is looking over his left shoulder; he looks angry, his hands are akimbo, on his hip, he pauses near Bud, glances at Rich and continues to walk toward a chair near the pencil sharpener and sit down. Rich's upper body starts to become erect; his head is tilted slightly backwards, which results in his neck being elongated and his chin protruding outward. His hands are in fists. He continues to look at Bud.

790 Bud starts to walk toward Rich's direction, but instead stands next to Dylan and talks with him. Rich turns his head back over his left shoulder to see what Dylan is doing. Rich leans back over at the waist and continues to fix his shoelace.

799 Camera is moved to C3. T3 is talking with Tim. Upon completion, Tim starts brushing his hair and walks off out of C3. Vic is sitting at the teacher's desk and is working.

801 Allan enters C3 and walks over near filing cabinet 2, which is on the west wall of the room. T3 is in that area. Allan walks back over to T's desk, turns his head and body right as if to head again toward the west side of the room; he then shifts again and turns facing Vic, who is sitting at T's desk.

803 The camera is moved, focusing on Tim, who is standing near the opening to C4 still brushing his hair and then on C2 as Bud is beginning to exit the room. T7 is talking with a student who is out of view from the camera. Andy says, "... they got this little thing

about how they gonna work. . . . I don't mind . . . jump me, I'm gonna fight both of 'em. . . ." T7 tries to reassure him, "Ain't none of them gonna jump on ya." Just then, Tim, who is still brushing his hair, walks over and starts pointing with his right index finger and says, "That's the bitch . . . fight from yesterday." T7 has moved over to Tim and is standing in front of him. T7 says, "Com'on, com'on," trying to direct Tim out of the area. Tim replies, "I ain't gotta go nowhere, man." T7 repeats, "Just com'on with me." He is walking next to Tim, and Tim walks along with the teacher. All of the students stop and are watching, their faces are still, wondering what will come next. Tim continues, "He know he's a whore." T7 replies, "So what, he's a whore." The students laugh, and Tim and T7 have left the area.

#### Case Study 16E: Aggression-Assault

##### Tape Analysis

806 Rich leaves C2 and walks toward the portable. The students continue to move to their respective classrooms. During this discussion, Allan has walked over to the middle of the learning center, watched the interaction, and then turned back toward C3.

811 T3 walked through C4 and toward the portable.

812 In C3, Allan has attacked Vic. Allan's left arm is around Vic's neck, with his forearm directly under Vic's chin. Allan's right arm is across Vic's chest and he is starting to hold the wrist of his left arm. Vic's right arm is up, the elbow is bent, and he is trying to grab at Allan's head. Allan is over Vic, Vic's knees are bent and

he is falling to the floor. Allan does not release Vic. Vic's left hand is pulling on Allan's left arm, he then makes contact with Allan's right wrist and pulls it downward. Simultaneously, Vic leaning backwards, starts to stand up. Allan leaning back, lifts Vic off the ground, Allan's right arm slides down from Vic's chest near the waist and then back up to his chest area. Allan turns to the left as he is holding Vic. Then Vic starts falling forward. Allan does not release Vic but maintains his hold around Vic's neck and leans forward over the top of Vic. Vic is on his knees and Allan is standing with both of his legs straddling either side of Vic. Vic is moving to his left, and Allan stays directly over him, his right hand on Vic's chest area. A student runs over in front of the camera and starts jumping up and down to keep the camera off the students fighting. Vic turns toward the direction of the camera, and Allan continues to hold both arms around Vic's neck. Vic starts standing up; Allan gets his arms around the outside of Vic's arms and chest and again lifts Vic backwards up off the ground. When Vic touches ground, he leans forward, Allan's arms are still wrapped around Vic's chest and his body is contoured forward to Vic. T6 has called Allan's name twice and is now facing Allan as Allan leans over Vic. T6's right elbow is bent and is four to six inches away from the side of his body; his forearm is angled down, with his palm out, wrist bent up, his hand and fingers are straight, separated, and pointing upward. He is talking to Allan. Allan releases his hold with his left hand, Vic turns right and twists.

Allan gives Vic a push forward as Vic moves away. T6 is standing next to Allan and to this point has not touched either student.

816           Vic has turned and is standing, facing Allan and the camera.

817           T6 is holding Allan's left upper arm. After Vic is released and has stepped back, T6 releases Allan's arm. Vic backs off one step, his upper body is leaning slightly forward, his chin is extended out. Vic's upper arms are angled back and downward, his elbows are bent and his hands in fists move out about a foot away from his sides and then swing back to rest with his fists in front of the groin area, elbows slightly bent, his left foot is in front of his right by approximately 8 to 10 inches. Allan makes an outward forearm sweep with his right arm, his hand is in a fist. Vic jerks back, both of his arms bend at the elbow and his hands in fists come up near his face. Allan hit Vic on Vic's left forearm. T6 is standing directly on Allan's left side, his shoulder and upper arm are in front of Allan, acting as a block for further fighting. T6 says something to Allan, who turns head left away from the teacher, steps sideways and walks off, out of view of the camera. The students were in physical contact, wrestling and one hit, for 00:00:20.5. Two seconds later Allan walked off.

818           T6 standing next to Vic asks what happened. Vic responds, ". . . come and grab me." As T6 talks with Vic, T6 touches him lightly or brushes his hand on Vic's belly twice, trying to get Vic to calm down. A student in the background makes a comment about the "muther fuckin camera" and the possibility of it getting broken. T3 returns to his class. Allan starts pacing. He walks past Vic and over to the

west wall in C3, walks quickly back toward the east wall, turns, goes back to the west wall, turns, walks back toward the east wall, and goes into the learning center, turns, walks over to the teacher's desk and then walks back to the lcts and sits down. The entire period of pacing was 52 seconds. Allan was visible on camera for 15 seconds; in that period he took 28 steps.

826 Vic goes to C2 and sits down at a desk next to T7's desk.

830 Allan sits at the lct, T3 is standing next to him and speaking with him about his task. Allan is looking down at the paper/desk, not at T3.

839 T3 kneels down and continues to talk with Allan. Allan turns his head and appears to occasionally look at T3. Allan makes 10 body shifts/movements, taps his finger on the table top, and three more body movements while he was sitting listening to T3.

#### Case Study 16F: Aggression-Assault

##### Tape Analysis

853 A student runs in and says, "They're fighting in the halls man." Everyone including the camera person ran to the door. Rich and Howard were fighting as professionals. The intensity was such that it could not be broken up until one student hit the floor. There is a tremendous amount of noise, screaming and then T7 can be heard clearly.

861 One student yells, "Stay out of it Ron." Ron had been leaving his area from the portable and was on his way back to the dorms when Rich and Howard started to fight.

862 T7 is yelling, "Come on Rich, I'm, I'm your friend, damn it, stop it man. You know, you know, no, no, no, come on man, it's not the way. It's not the way Rich." T7 has just pulled Rich out from the hallway and into the learning center over near the lcts. T7 repeats, "It's not the way!"

864 T7 has his arms around the outside of Rich's left arm and chest. Rich is struggling to get back at Howard. He lifts his left arm out of the hold and both of Rich's hands come up to T7's arms, where T7's hands are locked onto either wrist, and Rich tries to break the hold. The intensity of anger on his face is difficult to describe. His eyebrows are drawn together in the center, creating folds of skin, his eyes glare with a magnitude which made all the students around them move quickly back and out of the way. His mouth was open with both upper and lower teeth exposed, his bottom lip protruding. T7 turns to Rich and directs him forward, going toward the portable, Rich tries to get lose again, tips a bit to the right, pushes his hand off the divider counter and then off the wall divider between C3 and C4. T7 says, "Please, I don't want to fight. . . ." Rich walks with little resistance through C4 and out to the portable.

867 There are nervous laughs from the students.

869 One student walked over to Jim and physically picked him up such that Jim was parallel to the ground, flipped him around and put him down again with assistance. Rick is shouting, "Com'on now, let's

get in class, man, let's get in class, com'on get in class." In the hallway three teachers are physically containing Howard. Howard has slugged one teacher in the face and is still fighting.

#### Case Study 16G: Aggression-Assault

##### Tape Analysis

871 Luke starts in, "Everyone rush me now, huh, everyone rush me now, . . . rush me, com'on here. OK, come ov'r here, rush me right now, rush me, now, rush me right now. Rush me man, com'on rush me, rush me, go get the boy, rush me, OK, OK, rush me, rush me, (pause), rush me." Dylan was standing near Luke and has backed away cautiously. There are no teachers in the learning center and the conversation has just changed to Detroit versus Flint. Since I was the only adult, I broke role momentarily and calmly told the students to move on to their classrooms. Allan responds, "She ain't no teacher." I walked over to a student leader and asked him to help get the students back in class. The students are pacing around. Luke has walked away from the lc door and is heading toward C4.

892 The conversation about Detroit and Flint continues, and Rob tells Luke to get out of his face. Luke turns immediately around and heads directly for Rob and says, "Come' here, let me tell ya some-thin'." Both of these students along with five other students are at the lc door. A CS walks in to the learning center closing the door to the hallways. Howard is still struggling and fighting in the hallway with the teachers. The CS asks where Rich is and then proceeds through

the learning center and out to the portable; again there is no supervision in the center.

901        Vic has gone over to the pencil sharpener in C2 and is sharpening his pencil. Luke is walking around, pulling the front of his shirt in and out and flipping the tail up and down to cool off. The secretary, Sherry, walks through and then walks back out. Allan is sitting alone in C1.

910        Luke is sitting on the edge of the teacher's desk in C2. Andy is saying, "Number 1 and number 2 and number 32, and number 38." Luke cuts in, "They number 1, you see, you see, they number 1, cause they from Detroit and the burcrap, they got none comin."

912        Vic has walked back over from the pencil sharpener and is standing behind Luke. Vic says, "Hey wait a minute, don't think, don't think everybody's from Detroit man cause I, I ain't in it man, I can say all I want to man." With that, Luke quickly stands up, his body is rigid and leaning forward, his head is leading as he walks, his hands come up in fists, he yells, "Then say it," and with his left hand Luke swings and punches Vic in the jaw. Vic falls to the floor, Luke continues after Vic and as Vic starts to stand up Luke gets Vic around the neck and shoulder with his left arm. Vic's head and left shoulder are under Luke's left arm, sticking out toward Luke's back. Vic is trying to grab ahold of Luke from the back. The remainder of Vic's body is in front of Luke. Luke turns a full circle walking Vic around and then picks Vic up by his seat, walks over to a desk and drops him on top of a student desk. Vic and the desk tumble to the ground.



