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MEASURING AGGRESSION AND . CONFLICT ABOUT AGGRESSION

Ъу

Christine A. Gudas B.A., Concordia University, 1974 M.A., University of Windsor, 1982

A Dissertation

Submitted to the Faculty of Graduate Studies through the Department of Psychology in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy at the University of Windsor

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TO MY MOTHER AND FATHER WITH LOVE AND GRATITUDE

"But now we have come to the end of our explorations and must somehow make a landing, as far up the beach as possible; there to write our findings in the sand, since we have nothing to carve in stone, our work being merely a prelude to more substantial studies."

Henry A. Murray

Explorations in Personality
(1938, p. 703)

ABSTRACT

Mental health professionals need objective measures to assess their clients' disposition to aggress. Minuchin's (1950) measures of expressive aggression and defense against aggression on the TAT predicted neuropsychiatric inpatients' aggressive behavior. Recent work with the nonverbal, projective Picture-Preference Test (PPT; Auld & Kline, 1984; Kline, Auld, & Cooper, 1983) suggests that several of its scales -- and the Eysencks' Psychoticism (P) scale -- are also measures of a person's tendencies to aggress (Antisocial Tendencies, Maladjustment, Primary Process Thinking) or to inhibit aggression (Impulse Control). The purpose of the present study was to examine the relationship between the PPT scales, Eysencks' \underline{P} scale, and Minuchin's TAT measures. Sex differences were also explored. A group consisting of 48 male and 63 female undergraduates responded to the scales and wrote stories to six pictures -- pictures which best elicited aggressive themes in a pilot study. In addition to counting the frequency of Minuchin's TAT measures, the investigator developed scales to measure aggressive TAT content (Aggression Scale) and defensive TAT content (Inhibition of Aggression Scale). Interjudge reliabilities on these scales were good. As hypothesized, the Antisocial Tendencies, \underline{P} , and Maladjustment scales significantly correlated with Minuchin's measure of expressive aggression, indicating that these scales are useful measures of aggression. The Impulse Control scale did not relate to Minuchin's measure of

defense against aggression, as had been expected. As hypothesized, aggressive TAT content differed between the sexes. The stories of the men contained a greater amount of physical and antisocial, nonphysical aggression unmodified by the defenses. The stories of the women had a greater amount of inwardly directed aggression.

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I am indebted to Dr. Frank Auld, my chairman, who provided direction, untiring interest, and support to this endeavour. There is hardly a page which did not benefit from his incisive comments. He gave generously of his time. Dr. Auld demonstrated what academicism and scholarship are all about.

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A note of appreciation goes to Dr. David Reid, the outside reader, for his thorough and penetrating comments.

I thank each and every one of the introductory psychology subjects who generously gave their time to participate in the study and the teaching assistants and sessional instructors who allowed me to recruit their students.

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A note of gratitude goes to my twin sister, Virginia, who despite the rigors of a residency in cardiovascular surgery and of qualifying for Stanford University, found time to cheer me on. I would also like to express my thanks to Irene Arseneau who handled the task of typing the manuscript efficiently and professionally. I appreciated her calm reassurances as deadlines approached.

I reserve a very special thank you to my closest and dearest friend, John, whose love and support have nourished and sustained me over the years. In addition to his roles as rater, sounding board, and proofreader, he helped me in many other ways too numerous to mention here. Lizards and flamingos forever!

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CHAPTER I

INTRODUCTION

The problems created by human beings' propensity to aggress against each other offer a ready challenge to social scientists. For example, governments would like to know whether the widespread depiction of violence on television abets violence in the population. Society, concerned with the survival of the population as a whole, has a stake in controlling aggression. Accordingly, society demands that persons in the process of growing up learn to control their aggressive impulses and to channel them into socially sanctioned endeavours; those who do not learn this must bear the consequences of not controlling these impulses. Members of society learn to deal with their aggressive impulses by modeling parental figures and by being subjected to punishments for being inappropriately aggressive (Bandura & Walters, 1963).

I define aggressive behavior as an action intended to inflict injury or pain on another, and aggressive motivation as the tendency to behave aggressively. The aggression motive may or may not-result in aggressive action; it may or may not be accompanied by conscious awareness of anger. Aggressive behavior may take the form of either verbal threat or physical attack on another person. This definition agrees with that of Dollard, Miller, Doob, Mowrer, and Sears (1939), who were pioneers in the social psychological study of aggression.