Frank has entered and is trying to end the fight; he is touching Luke's back just as he drops Vic. Frank pulls Luke backwards away from Vic. Total amount of physical contact between Luke and Vic was 00:00:10.9. Luke steps backward and Steve along with Frank is moving away, yet between the two students, their arms are out and they are trying to calm things down. Vic gets up and says, "I ain't got nothin' to say. . . ." Vic turns and starts rushing for a chair. Frank and Steve grab at him as Vic passes, Steve loses his grip, and Vic grabs the chair. Vic is holding a chair up in the air, Frank holding on to Vic turns him in a full circle twice. During the second turn Sam grabs the chair. Luke is standing right next to the students who are being physical with Vic. Frank then pulls Vic and while all three are struggling, they fall to the floor. Frank had physical contact with Vic for eight seconds. The total incident lasted 29 seconds.

919        The students are still on the floor, and T5 enters the lc with T7 close behind. Luke starts walking around; he unbuttons his shirt and rolls up his sleeves.

923        Vic is walking around gesturing with his right hand, while his left is akimbo, on his hip. He is talking about how Luke hit him for no reason. Both hands are akimbo as he paces, stops, and watches as Luke is ready to get into another fight with another student. Andy is starting to get angry at Luke and starts saying, "Yea, I'm ready, I'm ready, I'm gonna bust him up. . . ." T5 talking to the other student says, "Not here" and walks the student out toward the portable. T7 has picked up the table and chairs, walks over to Luke and, holding

on to Luke's right upper arms, transfers his hand around Luke's back; T7's hand touching Luke's left side, they walk out of the learning center together.

929 Vic starts walking around the room again, his hands are on his hips and he starts to cry. Vic repeats, "He comes up and hits me for no Gaud damn reason."

934 Vic walks over to the chair near T7's desk, sits down, puts his elbow on his knee, his hand to his face and cries. His chest visibly moves in and out as he breathes; tears drop off his chin.

#### Case Study 16H: Aggression-Assault

##### Tape Analysis

935 Rob starts yelling, ". . . swing on me, na, na, . . . jump up and swing, no, no, no, yea, all ya all, punk, bitch, muther fuckers. Why don't yo'll jump up and swing at me? Na, bitch!" T5 calls out Rob's name and walks off in the other direction. T6 walks with Rob into C4. T6 is talking with Rob. Rob continues to yell. Only T6's back is visible; his arms are down, but his hands are at least 12 inches from his sides. His wrists are bent, palms facing the ground, fingers are extended. He lightly touches Rob as he walks toward the portable, first on the chest while Rob faces the center, then on the arm as Rob turns right toward the exit, and then a pat on the back as Rob proceeds forward. Rob turns back around and starts walking toward the center. T6 walking next to him uses his right hand to direct Rob over toward the corner of C4. T6 is talking the entire time.

945 Camera shot of Vic, who is still seated, tears glisten off his chin. (No one has had time to talk with him.)

946 T6 is talking with Rob; one cannot see if T6 is touching Rob at all. Rob starts fighting, and both move struggling toward the exit door of C4.

950 T3 comes in, and T6 and T3 contain Rob on the floor.

965 T6 and T3 let Rob up off the ground, and they leave through the portable. All the students are talking.

976 Tim is telling a CS how Frank slammed Vic on the ground for no reason. Frank says, "He swing a chair, I defend myself, I ain't gonna let somebody slam me."

994 T6 returns to the learning center. Tim is standing near the divider, folding a piece of paper, hands in pockets, then out, he then walks over toward C1.

1007 Frank enters C2 and is standing with one hand on his hip. Vic has since been allowed to leave the center. Frank is walking around. The other students in C2 are sitting with very little movement.

1022 T7 sits on the edge of the desk and talks briefly with the students.

1027 Howard walks through the learning center, grabs a clipboard off the top of T7's desk, and walks on. A CS is walking beside him.

1029 T7 starts passing out work to the students. No one is talking in C2.

1040 T5 asks a CS to cover T3's class while he works with a student. Tim comments about not having to do work.

1050 T7 starts to ask the students questions about geography. In the background, Nash is starting to talk.

1063 Allan is sitting in T3's chair. End of tape.

### Summary of Case Study 16

#### 16A Aggression-Anger:

1. Ron is confronting Dick about what Ron perceives as a problem. As the day progresses, one might deduct that Ron was trying to find allies.
2. During the conversation Ron demonstrated automanipulation and pacing behaviors. These behaviors increased in frequency and size as the conversation progressed, particularly after Nathan accused Ron of "playin" with them.
3. While Ron may or may not have been angry with Dick, his physical pacing behaviors are precursors for the following episodes.
4. While Ron spoke with Dick he did not give him eye contact. Usually his head was tilted downward.
5. Ron was standing and moving.
6. The ending was "separate." There was no need for teacher intervention. However, T3, who was aware of Ron's presence, did go over and escort Ron back to class after the conversation ended.
7. This conversation occurred during the first morning transition; thus the setting was unstructured.

**16B Aggression-Assault:**

1. Before the assault, both Ron and Rich demonstrated out-of-seat behaviors. Until the time that the tape blacked out, Rich had not completed any work in class. Both students demonstrated automanipulation with their hands.
2. While Rich was out of his seat, he walked around the room, out of C2 twice and returned; on the third departure he encountered Ron.
3. Rich was standing and in motion immediately before the assault.
4. Close-up pictures of Ron as he is being removed from the fight verify that his expressions are those commonly associated with aggressive characteristics (Brannigan & Humphries, 1973; Grant, 1969). Ron's eyebrows were pulled down and inward toward the center of the nose. His nostrils were flared, his chin was extended outward. His mouth was right as he continued the verbal confrontation with Rich.
5. Both students were physically contained by two staff members.
6. The ending was "other" with teachers intervening. The proximity of the teacher was within five feet.
7. The setting, was structured.
8. When Rich returned to the learning center, he did not pace. He remained in one area, manipulating his shoestring.
9. There were basically two rounds to this fight. There was a time period of 00:00:30 from the first verbal encounter until Rich was removed. Ron was contained for a 00:00:25 period. While the students were separated, the incident was not completed.

## 16C Aggression-Anger:

1. Ron immediately stood up once the physical restraints were released, and he quickly moved toward Hugh.
2. While Ron wanted to fight, this is an anger incident due to Hugh's behavior. Hugh did not move or react to Ron's threatening approach or words.
3. The ending was "other," requiring the teachers to physically intervene.
4. The teachers were in close proximity, within five feet. The setting would be considered structured since there was close supervision of Ron.
5. There was a 00:00:30 time period between the time Ron was released and the time the teachers were able to remove him from the learning center.

## 16D Aggression-Anger:

1. The incident of Tim yelling and pointing aggressively at another student is a small demonstration of aggression-anger.
2. Tim is only one example of the contagion that was occurring in the learning center at that time.
3. Tim had just begun to pace around the center.
4. Tim was removed from the learning center before his anger escalated.
5. The ending was "other," requiring the teacher to physically and verbally intervene.
6. After the final fight, Tim was still pacing.

**16E Aggression-Assault:**

1. The antecedent behaviors of both students in this incident were not observed.
2. The physical contact between Allan and Vic lasted for a 00:00:20.5 time period.
3. Allan began to pace immediately after the incident.
4. Vic went to C2 and sat down.
5. When the fight began, there was no teacher supervision in the vicinity. The incident occurred during the transition period; thus the setting was unstructured. The ending was "other" due to a teacher's verbal and physical intervention.

**16F Aggression-Assault:**

1. Rich had just left C2 during the transition period. The setting is unstructured. Rich was in the hallway; he had just come out of the restroom. Rich had just had the physical incident with Ron. He was standing and moving before this incident.
2. Howard's antecedent behaviors were not observed.
3. There were numerous hits exchanged between Rich and Howard.
4. Rich was physically restrained and continued to struggle with the teacher. His facial features resembled expressions of aggressive characteristics.
5. Rich was physically escorted out of the learning center. From the beginning of the fight to his departure from the learning center was a 00:00:35 period.

6. Howard was physically contained by three staff members. From the beginning of the incident to when the learning center door closed was a period of 00:02:00.
7. Howard walked through the learning center 00:05:00 later.
8. The ending was "other"; both students were physically contained or escorted to another area. Initial teacher proximity is unknown.

#### 16G Aggression-Assault:

1. Luke demonstrated pacing behaviors before he attacked Vic.
  2. Luke verbally challenged Rob or anyone else to fight with him (871).
  3. When Vic disagreed with Luke, Luke jumped up and immediately punched him on the chin. The physical aggression continued from there.
  4. Luke began to pace immediately after the episode was controlled by students.
  5. The setting was unstructured; all teachers were involved with other students who had been in fights. There was no supervision in the area.
  6. Teachers entered the learning center after the students stopped fighting. Luke was removed from the learning center at that time.
  7. Vic stood up and paced briefly.
  8. Vic then sat down and cried. He was removed soon afterwards.
  9. The physical contact between Luke and Vic lasted for 00:00:10.9.
- The total time of the incident from the first confrontation to separation was 00:00:29. Frank was physically engaged with Vic for 00:00:08.



**16H Aggression-Assault:**

1. Rob started yelling verbal challenges to any takers.
2. A teacher was in close proximity and promptly intervened.
3. Rob paced back and forth in C4.
4. T4 touched Rob while Rob was in an aroused state.
5. Rob started fighting with T3 and was contained by T3 and T6 for 00:00:48.
6. Rob was removed from the learning center.

These eight descriptions of assaultive and anger episodes only suggest a hint of the tension within the building on that particular day. There was a contagion among the students, and everyone was picking sides. Upon reevaluating the incidents, it was like the calm before the storm. The morning transition was too quiet for a room of young adolescent men. Students who were not normally in the learning center pulled up chairs as if to sit and view the movie. The students who were involved in any of the physical incidents were removed to their dormitories. Adjustments were held with the students preceding school and the following morning. One student was removed from the camp setting, and assault charges were filed.

The analyses of the video tapes resulted in the description of observable behaviors. The time sequence denoted the length of the verbal and physical interactions. Since Case Study 16 had numerous

overlapping incidents, the precise times for when students began to calm down in many cases could not be attained since students were promptly removed from the learning center.

## CHAPTER V

### SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

#### Summary

This study has focused on the acting-out behaviors that function as a major cause for conflict within the classroom. Primarily, the writer has dealt with two problems. First, was to determine whether aggressive-assault behaviors and aggressive-anger behaviors progress in a sequential pattern, with specific actions occurring before, during, and after the event. Next, if there was a paradigm of behaviors, could these behaviors be discernible through observations such that a teacher could use this pattern as a basis for intervention in a positive preventative manner?

An ethological study was conducted. Ethology is the comparative study of behavior patterns. This study focused on observing students in a naturalistic setting, i.e., the classroom. The observer recorded field notes and made video-tape recordings of the happenings in the classrooms. The written field notes allowed the observer freedom to view happenings in various sections of the school. The video tapes were used for interobserver reliability, along with providing density and permanence of the record (Grimshaw, 1982) of the activities in the learning center. From May 21, 1983, to July 15, 1983, 150 hours of video tapes were recorded. The subjects in this study were 13- to

18-year-old males who were incarcerated for a variety of reasons. The students lived in a camp setting, and the school facilities were on the same grounds.

Sixteen case studies were presented. The sixteenth study contained eight separate yet intermingled cases. All eight cases occurred within a 40-minute period. Because of the intensity of these fights, rather than breaking up the continuity of patterns that occurred, the study was submitted as one. Thus there are a total of 23 case studies. Among these 23 case studies, there are 14 different aggressive-assault case studies, four aggressive-anger case studies, four sniper hit case studies, and one quasiagonistic case study. The quasiagonistic behavior case study was included to be used as a comparison when evaluating the other studies.

### Results

The data analyses focused on two main questions. First, to determine whether there were specific behaviors which were observable and measurable, which were characteristic of students in conflict with the teacher and/or the other students. Second, to determine if there were specific behavior groups or behavior types which were demonstrated in a developmental sequence as the conflict interaction continued. The following is a summary of the data analyses.

## Aggressive-Assault Behaviors

### Pre-Aggressive-Assault Behaviors

1. The students demonstrated off-task behavior: 14 out of 14 observed cases.
2. The students demonstrated out-of-seat behavior: 14 out of 14 observed cases.
3. The students were in an unstructured setting (i.e., classroom without supervision or during the transition period): 10 out of 14 observed cases.
4. The students demonstrated automanipulation with their hands: seven out of eight observed cases.
5. The students demonstrated pacing behaviors before an attack: 10 out of 12 observed cases.
6. The students' arms were down by their sides: seven out of nine observed cases.
7. The students were standing and moving immediately before an assault: 14 out of 14 observed cases.
8. The students projected their upper bodies forward, extended their chins forward, and stared at the victim: four out of four observed cases.

### The Assault

1. The physical incidents involved one to four hits, kicks, or choke holds: 11 out of 14 observed cases.
2. The physical incidents involved four or more hits, kicks, choke holds, or wrestling: 3 out of 14 observed cases.

3. The physical aggression-assault incident between students lasted 00:00:11 or less: 10 out of 14 observed cases.

4. The physical aggression-assault incident between students lasted 00:00:12 to 00:00:25: 2 out of 14 observed cases.

5. Excluding Case Studies 6 and 16H, the average length of physical contact between students was 00:00:07.

6. The proximity of the teacher was within five feet of the incident: 13 out of 14 observed cases.

#### Post-Aggressive-Assault Behaviors

1. The students paced for a period ranging from two minutes to one hour and 15 minutes after the physical encounter: eight out of nine observed cases.

2. The students held their arms down by their sides: seven out of eight observed cases.

3. The students demonstrated automanipulation with their hands: eight out of eight observed cases.

4. The students eventually demonstrated in-seat and quiet behaviors: five out of five observed cases.

5. The students continued to demonstrate off-task behaviors: five out of five observed cases.

6. There were four observed cases where pre, during, and post assaultive behaviors were observed to the point where students resumed on-task behavior. Of those four observed cases, the entire pre,

during, and post aggressive-assault behaviors ranged in length from 20 minutes to 40 minutes. The average length of time was 00:27:25.

### Aggressive-Anger Behaviors

#### Pre-Aggressive-Anger Behaviors

1. The students demonstrated off-task behaviors: four out of four observed cases.
2. The students demonstrated out-of-seat behaviors: four out of four observed cases.
3. The students were in an unstructured classroom setting: three out of four observed cases.
4. The students demonstrated automanipulation behaviors: four out of four observed cases.

#### The Anger

1. The students demonstrated pacing behavior while they were angry: four out of four observed cases.
2. The students' arms were down or away from their bodies: four out of four observed cases.
3. The students verbalized concerns, frustrations, annoyances, or dislikes: four out of four observed cases.

#### Post-Aggressive-Anger Behaviors

1. The students were removed from the learning center: two out of four observed cases.
2. The students demonstrated off-task behaviors: two out of two observed cases.

3. The students remained seated for approximately ten minutes or longer: two out of two observed cases.

#### Sniper Hit Behaviors

##### The Assault

1. The assailant was standing and moving before the assault: four out of four observed cases.

2. The assailant made a surprise attack: four out of four observed cases.

3. The assailant hit the victim one time: four out of four observed cases.

4. The assailant fled the area quickly: four out of four observed cases.

5. The incidents occurred during an unstructured period: four out of four observed cases.

6. The victim was startled and pursued the assailant: four out of four observed cases.

7. The proximity of the teacher was unknown: three out of four observed cases.

#### Victim Behaviors

##### Post-Aggressive Assault Behaviors of the Victim

1. The students/victims were hit, kicked, choked, or wrestled: 18 out of 18 observed aggressive-assault and sniper hit cases.



2. The students demonstrated in-seat behaviors after being assaulted: five out of five observed cases.

3. The students demonstrated quiet, nonverbal behaviors: five out of five observed cases.

4. The students demonstrated off-task behaviors: five out of five observed cases.

5. The students put their heads down on the desk or cried: three out of five observed cases.

#### Teacher Behaviors

##### Aggressive-Assault and Aggressive-Anger Interventions

1. Upon approaching the assailant, the teacher touched the assailant: 10 out of 13 observed cases.

2. The teacher verbally counseled or held an "adjustment" with the assailant for one minute or less: seven out of nine observed cases.

3. The students were standing during the counseling session: seven out of nine cases.

4. The teacher physically restrained the students: 7 out of 14 observed cases.

5. The physical restraint lasted for one minute or less: five out of seven observed cases. The range of time for physical restraint was approximately 30 seconds to 50 minutes.

6. In the aggressive-assault cases, the teacher was within five feet of the assault: 13 out of 14 cases.

7. In the aggression-anger cases, the teacher verbally and physically intervened within a two-minute period of when the students began to demonstrate off-task and pacing behaviors: four out of four observed cases.

### Patterns of Aggressive-Assault Behaviors

The findings of this study indicate that there were some patterns of behavior that co-occurred over time and events (Table 1). The conclusions presented represent a reasoned judgment based on the findings presented in Chapter IV.

The observations of the students over an extended period of time showed that the students had some consistency to their daily behavior. This behavior includes how one greets a friend, sitting positions in classrooms where seating was not designated, combing one's hair, and general interactions with others. Some students were very talkative and boisterous, trying to gain attention from peers and supervisors; some students were commonly quiet and withdrawn. Other students never entered the learning center except on special occasions when something big was going to "go down." Essentially, there was some consistency to each individual's mood. Naturally, there were days when the students were out of sorts, perhaps depressed or anxious, and conversely when one was extremely happy. This mood consistency of an individual's general behavior will be termed the baseline behavior region.

When one's internal controls are functioning, individuals will monitor external input from people and the environment and function

Table 1: Summary of Aggressive-Assault Behaviors

Behaviors	Observed Frequency	% of Total Assaults	% of Total Within Category
<b><u>Launching Events:</u></b>			
off-task	14/14	100	100
out-of-seat	14/14	100	100
automanipulation with hands	7/8	50	88
unstructured environ.	10/14	71	71
<b><u>Expanding Behaviors:</u></b>			
pacing	10/12	71	83
arms by sides	7/9	50	78
standing/moving	14/14	100	100
upper body & chin extended forward	4/4	29	100
<b><u>Assault Crisis:</u></b>			
1-4 hits, kicks, chokes, etc.	11/14	79	79
4 or more hits, kicks, chokes, etc.	3/14	21	21
physical contact 11 seconds or less	10/14	71	71
physical contact 2/14	2/14	14	14
30 seconds or less			
physical contact 2/14	2/14	14	14
31 seconds or more			
<b><u>Recycle:</u></b>			
pacing	8/9	57	89
arms by sides	7/8	50	88
automanipulation	8/8	57	100
<b><u>Needs:</u></b>			
off-task	5/5	36	100
in-seat	5/5	36	100
removed from area	10/14	71	71
unable to observe entire event			

**Note:** Total number of aggressive-assaults = 14.

within their baseline behavior region. However, there may be times when one expresses his feelings with aggressive-assault and aggressive-anger actions. These behaviors of conflict and crisis may be ones from which we can learn. The term "conflict" has two definitions. The first is one of danger, the second one of potential. How one deals with an individual in crisis may help to determine whether the crisis becomes one of danger or potential. Thus the stages in which one travels when demonstrating aggressive-assault behaviors will be termed "the LEARN Crisis Cycle." There are five stages in the LEARN Crisis Cycle, which this writer has delineated from the research:

Launching events: The first stage of the LEARN Crisis Cycle consists of launching events. The individual is in the first stages of arousal, and the individual has the potential to calm down and go back to his baseline behavior region or to become further upset. Events that may launch an individual beyond his baseline behavior region may include being nagged or teased, being required to perform an undesirable task, being late, and excess stress from the home or school environment. The observable behaviors that result from the student's inability to cope with added stress include students demonstrating off-task and out-of-seat behaviors and the students exhibiting automanipulation of objects and/or self with their hands. The other factor that continually occurred was that for some reason, whether the students were in a classroom setting (teachers within five feet, but no direct supervision) or whether it was a transitional period in the schedule (moving from one class to another), the setting leading up to an

aggressive-assault episode was usually unstructured, and the time of day was between 9:30 a.m. and 12:00 noon.