The present author, accepting the analysis of aggression by Dollard et al. (1939), considers the "aggression drive" as a way of speaking of the forces within a person that motivate him/her to act aggressively. Like Dollard et al. (1939), the author believes that the more direct the expression of the aggressive drive -- for example, through overt aggressive actions -- the more complete the discharge of these drive-tensions. "Latent tendencies to inhibit aggression" refers to forces within an individual that motivate him/her to inhibit the expression of his/her aggressive drive.

Most researchers use the terms "aggression" and "hostility" interchangeably, but a handful of researchers (e.g., Buss, 1961; Geen, 1976; Zillman, 1979) do not. In this study I use "hostility" to mean a negative attitude toward or a negative evaluation that the person has towards others, an attitude that predisposes one to aggressive behavior. Buss (1961) defines "resentment" and "jealousy" as two kinds of hostility. In theory, aggression could occur without hostility; in practice, it seldom does.

In the next several paragraphs I will spell out the psychoanalytic understanding of the consequences of inner conflict about aggression. My discussion owes a good deal to Cameron (1963), Fenichel (1945), Foulds (1965), and Horney (1937). Their reasoning is that conflict exists within the personality between two competing forces; namely, forces pushing for the expression of a person's aggressive drive and forces pushing to inhibit this expression. The neurotic's gratification of his/her aggressive drives cannot come about directly because he or she fears that society or his/her conscience will punish him or her for gratifying these drives. The formation of symptoms represents a compromise solution to this conflict in the personality. Symptoms vary from one diagnostic category to another, within the neuroses; however, whatever the kind of symptom, the function of the symptom remains the same. Symptoms provide an indirect way in which the neurotic can express his/her tendencies to aggress. Unconscious defense mechanisms defend the neurotic from experiencing an intolerable degree of anxiety even from this indirect expression of his/her aggressive drives.

However, the cost to the person for this compromise is always some impoverishment of his/her personality and some problems in his/her daily life. For example, the person may be continuously fatigued from his/her efforts to control his/her tendencies to aggress. He/she may avoid others or avoid situations which evoke his/her aggressive tendencies, thus narrowing his/her sphere of living. Health problems, such as chronic migraines or high blood pressure, may be symptomatic of a person's sustained inhibition of his/her tendencies to aggress. The fear of more directly gratifying his/her aggressive needs may generalize to his/her avoidance of socially sanctioned activities such as competition and self-assertion. It can sustain the person's elaborate defenses against even the expression of fantasy of these forbidden tendencies to aggress. The result can be a life relegated to passivity, a life of apathy, or the development of specific neuroses such as obsessive-compulsive neurosis or depressive neurosis.

An obsessive-compulsive's ritualistic behavior serves to defend him/her against the anxiety and guit caused by the eruption of his/her tendencies to aggress. His/her symptomatic behaviors drain him/her of energy and disrupt his/her interpersonal relationships. Family members (or other loved ones), who are the targets of his/her strong ambivalent unconscious attitudes, must often accommodate their lives to his/her symptoms. Thus the obsessive-compulsive's rituals serve to support indirectly his/her tendencies to aggress against loved ones. His/her rituals also serve to ward off his/her experiencing a greater amount of anxiety or guilt from a more direct expression of hostility and aggression toward loved ones or a more direct awareness of the wishes. His/her symptoms are a safer compromise to his/her aggression-conflict than the direct expression of aggressive impulses or the awareness of them, which he or she believes would risk jeopardizing narcissistic supplies from loved ones. His/her slavish adherence to obsessive rituals is punishing to the self. Because these rituals are punishing, they serve to alleviate the . person's guilt about his/her strong ambivalent attitudes.

The neurotically depressed individual's self-derogation, his/her proclamations to family and friends that he/she is worth little, mask strong tendencies to aggress towards them. The neurotically depressed person's demanding of others' time and energy, and his/her inevitable contempt when those around him/her tire of assuring him/her of his/her self-worth, indirectly gratify his/her tendencies to aggress. If the aggressive drives derive from a need to appease an

extremely critical superego, he/she may be pushed to attempt suicide.