Expanding events: Once the launching behaviors have occurred, again the individual has the potential to expand these behaviors or return to the baseline behavior region. The expanding events include such behaviors as pacing with one's arms down by his sides. The individual is always standing and moving, and his upper body and chin may be extended forward. There is also the possibility that orienting responses occur during this phase. This study, due to technical equipment, was unable to record such events. However, Darwin (1872) described such orienting responses in his description of anger: nostrils dilate, nostrils quiver, eyes glare, body held erect for instant action, etc. Additionally, consistent descriptions of facial expressions and gestures exhibited while in an agonistic and quasiagonistic state have been documented by Brannigan and Humphries (1976), Blurton-Jones (1972), Grant (1969), and McGrew (1972).

Assault crisis or anger crisis: The individual progresses quickly into aggressive-assault or aggressive-anger behaviors. When the individual demonstrates aggressive-assault behaviors, there are typically four or fewer hits, kicks, chokes, or wrestles. The majority of fights last less than 25 seconds, with the average length being seven seconds. Commonly a teacher is within five feet of the individuals before an aggressive-assault incident. The assault is the most physically harmful stage in the cycle for both the aggressor and those assaulted. It is possible for this stage to last far beyond 25

seconds, particularly if the intervention strategy used during the assault is physical containment.

The anger crisis crescendo is the verbalization of distraught feelings. The significant difference in the anger crisis cycle is the omission of any physical altercation. The teachers were present and intervening with the individual before any possible physical encounter.

Recycle: Once the actual physical altercation has been halted, the individual moves into the fourth stage of recycle. The recycle stage looks much the same as the expanding stage. The individual paces, the arms are by the sides of the individual's body, and the individual will automanipulate objects or self with his hands. The reason this stage is termed recycle is due to the fact that the individual has two alternatives. The first is the potential to return to the assault stage. This may occur if the punishment for the transgression is unjust. Zillmann (1979) has stated that "if aversive stimulation is perceived as unjustified and arbitrary by the respondent, it is likely to promote rather than suppress hostility and aggression" (p. 221). The second alternative is for the individual to progress to a calmed, quieter state of behavior.

Needs: In the needs stage the individual becomes quiet and has no or minimal verbal interactions with others. The individual remains seated and continues to demonstrate off-task behaviors. Essentially the individual is in the depths of his baseline behavior region. The individual's move from the recycle stage to the needs stage is evidenced by an increase of muscle relaxation which is incompatible with

aggressive-assault behaviors. Interventions and instructions aimed toward changing the individual's behavior patterns are most effective in the needs stage.

It will normally take an individual anywhere from 5 to 50 minutes to progress through the LEARN Crisis Cycle. However, the average length of time for the pre, during, and post aggressive-assault behaviors to be demonstrated in this study was 00:27:25. However, it must be noted that under unusual circumstances, considering the mental severity of the assaultive individual and the intervention strategies employed by the supervisors, the crisis cycle potentially could continue for a few hours.

Finally, an unexpected pattern of behavior emerged as observations were made for aggressive-assault and aggressive-anger behaviors. This pattern of aggressive-assault has been labeled sniper hits by this writer. There were co-occurring behaviors that included (a) the assailant was standing and moving before the assault, (b) the assailant made a surprise attack, (c) the assailant hit the victim one time, (d) the assailant fled the area quickly, (e) the incident occurred during unstructured periods, (f) the victim was startled and pursued the assailant, and finally, (g) the proximity of the teacher was unknown.

The goal of this study was to determine if specific behaviors which are observable and characteristic of individuals in conflict exist and to determine the existence of specific behavior groups or types which are demonstrated in a developmental sequence. It may be concluded, based on the findings, that there are some patterns of

behavior that co-occur over time and event for aggressive-assault behaviors, aggressive-anger behaviors, and sniper hits. The conclusions drawn by the investigator have implications for teachers and administrators.

### Discussion

There are two major issues that warrant comment. The first is the ratio of aggressive-assault to aggressive-anger behaviors, and the second is the issue of supervisors touching individuals while the individual is demonstrating aggressive-assault or aggressive-anger behaviors.

Logically, one might assume that the rate of occurrence would be greater for the demonstration of aggressive-anger behaviors than of aggressive-assault behaviors. The fact that there was a 4.5:1 ratio of aggressive-assault and sniper hits to aggressive-anger case studies may be a consequence of the population observed, a deficit in language skills, inappropriate role models, and/or peer pressure. Critically, the students' interaction skills and ability to cope with crisis situations eventuated with physical rather than verbal confrontation solutions. The necessity to teach students how to appropriately express their feelings and concerns appears to be as essential to one's survival as reading and math. The results of the deficiency are at times life threatening.

Repeatedly the students requested teachers and staff to "not touch them." There are two obvious reasons for this request. The first is that the student is trying to control the situation, and this



is one manner in which to accomplish this task. The other truly is that the student does not want to be touched. The indicators used to determine if the behavior was assaultive or quasiagonistic included the victim's nonwilling participation, some physical altercations between two individuals, and the intensity of the incident as perceived by the victim, which was demonstrated by a change in the victim's behaviors that could be observed by others. This criterion was determined based on the numerous cases in which the students physically interacted with each other in a playful manner.

Bandura's (1973) definition of assault states that the injury to another individual may be psychological as well as physical. If, in fact, part of the definition for aggression-assault should include the recipient's perception of the incident, then there are major implications for teachers. For instance, in 10 out of 14 cases, teachers were physically involved with the students. The physical contact ranged from just a touch on an individual's shoulder or back to physical restraint. If assault is dependent on how one perceives the touch, a teacher who approaches a potentially dangerous situation and whose first response in trying to control that situation is to touch the angry student, the touch may in fact be perceived by the student as assaultive. One example of this may be Case Study 14. T5 approached Dan from behind and at Dan's left side. While speaking to Dan, T5 put his right hand on Dan's right shoulder. Dan knocked T5's hand off his shoulder and walked away. Dan may have perceived that touch/grasp on the back of his shoulder as assaultive. Within five seconds, Dan

assaulted another student. The question is whether Dan actually had been assaulted first. Before the touch, Dan had been demonstrating behaviors that are common in the expanding stage. The alternatives available to Dan at the time were to calm down or expand his behaviors further. The touch from the teacher may have been the reason for Dan's subsequent assaultive behavior.

### Implications

Based on the review of the literature and the analyses of the observations, the findings of this study have major implications for two areas in education. The first involves the area of teacher training programs. The second, a branch of the first, involves the implications for teacher-intervention techniques used when students are demonstrating aggressive-assault and aggressive-anger behaviors.

#### Teacher Training Programs

The information regarding aggressive-assault and aggressive-anger behaviors may be used to augment teacher training and inservice programs. There are five ways listed in which the information from this study may be of value to the field of education.

1. The identification of particular behaviors exhibited by the student before, during, and after an aggressive-assault incident will enable teachers, administrators, and parents to develop effective behavior management plans that will provide options of intervention techniques for each aspect of the LEARN Crisis Cycle.

2. The identification of particular precursor behaviors will enable a teacher to maximize her/his resources and deal with disruptive situations from a proactive position rather than a reactionary one.

3. The ability to redirect behaviors may reduce the possibility of injury for both the teacher and the student.

4. Many of the students in this study severely lacked socially appropriate modes to deal effectively with their feelings. The knowledge about aggressive-assault and aggressive-anger behaviors can be used for informational/instructional purposes with the students as a means to brainstorm about alternative behaviors and choices the student has in his repertoire for dealing with conflict.

5. In 13 out of 14 aggressive-assault case studies, the students fought within five feet of the teacher. One might consider the possibility that students fight near teachers, trusting that the fight will be halted.

### Intervention Techniques

There are four ways in which the information from this study will affect how a teacher intervenes with a student who is demonstrating aggressive-assault and aggressive-anger behaviors.

1. One point of thought is that the responses we make in interactions with others depend on learned behavior. If this is the case, the touching and physical containment of students while they are demonstrating aggressive-assault and aggressive-anger behaviors may be modeling to the students the very behavior we are trying to modify.

2. Muscle relaxation is incompatible with physical assault. Additionally, if the aversive is viewed as oppressive by the assailant, it is likely to aggravate the aggressive-assault behaviors (Zillmann, 1979). In this study when a student was physically contained, the containment was terminated before the student demonstrating muscle relaxation. In five out of seven physical containments, the student fought again within a period of 5 to 30 minutes.

3. Most teacher/student verbal interventions or counseling sessions after an aggressive-assault occurred lasted less than one minute. Six out of 14 victims were counseled after the assault. The counseling session usually lasted less than one minute. It seems that if the students are most vulnerable at this time (demonstrating withdrawn behaviors such as head on desk, crying, quiet, off task, etc.), more time needs to be allotted for the critical task of teaching new coping behaviors.

4. The students demonstrated standing and moving behaviors in the expanding and recycle stage. During teacher/student "adjustments" or counseling intervention sessions, the student was standing and moving in 13 out of 14 cases. The implication is that perhaps the students were not ready to listen to any suggestions from the teacher.

### Recommendations

There are two major areas of recommendations made by this writer. The first includes the advocacy of certain intervention techniques that will aid in effectively and efficiently dealing with conflict in the classroom. The second includes recommendations for

further studies in the area of aggressive-assault and aggressive-anger along with curriculum needs for schools.

### Intervention Techniques

The interventions recommended resulted from the observations made in this study. It is the writer's position that with the implementation of these suggestions, the probability of students and teachers being injured in the classroom will be decreased, and the potential for teacher/student interactions to be more successful in terms of eventually providing socially appropriate alternatives to dealing with angry feelings will be increased.

1. Upon the first demonstration of off task, out of seat, and automanipulation with the hands, the teacher needs to take at least one minute to talk with the student. This will allow the teacher to assess the degree to which the student is upset and help the student to verbally express his feelings while potentially avoiding any physical altercations.

2. The teacher needs to get the student to sit down both at the onset or launching and the expanding stages of the LEARN Crisis Cycle and during the recycle stage of the cycle. Muscle relaxation is incompatible with assault. Once the student is seated, the teacher will have a better chance of discussing alternatives to dealing with angry feelings.

3. When approaching a student who is demonstrating aggressive-assault and/or aggressive-anger behaviors, the teacher should not touch the student unless it is absolutely necessary.

4. If it is deemed necessary to physically contain a student until the student is able to maintain his own behavior, the individuals who are containing that student should not release the student until they can feel the student's muscles relax.

5. While physically containing a student, the person who has the best rapport with the student at that moment should be the only person talking to the student. When two or more supervisors start speaking to the student at once, it can be confusing for the student.

6. A student should not be released because he requests same; the supervisor is the person who should be setting the limits and conditions as to when the student will be ready. In other words, when the student is quiet and relaxed, the supervisors will release him.

7. The physical-containment techniques should allow the student some freedom of movement as the student starts relaxing.

8. The "adjustment" or counseling session held after the student is relaxed should be geared toward what options are available to a person who is having angry feelings. This session should have the student seated and should last for longer than one minute.

9. The majority of the aggressive-assault incidents occurred during unstructured transitional periods. To provide added safety for the students, alternatives should be developed for class movement.

### Further Studies

1. Further study in this area with greater financial support, sophisticated equipment, and added human resources may aid in determining more detailed patterns of behavior for aggressive-assault, aggressive-anger, and sniper hit incidents.

2. A comparison may be made of intervention strategies ranging from verbal interventions to the most restrictive physical containments. Evaluations need to be made to determine if nonphysical interventions will modify aggressive-assault behaviors versus the use of physical interventions. This study needs to include the amount of time a teacher spends interacting with a student before, during, and after the aggressive-assault. A follow-up may include interviewing the student to compare the student's perception with the teacher's perception of the incident.

3. A study could be conducted comparing the amount of time one is physically involved with another individual and the time it takes for the assailant to get back to baseline behavior region. This study might seek to determine a continuum for physical restraints; i.e., is a light touch as threatening to an individual as a full body containment?

4. A study needs to be conducted to systematically address the issue of social-emotional development as it relates to the responsibility of the school. Teachers need training, resources, and curricula to aid in their dealing with the various emotional conflicts that arise daily in a classroom.

5. A field study needs to be conducted observing victims. The students who are consistently the targets for aggressors may, in fact, set themselves up for that role. The study may provide some suggested interventions for teachers to break the victim's pattern of behavior.



## APPENDICES

**APPENDIX A**

**DEFINITION OF TERMS FOR BODY AND**

**FACIAL MOVEMENTS**

## A CONTRIBUTION TO A LIST OF THE UNITS OF NON-VERBAL BEHAVIOUR WITH DEFINITIONS

The following terms and definitions form part of the list used by the authors. We have included those units which are most probably concerned in interpersonal communication, and have generally omitted units which are vocalisations, or primarily locomotory, or which describe the various kinds of resting sitting postures, or sighing and swallowing, although according to the social situation these latter units also often have signal value. We have commented on units and definitions published by other authors only where necessary to avoid the confusion of different terminology or to clarify definitions.

### UNITS IN THE MOUTH REGION

*Simple smile* - Lips together but not compressed, drawn up and out at the corners. This unit includes both *simple smile* and *wide smile* defined by Grant (1959).

*Upper smile* - The mouth corners are drawn up and out, remaining pointed, lips parting to reveal some of the upper set of teeth, but not the lower.

*Broad smile* - Similar to *upper smile*, but the lower lip is pulled down to reveal some of the lower teeth. The vocalisations of laughter are often associated with this smile, but can occur in most other forms of smiling.

*Compressed smile* - As *simple smile*, but lips compressed and tending to be pressed slightly into the mouth.

*Wry smile* - An asymmetrical smile in which the lips remain closed. One side of the face adopts the form seen in *mouth corners down* while the other side adopts the form seen in a *grin* or in *simple smile*.

*Long smile* - Lower jaw pushed out so that the incisor teeth are directly exposed and usually in contact, both upper and lower sets being exposed, and mouth corners are drawn up and out tending to be rounded not pointed.

*Lip-in smile* - Similar to *upper smile*, with the lower lip drawn in between teeth but not bitten.

*Play face* - The mouth is widely opened as in *open mouth*, and the mouth corners tend to move out and up, producing the pointed appearance characteristic of smiles. The teeth are mainly or entirely hidden by the lips.

*Grin* - As *simple smile*, but involving one side of the mouth only.

*Open grin* - General appearance rather as in *upper smile*, but instead of being passively lifted from the mouth corners the top lip is actively raised as in *wry* and is slightly out-turned. Often on one side only, but may be symmetrical.

Intermediates (*false smile*) between symmetrical *open grin* and *upper smile* are seen in attempts to mimic an *upper smile*.

11. *Mouth corners tremble* – The corners of the mouth tremble laterally. Often associated with sad crying, just prior to tears.

12. *Mouth corners back* – The corners of the mouth are drawn well back but not lifted, the lips remaining together.

13. *Squared mouth* – Lips opened widely and drawn back to give the mouth a rather squared appearance.

14. *Mouth corners out* – As in *mouth corners back*, but the lips are parted. Teeth visible but not displayed so obviously as in *oblong mouth*. *Oblong mouth* of Grant (1969) includes both this unit and the next.

15. *Oblong mouth* – As in *mouth corners out* but the lower jaw is pushed forwards so that the upper and lower incisors are displayed meeting in opposition. The mouth corners tend to be roundly squared, not pointed.

16. *Intention bite* – As *oblong mouth* but the lower jaw is juttied pushing the lower set of teeth as far forward as possible and they are broadly displayed by lowering the lip. The upper incisors are hidden by the upper lip.

17. *Lip up* – As *sneer* but a fleeting movement not held even briefly at the extreme position.

18. *Sneer* – The upper lip on one or both sides is lifted, more to the side of the centre than near the mouth corners, and the raised position is held for one or more seconds.

19. *Bite lip* – The upper or lower lip is gripped between the teeth. When the mouth is closed this cannot be directly seen, but can be inferred from slight jaw movements and an inward movement of part of a lip. Equivalent to *chew lips* (McGrew, Ch. 5).

20. *Tight lips* – The lips are pressed tightly together but are not appreciably turned into the mouth and the distance between the mouth corners is not appreciably shortened. This definition is more specific than that used by Grant (1969) which does not differentiate *lips in*.

21. *Lips in* – The lips are pressed together and turned into the mouth.

22. *Lower lip out* – The lower lip is pushed up over the upper then curled forward and out.

23. *Point* – Both lips are protruded and though held together are full, not compressed. There is less movement of the mouth corners towards the centre than in *purse*.

24. *Purse* – The mouth corners are pulled in towards the centre, and the lips tightly compressed and pushed forwards.

25. *Small mouth* – The mouth corners move in towards the centre but without noticeable compression or protrusion of the lips.

26. *Twist mouth* – An asymmetrical unit in which the lips are pressed together and slightly protruded centrally, one corner of the mouth being brought in towards the mid-line, the other corner being drawn back.

27. *Lips forward* – The lips are parted, mainly in the centre, and protruded. The corners of the mouth tend to be pointed and are not squared and sometimes move a little towards the mid-line.

28. *Open mouth* – The mouth is opened widely, but the teeth are not shown, except occasionally the tips. The mouth corners are not drawn back and up as in a smile, but remain in the neutral position.

29. *Spit* – Action of spitting.

30. *Kiss* – The lips are moved forwards, and touch, part of the same or another person (specify).

31. *Intention speak* – The mouth suddenly opens in a context where speech might be expected, but no words issue.
32. *Chew* – Variable chewing movements of the jaws. Not always associated with material in the mouth.
33. *Tongue between lips* – Just the tip of the tongue protrudes between, and is gripped by, the lips.
34. *Tongue out* – The tongue is well protruded beyond the lips. This includes sticking out the tongue at another person, and the protrusion of the tongue sometimes seen during 'excited play' or during 'delighted surprise'.
35. *Lick* – The tongue moves forward and its tip briefly touches the parted lips.
36. *Mouth corners down* – The corners of the mouth are drawn down, the lips do not pout forward and are usually closed but occasionally may be slightly apart.
37. *Scowl* – A unit combining *mouth corners down* and *lower lip out*, the chin usually acquiring a crumpled appearance.
38. *Lower lip tremble* – Up and down trembling movement of the lower lip, which may occur during *lower lip out*, *scowl* or *mouth corners out*.
39. *Yawn* – The mouth opens widely, roundly and fairly slowly, closing more swiftly. A swelling of the throat is usually visible, accompanied by a deep breath and often closing of the eyes and lowering of the brows.
40. *Basic mouth* – Lips in a resting position. This varies from individual to individual and the lips may or may not be parted.

#### UNITS INVOLVING THE EYEBROWS

41. *Raise* – One or both eyebrows are raised and are held, at least briefly, in the raised position. They are not drawn in towards the mid-line and are not tilted.
42. *Flash* – A swift raising of the eyebrows which is not held, the brows returning immediately to the neutral position.
43. *Angry frown* – The eyebrows are lowered mainly in the midline towards the nose, tending to draw together. *Puzzled frown*, distinguished by Grant (1969) is a less intense form of *angry frown* in which the lowering of the brows is minimal.
44. *Sad frown* – The inner ends of the eyebrows have kinked and slightly lifted and the outer ends are lowered.
45. *Sad raise* – The eyebrows are raised sloping as in *sad frown*.
46. *Low frown* – The eyebrows are drawn low against the upper eyelids and show no clear tilting outwards or inwards.
- The individual's eyebrows in their usual resting position are termed *neutral*. This position may vary somewhat from person to person.

#### UNITS INVOLVING THE EYELIDS AND EYE SURROUNDINGS

47. *Shut* – The eyelids close and remain shut for about a second or longer, before opening again. (In a normal blink there is no noticeable pause in the closed position.) Equivalent to *eyes closed* (Grant, 1969).
48. *Blink* – A burst of rapid blinking. (Single, isolated blinks are not included.)
49. *Narrow eyes* – Both upper and lower eyelids draw partly together, narrowing the area of eyeball visible. The eye region appears tense. This unit may or may not be held in the narrowed position for several seconds.
50. *Droop* – The upper eyelid falls so that the eyeball is almost, but not quite, covered. The lower lid does not move, and the eye region appears relaxed.
51. *Wink* – As *shut* but for one eye only, the other eye usually looking at another person.