Antisocial persons who lack internal controls of their aggression are said to have a personality disorder. These psychopaths experience far less anxiety over the gratification of their aggressive needs than the neurotics do. Those who have an antisocial personality disorder gratify their aggressive needs directly, creating problems for society and for themselves, whereas neurotics typically inhibit any direct expression of their aggression.

Not everyone who acts aggressively, even violently, lacks internal controls. Freud (1928/1961) described criminals from a sense of guilt. Sociologists (Dietz, 1978; Wolfgang & Ferracuti, 1967) have pointed out that persons who are ordinarily well controlled sometimes carry out violent crimes. Sociologists maintain that often the perpetrators of violent crimes decide to act violently after they have carefully evaluated their social situation.

Sex Differences and Aggression

In discussing sex differences in aggression, I will consider:

(a) differences in strength of aggressive drive and in overt expression of aggression, (b) differences in the control of aggression, and (c) differences in the socialization of aggression between girls and boys.

Men and boys express more physical and verbal aggression than women and girls (Frodi, Macaulay, & Thome, 1977; Maccoby & Jacklin, 1974). Frodi et al. (1977) summed up their view of the literature by

saying that women generally have higher recognition thresholds than men for aggressive words or pictures that are presented tachistoscopically. Women also perceive less aggression than men both in ambiguous pictures that are presented tachistoscopically and in aggressive scenes that are presented stereoscopically. With these consistent differences in sensitivity to aggressive stimuli between girls and boys it is surprising to learn (e.g., from Maccoby & Jacklin, 1974) that when parents and teachers were interviewed they said that they reprimanded the boys' aggression as severely as the girls' aggression, if not more severely.

Girls express more anxiety and guilt over their overt aggression than boys. We know this because parents asked to report on their children's aggression said that their daughters more often confessed to behaving aggressively than their sons did (Eron, Walder, & Lefkowitz, 1971; Sears, Maccoby, & Levin, 1957). Kagan and Moss (1962) believed that girls were more anxious about and more guilty over aggression because the girls more completely internalized their parents' standards through identification and had a greater fear of rejection and disapproval. Lefkowitz, Eron, Walder, and Huesman (1976) in their longitudinal study found that the expression of a great amount of guilt in childhood was a significant predictor of lower levels of aggression in late adolescence only for the females. Adult women are consistently found to express more guilt, anxiety, and fear over their aggression than men across all the testing conditions reviewed by Frodi et al. (1977). Therefore the expression and control of aggression appears to be a more

conflictful area for females than males.

Gold (1957) believed that the type of punishment a child receives from his/her parents is a crucial factor in the socialization of the child's aggression. From his review of two national interview studies of American adolescent boys and girls, he concluded that boys were more likely to be punished physically for their aggression than girls. From the many findings Douvan and Adelson (1966) report, of note is the sharp decline in parents' physical punishment of their adolescent daughters as compared to the parents' physical punishment of their adolescent sons. This decline in the use of physical punishment of girls was accompanied by an increase in the use of psychological techniques of punishment such as guilt induction.

From the above research I suspect that women generally have greater tendencies to inhibit the gratification of their aggressive drives than men. One must also recognize society's greater tolerance for overt aggression in males than in females despite some parents' efforts to discipline their daughters' and son's aggression in the same manner.

The Measurement of Aggression

Now let us turn our attention to the measurement of the tendency to aggression and of the inhibition of aggression. Measuring these forces is important to both clinicians and researchers, as should be obvious.

Clinicians often have to assess the level of a client's aggression

and the level of his/her inhibition of aggression in order to predict the likelihood of aggression and the direction it will take, and in order to plan appropriate therapy for helping the client to deal better with his/her conflict about aggression. The clinician's ability to perform these clinical tasks requires an understanding of the dynamics underlying the client's aggression. The strength of the client's tendencies to aggress and those tendencies to inhibit aggression must be appraised. Another clinical question is what form the resolution of the client's aggression-conflict will take. The clinician gathers information to help him/her answer these and other questions by both informal and formal methods. Informal methods include such procedures as direct observation, family reports, social histories, and interviews from which the clinician draws inferences about the client's aggression. The clinician can also get information from questionnaire tests, which by definition are formal, objectively scored measurement tools. Bendig's Overt and Covert Hostility scales, Fould's Hostility Scales, and the Buss-Durkee Hostility Inventory are examples of questionnaire tests. Much research on aggression, especially on laboratory-induced aggression, relies heavily on such self-report measures of aggression and hostility.