52. *Stare* – The eyelids are held wide open, exposing a greater area of eyeball than in the usual *open* position. This unit is equivalent to that termed *eyes open* (Grant, 1969) and is not the same as his unit *stare*.

53. *Widen* – As *stare*, but the widening of the eyes is momentary. Relates to *stare* rather as *flash* relates to *raise*.

54. *Pouch* – A small area of skin immediately beneath each eye swells. The swelling is not coincident with 'tiredness pouches', being above these, and cannot be properly produced by merely screwing up the face.

55. *Tears* – Excess moisture in the eyes.

56. *Open* – The usual position of the lids when the eyes are open.

#### UNITS OF GAZE DIRECTION

These definitions depend primarily on the eye movements of gaze direction and on the subject of gaze, not on head movement.

57. *Look at* – Gaze directed at another person. Specify the part, e.g. look at the face, the body, the legs.

58. *Look away* – Gaze directed away from the other person.

59. *Look down* – Gaze directed at own person. This definition is different from that given by Grant (1969).

60. *Look up* – The gaze is suddenly directed upwards, then usually more slowly returns to a level or downward direction. The suddenness of the unit makes it quite distinct from *look away* in an upward direction.

61. *Look around* – The gaze continually wanders, but otherwise as *look away*.

#### ADDITIONAL FACIAL UNITS

62. *Grimace* – The eyes are partially or completely closed, with the skin on the bridge of the nose and around the eyes wrinkled. The corners of the mouth are drawn out and slightly down, the lips parting to reveal the upper set of teeth. May be more exaggerated on one side of the face.

63. *Screwface* – The skin on the bridge of the nose is wrinkled by an upward movement of the skin immediately to the sides of the nose and by a slight downward movement of the brows. The eyes are partially closed, with wrinkling beneath them. The upper lip lifts and may partly expose the upper teeth but this movement is achieved in a different way to that of *sneer*. Probably equivalent to *wrinkle* (Grant, 1968) and *pucker face* (McGrew, Ch. 5).

64. *Flare* – Widening of the nostrils.

65. *Twitch* – A tic-like twitching in the upper cheek region.

66. *Sweat* – Beads of sweat appear on the skin.

67. *Facial reddening* – A reddening of the facial skin from its normal colour.

68. *Blanch* – A paling of the facial skin from its normal colour.

69. *Smooth face* – The cheeks flatten into harder-looking planes; no special expression of mouth or eyes but there is an impression of tenseness of the facial muscles.

70. *Normal face* – No special expression present but face not slack as in sleep.

#### UNITS DEFINED BY HEAD MOVEMENT

71. *Threat* – The head jerks sharply forward, remaining level, towards the other person. Usually accompanied by *look at*.

72. *Head forward* – The head is held in a forward position like that at the end of *threat*. Not necessarily preceded by *threat* as the forward movement of the head is often gradual not sudden.

73. *Chin out* – The head is tilted, pushing the chin forward and stretching the throat.

74. *Head to side* - The head is tilted to the side. Equivalent to *head tilt* (McGrew, Ch. 5).
75. *Head movement* - A burst of varied movements of the head, not described by the definitions of other units.
76. *Jerk* - The head abruptly jerks up and to one side and may move the hair.
77. *Nod* - Affirmative gesture. Repetitive, rhythmic, dorso-ventral tilting of the head.
78. *Shake* - Negative gesture. Oscillatory partial rotation of the head on the neck.
79. *Bob* - The head quickly moves once up and down, like a short inverted nod.
80. *Chin in* - The chin is tucked tightly against the throat, the head tilting forward without being thrust forward.
81. *Hang* - The head is tilted forward fully until the gaze is directed almost vertically down.
82. *Head rock* - An antero-posterior rocking of the head and neck, distinguished from nodding by its orientation, the involvement of the neck and its slower rhythm.
83. *Evade* - A sharp head, or head and shoulder, movement away from the other person.
84. *Level* - Head in a level, neutral position.

#### UNITS FORMED BY THE HANDS AND ARMS

85. *Shrug* - A fairly sudden raising of both shoulders.
86. *Sit on hands* - Sitting on the fingers of one or both hands.
- The following five units are each to be qualified by the object and person of their activity, e.g. *scratch arm self* or *pick jacket interviewer*.
87. *Scratch* - The finger nails are used to scrape, usually repetitively, at skin, hair or clothes.
88. *Caress* - Stroking movements made mainly by the finger pads - not the extreme tips and nails - against the skin, hair or clothes. The rate of repetition is slower than in *scratch* and *rub*.
89. *Rub* - Similar to *scratch* but the nails are not used. Almost any part of the hand or fingers may be used.
90. *Pick* - The thumb and forefinger are used as if (or actually) to pick something from the skin, hair or clothes.
91. *Adjust* - One or both hands are used manipulatively to alter the position of clothing or hair.
92. *Fumble* - A twisting and turning movement of the fingers of each hand with those of the other. Similar fumbling often occurs with a ring, tie, hair etc. and the object of the activity is then specified, e.g. *fumble ring*.
93. *Tap* - A repetitive rhythmic movement of the fingers, tapping or jerking in sequence.
94. *Hand flutter* - Hand or hands with fingers outstretched, palms facing the actor, normally in front of the eyes, the fingers being shaken rapidly by an oscillating partial rotation of the wrist and forearm.
95. *Digit suck* - Finger(s) or thumb in mouth.
96. *Mouth* - The fingers rest against the lips, but do not touch the teeth.
97. *Cup* - The hand is brought up sharply and cupped over the mouth.
98. *Teeth* - The tips or sides of the fingers are pressed hard against, but not between, the teeth.
99. *Cover eyes* - The hand is cupped to cover the eyes, the palm turned towards the face.

100. *Face* – The fingers, and usually the palm too, rest against the face (excluding the mouth). The palm is not directed towards the other person.
101. *Finger face* – One or more fingers are extended with their tips touching the face, the palm not touching the face and tending to be turned towards the other person.
102. *Offensive beating posture* – The arm is raised with the elbow out to the side, and the hand some inches to one side of the head. The hand is usually rather to the front of the ear, with the palm foremost, fingers extended or loosely flexed.
103. *Defensive beating posture* – This differs from the offensive beating posture in that the raised hand is close to the ear or side of the head, the fingers often touching the hair or skin. The hand tends to be further back and is not lifted so high. This definition differs from that given by Grant (1969). Intermediate positions between this and the preceding posture often occur, and are referred to as *beating posture*.
104. *Beat* – The hand is brought from the *beating posture* position sharply into contact with another person.
105. *Incomplete beat* – As *beat*, but delivered out of range or with minimal movement and force. This unit is often preceded by *defensive beating posture*.
106. *Hand on neck* – The palm of the hand is placed on the neck.
107. *Arm over face* – One or both arms are raised and crooked over the head, palms facing the head.
108. *Clap* – The palms of both hands are brought together sharply.
109. *Pound* – A sharp blow by one hand against the other immobile hand or against an object such as a table.
110. *Push gesture* – A steady but fairly rapid movement of the hands outward from the actor, palms facing directly away from the body.
111. *Demonstrate* – A movement of arm, hand or fingers used to describe the direction, shape, size or other qualities of that which is being talked about.
112. *Show* – The arm, with an object in the hand, is extended towards another person.
113. *Gesture* – Variable movements of arm, hand or fingers, usually during conversation, not covered by other gestural unit definitions. It is possible to break *demonstrate* and *gesture* into many subunits, defined by the speed, orientation and extent of the movements.
114. *Flat gesture* – The hand is opened flat, palm facing the ground, then moved sharply a short distance diagonally forward and sideways parallel to the ground. The elbow points to the side.
115. *Palms up* – The hands are held to the front of the body then the wrists are rotated to bring the palms uppermost. Sometimes accompanies *shrug*.
116. *Akimbo* – Hand on hip, the bent elbow pointing laterally away from the body.
117. *Fold* – Forearms in contact with each other along their whole length, held horizontally across the chest.
118. *Fist* – One hand grips itself, the fingers curled tightly into the palm.
119. *Link* – The two hands clasp each other without great force.
120. *Grasp* – The two hands clasp each other very tightly; white or red marks may be visible on the skin.
121. *Hands behind back* – The hands are placed behind the back, usually with *link*.
122. *Hold* – One or both hands grip some object (specified).
123. *Punch* – Hand as in *fist*, arm extended sharply to deliver a blow.



124. *Touch* - Hand lightly placed on object or person (specify).

125. *Single* - The hands are separate, immobile and not covered by the definition of any other unit.

#### LOWER LIMB UNITS

There are many units defined by movements of the lower limbs, such as the various kinds of locomotion, sitting and standing. However the lower limbs become particularly expressive when the individual is seated in a chair and they are freed from locomotory requirements. The following are some of the common units to be seen in a seated person.

126. *Cross legs* - Legs crossed at knee level or ankle level.

127. *Shuffle* - Irregular movements of the foot against the floor.

Also seen when standing.

128. *Tap foot* - A fairly regular tapping of the sole of the foot against the floor.

129. *Leg tremor* - A rapid trembling of the whole leg particularly noticeable at the knee, the foot tapping against the floor much faster than in *tap foot*.

130. *Foot* - Movement of the foot, when free of the floor, irregularly around the ankle joint.

131. *Foot rock* - A regular up and down movement of the foot when free of the floor.

132. *Circle* - A circling motion of the foot around the ankle joint, often involving the whole lower leg in movement.

133. *Swing* - A to and fro swinging of a crossed leg. Other units whose names are self explanatory are *feet back*, *feet forward*, *feet apart*, *feet together*, *knees together*, *knees apart*.

#### TRUNK UNITS

Many of the units which fall under this heading are self explanatory and we shall not define them here (see Grant, 1969); they include, *lean forward*, *lean back*, the variable movements seen in getting comfortable (*settle*), the *to-fro* *rock* and *side rock* movements seen particularly in psychotics, and other units. In the three units defined below the trunk is involved as one component of a complex posture.

134. *Slope* - A composite unit of *chin in*, *lean back*, and *hands behind back*. Occasionally the hands *link* in front of the waist.

135. *Crouch* - The legs are flexed and the body is bent forward so that the forehead is close to the knees. The shoulders are drawn forward, and the chin is tucked tightly into the neck. The arms may cover the head.

136. *Hunch* - Intermediate between *chin in* and *crouch*, in which the shoulders are drawn forward and the back is rounded.

*The check list*

The behaviour patterns described in the following pages comprise the majority of the units at present being used in this department in an application of ethological methods to the study of human behaviour. A number of situations are being, or have been observed. These are: interviews between individual psychiatric patients and doctors, group meetings of patients and doctors, free acting groups of patients, groups of normal adults, and free playing normal nursery school children. This last group provided the majority of illustrations for this article.

A preliminary sequence analysis (Grant 1968) indicated that the relationships between the behaviour patterns were the same in both patient and normal groups, and remarks relating to function and motivation are dependent on this analysis and on a knowledge of the situations in which the various patterns are shown.

The elements are grouped according to the part of the face or body involved.

*a. Direction of gaze*

Except when the eyes are closed an individual is always looking at something. However, for recording purposes in the social situation, the direction of gaze can usefully be split up into the following categories.

1. Look at. Looking at other person's face.
2. Look away. Looking to one side of other person.
3. Look directly away. Gaze fixation on something impersonal which, during observation, would be named, e.g. at window.
4. Look down. Looking down at floor.
5. Look up. Looking up at ceiling.
6. Look around. The gaze wanders, there is no fixation.
7. Stare. Looking at with the eyes wide open (see no. 12).

As looking is an almost continuous activity all other expressions will be combined with one or other of the gaze elements, raising the problem of the modifying effect of one element on another (see discussion).

#### *b. Eyelids*

8. Eyes closed. The eyelids close and stop in closed position for an appreciable time (see plate 11*b*). This should be contrasted with 'Blink' where there is no appreciable stop.
9. Blink. A burst of blinking. The normal level of single blinks is not recorded. Blink occurs in two distinct parts of the behaviour sequence; associated with crying, where it may well be functional in clearing tears from eyes, and associated with 'Look away' as part of incipient flight.
10. Narrow eyes. Eyelids partly closed. Usually associated with 'Look at'.
11. Wink. As in normal usage. Like one or two other elements, e.g. nod and shake, this has a deliberate, culturally determined meaning and is what might be called a speech equivalent.
12. Eyes open: Eyelids wide open. When combined with 'Look at' (no. 1) is recorded as 'Stare' (no. 7).
13. Pouch. Swelling of loose skin under eye. This element in common with one or two others, e.g. flush, sweat, is presumably under autonomic control.
14. Tears. Actual moisture in eyes.

#### *c. Eyebrows and forehead*

15. Flash. A quick raising and lowering of eyebrows.
16. Eyebrows raised. The eyebrows are raised and stop in the raised position for an appreciable time (see plate 10*a*).  
These two elements are very similar in use. They seem to have an attractive function, drawing the attention of the other person to the face. They are concerned with regulation and timing of speech.
17. Aggressive frown. The eyebrows are drawn together and drawn down in the centre. This is the commonest expression in the aggressive situation (see plates 7*a*, 9*b*).
18. Puzzled frown. The eyebrows are drawn together, less strongly than in 'Frown' (no. 17), and they remain flat.
19. Sad frown. The brow is wrinkled horizontally by the scalp being drawn forward. The eyebrow tilts down at the outside corner.  
The frowns, especially sad and puzzled, can be associated with 'Eyebrows raised', drawing attention to the individual (see plate 10*b*).

#### *Mouth, lips and tongue*

Of the two major areas of expression in the face, the upper and lower halves, the lower, with the extreme mobility built into the lips and mouth, has the greatest number of expressive positions.

The following list of mouth movements is partly arranged in order to indicate the major groups of expressive movements.

### a. *Smiles*

20. **Simple smile.** The lips are drawn slightly back and up and are closed (plate 1a).
21. **Wide smile.** Similar to 'Simple smile' but the lip corners drawn fully back.
22. **Grin.** Similar to 'Wide smile', but involving only half of the mouth.  
'Simple smile' and 'Wide smile' may be two ends of a continuum. 'Simple smile', however, is usually seen when the child is alone, whereas 'Wide smile' is shown to another person.
23. **Upper smile.** A smile showing the top teeth (plate 1b). This is the commonest social smile. It is used in greeting situations.
24. **Lip in smile.** A variation of 'Upper smile' occurs when the lower lip as well as covering the lower teeth is drawn in between the teeth. This may well be a combination of 'Upper smile' (no. 23) and 'Bite lip' (no. 43).
25. **Broad smile.** The lips are drawn up and back and both upper and lower teeth are shown (plate 2a). Seen during excitement, fast chasing play, etc.
26. **Open grin.** Related to 'Broad smile' as 'Grin' is to 'Simple smile'. Half of the mouth only is involved.
27. **Oblong smile.** Similar to 'Broad smile' except that lower jaw is pushed forward slightly so that teeth are directly opposed. The corners of the mouth round slightly. This unit is shown when some agonism is present along with the pleasurable excitement.

### b. *Flight elements*

The next group of elements is associated with fleeing from or being submissive to another individual.

28. **Mouth corners back.** The corners of the mouth are drawn well back but not lifted. The lips are together.
29. **Oblong mouth.** Similar to 'Mouth corners back' except that the lips are apart showing the upper and lower teeth (plate 3a).  
As well as differing in the opening of the mouth these elements differ in the length of time during which they are displayed. 'Mouth corners back' is a brief movement. 'Oblong mouth' may be shown for some considerable period of time. However, the situations in which they occur are very similar.
30. **Lick lips.** The tip of the tongue is passed over the lips.
31. **Swallow.** Although not actually an expression this can be easily recognised and recorded. It is placed here because, together with 'Lick lips', it associates well with flight and submission.

Both elements may well be responses to autonomic stimulation and drying of the mouth.

32. **Mouth corners down.** The lips are closed and the corners of the mouth are drawn down (see plate 11a). This element is frequently associated with 'Sad frown' (no. 19) as in the typical sad face of the cartoonist.
33. **Lower lip out.** The lower lip is pushed up over the upper then curled forward and out.
34. **Lower lip tremble.** A variation of 'Lower lip out' in which the lip trembles.

lips in. The lips pressed together and then drawn between the teeth. This element often indicates that crying is very close and it can be seen as an attempt to stop crying.

### *Aggressive elements*

The next group of elements is associated with aggressive activity.

36. Lips forward. The lips are apart and pushed forward. The mouth is open to some extent (see plate 7b). This unit is frequently associated with 'Look at' and 'Aggressive frown' and forms part of the full aggressive display.
37. Small mouth. The corners of the mouth are drawn in towards the centre so that the mouth appears small (plate 6a). There is little or no pushing forward of the lips as there is in 'Purse' (no. 42).
38. Tight lips. The lips are pressed tightly together.

The last two elements are very closely associated with actual hitting in the children, as opposed to the 'Aggressive frown' (no. 17) and 'Lips forward' (no. 36) which more commonly occur simply as displays.

39. Intention bite. The lower jaw is pushed forward and the lower lip dropped to expose the lower teeth (plate 6b). This element is associated with aggressive activity and has been observed to lead directly to biting the other child. There seems little doubt that it is an intention movement of this bite.
40. Sneer. The centre of the upper lip is drawn up to expose the teeth. Quite often this unit is one-sided, only one half of the lip being drawn up (see plate 5a). This drawing up of the lip results in the wrinkling on the bridge of the nose, cf. 'Wrinkle' (no. 51).

We have distinguished a very abbreviated form of this element as 'Lip up', where the lip is raised and dropped immediately. 'Sneer' lasts an appreciable time, say a second or longer. The situations, however, remain the same and there is probably no real difference.

### *Other mouth elements*

41. Twist mouth. The lips are pressed together, pushed out in the centre, then twisted to one side. Cf. 'Purse' (below). In a preliminary analysis this element was shown to indicate an ambivalent situation between approach and avoidance.
42. Purse. The lips are pressed together, then pushed out in the centre. This is similar in appearance to 'Twist mouth' without the final twist. The indications are that it is again an ambivalent response.
43. Bite lip. One or other, usually the lower, lip is held between the teeth (see plate 2b).
44. Open mouth. The lower jaw drops and the mouth hangs open. This element is most commonly seen in the children when they are watching something exciting or unusual.
45. Tongue. The tip of the tongue shows between the lips.
46. Tongue out. The well known pattern of sticking the tongue out at another person.
47. Yawn. The mouth is stretched wide open and a deep breath taken.

Although a distinctive sound is made the facial expression is probably the most noticeable aspect of this element.

### *The head and full face*

#### *a. Aggressive elements*

48. Head forward. The head is brought forward towards the other person. This is a distinctly slower movement than is seen in the following element Threat and the position is likely to be held for some considerable time.
49. Threat. A sharp movement of the head towards the other person.
50. Chin out. The chin is pushed forward, tilting the head back and stretching the neck (see plates 7a, 7b).
51. Wrinkle. The skin on the bridge of the nose is wrinkled by much the same movement as 'Sneer'. However, the teeth are not exposed. The lips usually remain together and there is no rolling out of the top lip (see plate 9a).

#### *b. Flight elements*

52. Evade. A sharp head or head and shoulder movement away from the other person (plate 3b). Notice the similarity to the equivalent aggressive movement 'Threat' (no. 49).
53. Chin in. The chin is tucked strongly into the chest (plates 5b, 9b). This is one of the commonest submissive elements in human behaviour. The most typical situation for its occurrence is the child approaching a dominant adult.

#### *c. Speech equivalents*

Two head movements are used in place of speech during ordinary conversation. They are:

54. Nod. the 'Yes' movement.
55. Shake. the 'No' movement.

#### *d. Control movements*

Several head movements are used apparently to attract the attention of the other person and are associated with the control of the flow of speech. 'Flash' (no. 15) and 'Eyebrows raised' (no. 16) act in the same way and are frequently associated with the following elements.

56. Head to side. The head is tilted to one or other side (plate 10a).
57. Bob. A quick upward movement of the head rather like an inverted nod.
58. Jerk. A quick upward and sideways movement of the head similar to the movement when hair is jerked out of the eyes.

The previous three elements are specific motor patterns easily recognised and used in the situation described. However, many small jerky movements of the head appear to be used in this way and a blanket term is used to cover these. This is:

59. Head movement. Burst of variable head movement not otherwise described.

**c. Other head elements**

- 60. Head rock. The to and fro body rocking movement (no. 100) is occasionally reduced to this head movement.
- 61. Twitch. Spasmodic, tic-like muscle movement in the face.
- 62. Smooth face. The face is expressionless but it is possible to see that there is quite high muscle tone. This element is frequently associated with 'Still' (no. 102) and acts in the same way in the behaviour, that is, it reduces the flow of information.

**Hand and arm movements**

Because of the range of mobility in the hand and arm this section could be much further sub-divided than will be done here and it will be seen that several elements cover a wide variety of movements. However, it is hoped that the main social signals have been isolated.

**a. Gestures**

- 63. Gesture. Free hand and arm movements, other than the three elements below associated with talking.
- 64. Demonstrate. A gesture with a definite meaning, e.g. 'The box was so big' demonstrated by hand movement.
- 65. Push gesture. A gesture in which the palm of the hand is turned away from the person showing the gesture, and the elbow is then straightened as though pushing something away.
- 66. Flat gesture. A gesture in which the hand is fully open with the palm facing the ground and then moved away from the body parallel to the ground.

**b. Aggressive and flight elements**

- 67. Beat. A blow from the open or closed hand. The elbow is bent and the movement is from the elbow. There are two variations:
  - a. Offensive beat. The blow is downward with the elbow held out to the side (plate 8b).
  - b. Defensive beat: The elbow is forward, the fore-arm is dropped and the movement of the hand is upwards.

Both variations are frequently seen as postures. That is:

- 68a. Offensive beating posture. The hand is raised with the elbow out to the side (plate 8a).
- 68b. Defensive beating posture. The elbow is brought round towards the front of the face and the fore-arms drops down from it.

These may be shown at considerable distance from the other person.

- 69. Hand on neck. The palm of the hand is placed on the back of the neck. Frequently a considerable pull is exerted. This is typically an adult pattern which may be related to the 'Beating postures'. During observation of psychotherapeutic groups it was frequently shown by individuals who shortly afterwards expressed verbal aggression.
- 70. Arm over face. This may be seen as an extension of the 'Defensive beating

posture' and again is a defensive posture. The elbow is brought fully forward and completely covers the face.

71. Arm over head. The arm goes right over the head, sometimes near to the back of the neck. Again similar to 'Arm over face' and again probably an extension. This element is often associated with 'Crouch' (no. 93).

*c. Hand and face elements*

72. Hand to face. This is a blanket term covering any occurrence of the hand placed on the face other than the specific elements described below.
73. Pinch nose. The bridge of the nose is grasped between the thumb and forefinger.
74. Finger in mouth. A finger is put into the mouth (plate 11b).
75. Finger on teeth. One finger is pressed against the front of the teeth.
76. Lean on hand. The face is cupped in the palm of the hand. Frequently the elbow is leaning on the desk top.

The hands are used in order to cover one or other of the various functional organs located on the face and head. In the social situation that we are describing the most common of these are:

77. Cover eyes. The hand covers the eyes.
78. Hand on mouth. The hand covers the mouth.

These elements occur in the behaviour at points where a break in information flow might be expected or desired. It is interesting that 'Cover eyes' is commonly used in situations where it would appear that the individual wishes to cut out verbal information, while the much less common act of putting the hands over the ears seems to be reserved for actual noise.

*d. Grooming elements*

A number of hand movements concerned with self-grooming have been observed in the social situation. These are recorded in five main sub-divisions:

79. Caress. A gentle smoothing action using the fingers or the palm of the hand.
80. Rub. A harder, more concentrated action than 'Caress' using the tips of the fingers or the knuckles.
81. Scratch. Even more concentrated and generally using the nails.
82. Pick. An action as though, or actually, picking something off the surface using the thumb and forefinger. This frequently refers to clothes.
83. Adjust. Refers almost exclusively to clothes. An alteration to the lie or position of the clothes.

During observation each of these elements is generally qualified by the area involved, e.g. 'Scratch leg', 'Adjust tie', 'Rub nose', etc. Three elements in this general class are common enough to be recorded specifically. They occur in the behaviour pattern at times when ambivalence is strongly indicated.

84. Scratch head. Scratching the scalp (plate 11c).
85. Groom head. Running the fingers backward through the hair.
86. Rub eyes. Rubbing the eyes with the knuckle of the hand.



*c. Other hand or arm movements*

- 87. Fumble. Twisting and turning something between the fingers, e.g. a pencil, wedding ring, handkerchief, etc. This is another element closely associated with ambivalent behaviour.
- 88. Fold arms. The arms are folded across the chest.
- 89. Hold chair. The arms of the chair or the sides of the seat of the chair are gripped with both hands and held tightly. This is frequently associated with flight elements.

*Shoulders, body and legs*

- 90. Shrug. Raising both shoulders. This element is frequently used as a speech equivalent, like 'Nod' and 'Shake', and does not analyse out into a specific part of the behaviour pattern.
- 91. Shoulders forward. The shoulders are brought forward. Occasionally the body is also turned slightly so that one of the rounded shoulders is presented to the other person.
- 92. Hunch. The chin is tucked in, the shoulders brought forward and the back is rounded.
- 93. Crouch. The body is bent right forward so that the forehead is near the knees. The shoulders are drawn forward and occasionally the arms are over the head.

The previous three elements are closely associated and are all parts of flight behaviour. It may be that there is a complete continuum here from 'Chin in' (no. 53) to 'Crouch', but in fact it is observationally easy to distinguish the four elements described.

The fact that the greater part of the observations recorded here is of adults sitting in a chair leads to the need for distinguishing the next five elements.

- 94. Lean forward. Leaning forward from the hips towards the other person.
- 95. Lean back. Leaning back against the back of the chair.
- 96. Settle. Whole body movements, frequently including legs and arms, as the person makes himself 'more comfortable' in the chair.
- 97. Relax. The body musculature relaxes and there is slumping in the chair.
- 98. Up, down. The person raises himself partly off the chair and then sits down again. This is an intention movement of getting up off the chair, and may be associated with any behaviour necessitating this, e.g. ready to leave table after lunch but waiting for others to finish. In the interview situation in which the original analysis was done it associated largely with flight behaviour and on occasions led to actually getting up and running out of the room.
- 99. Rock. A to-and-fro rocking movement of the body, cf. 'Head rock' (no. 60).
- 100. Side rock. A rhythmic side to side rocking of the body.

The previous two elements were most frequently recorded in chronic schizophrenics. However, they are reasonably common in children and have occasionally been recorded in the non-chronic adult. They are shown most frequently in ambivalent situations.

- 101. Still. A cessation of all movement, a freezing. Associated with 'Smooth face' (no. 62).
- 102. Cross legs. One leg crossed over the other.
- 103. Swing leg. In association with 'cross legs' the leg hanging free is swung rhythmically. This element is similar in some ways to 'Rock' (no. 99) in its position in the behaviour pattern. Like 'Rock' it is a common stereotype of chronic schizophrenics and also like 'Rock' it can be observed in ambivalent situations.

#### *Ambulatory movements*

Ambulation, to a much larger degree than the rest of the elements described here, is not easily described in patterns of muscle movement. Direction rather than motor pattern is the most important aspect from the social behaviour point of view; for example, a child may approach another by walking, by riding his tricycle or by pushing a scooter. The following divisions have been found useful but much more could be done.

- 104. Approach. Movement towards other person.
- 105. Leave. Undirected movement away from other person.
- 106. Retreat. Directed movement away from other person.  
The distinction between 'Leave' and 'Retreat' is difficult to describe although easy to pick up during observation. One could say that 'Leave' is an action while 'Retreat' is a reaction to the other person.
- 107. Flee. Running away from other person.
- 108. Chase. Running after fleeing person.
- 109. Follow. Following a leaving or retreating individual.

#### *Vocalisations*

Sophisticated techniques are available for describing and analysing non-verbal vocalisation. These have not been applied in the studies described here. The following list are of major categories easily distinguished by ear.

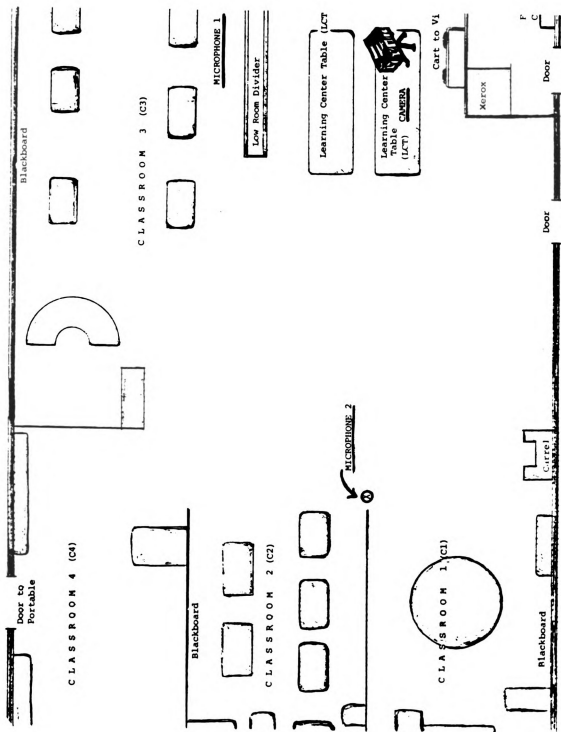
- 110. Laugh. The sound of laughter. An explosive staccato expulsion of breath. This noise can be superimposed on any of the 'smiles' and also occasionally with no smile present. Its behavioural meaning appears to be determined by the facial expression associated with it.
- 111. Shout. This term is used to cover the short loud verbalisation, e.g. Hi!, Tom!, Get out!
- 112. Squeal. Short, high pitched, usually not verbalised. Essentially a juvenile sound, common during exciting games.
- 113. Sob. Noisy breathing associated with crying.
- 114. Sniff. A short sharp inhalation through the nose. Can be used as a verbal equivalent, 'that is beneath me', but is again most commonly associated with crying.
- 115. Sigh. A deep inhalation and exhalation of breath.

#### *Autonomic responses*

Three responses that are under autonomic control are distinctive enough possibly to act as social signals. The following are recorded.

## APPENDIX B

### DIAGRAM OF THE LEARNING CENTER



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## REFERENCES

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