The problem with relying on self-report inventories, as well constructed as they may be, is that they measure only the tendencies to aggress and the aggressive acts that the person is largely aware of and is comfortable in reporting to another person. In many instances of conflict of aggression, a person's motivation to aggress is not conscious. If the motive to aggress is unconscious, so

necessarily will the defense against the motive be unconscious.

Obviously what the person is unaware of he or she cannot report. We can learn from self-reports how a person rationalizes his/her behavior, but we have a limited opportunity to assess his/her dynamics and conflicts.

Because of these limitations in self-report tests, researchers and clinicians at times turn to projective tests, such as the Rorschach and the Thematic Apperception Test (TAT). The projective test's lack of structure and the instructions that invite the person to concentrate on things other than him/herself, allow the person to take the psychological distance necessary to loosen his/her defenses (Murray, 1943; Murstein, 1963, 1965). The person gets caught up with the task at hand, revealing more about him/herself in his/her responses than he/she is aware of revealing. Not knowing what is being assessed, he/she is less likely to manipulate his/her responses than when he/she answers direct questions about him/herself. He/she projects into the ambiguous stimuli elements of his/her personality functioning such as his/her needs, conflicts, and defenses.

As effective as projective tests are in circumventing defenses, there are problems with these tests as well. The proliferation of formal scoring schemes for the TAT (Aron, 1949; Bellak, 1971; Murray, 1943; Tomkins, 1952) and for the Rorschach [Elizur's (1949) Rorschach Content Scales, Murstein's (1965) scoring scheme] contributes to a distressing lack of standardization. This problem is compounded by researchers who devise their own scoring schemes or modify existing ones, only to abandon these schemes after their studies are completed.

Such a process does little to benefit the practicing clinician.

Murstein (1963, 1965) contends that the lack of a demonstration that there are sex differences in the responses to projective tests is partially attributable to the lack of standardization in the research and to the lack of adequate samples of women.

There is a need to find reliable measures from which we can extract information concerning a person's tendency to aggress and tendency to inhibit aggression. These tendencies are important in our understanding of both normal and neurotic adaptations to life. A person experiences problems in his or her everyday life when these competing tendencies cannot find a constructive co-existence in the personality, which results either in an excessive inhibition or in a lack of inhibition of the tendencies to aggress. I am interested in clarifying the importance of both the tendencies to express and to inhibit aggression in a person's adaptation to life, and in the relationships among various measures of these tendencies.

Search for Adequate Measures

Because in most situations it is not possible to study a person's aggressive behavior in his/her everyday life, we rely on psychological test measures of aggression to aid us in our gaining a greater understanding of a person's aggressive behavior in his/her everyday life. There are a host of measures available both to the researcher and to the clinician from which they can infer the presence of aggressive tendencies in a person. What is important to keep in mind is that the resultant aggressive behavior which is expressed in everyday

life or inferred from responses on a test of aggression represents a compromise within the person, in a particular situation, between the forces to aggress and the forces to inhibit aggression. Two broad categories of measurement tools researchers use to-make inferences about a person's aggression are: (a) tests either relying on self-report responses (from self-report questionnaires) or on projective responses (from projective tests), and (b) observations of overt aggressive behavior. In this section I discuss development up to the present of both kinds of measures of aggression and of inhibition of aggression.

Self-report questionnaires. The more the respondent perceives a self-report questionnaire as measuring his/her aggression, the more anxious and defensive the respondent will likely be, especially if he/she possesses strong tendencies to inhibit his/her aggression. He/she may cope with the anxiety aroused by the test by repressing thoughts of his/her aggressive behavior. If his/her score on the self-report questionnaire is low, one cannot tell whether it is low because of inhibition or because of low aggressive drive. I suspect that the self-report questionnaires that directly ask the subject about his/her aggressive behavior (e.g., the Buss-Durkee Hostility Inventory) will induce more anxiety and thus more repression than more indirect self-report questionnaires. Some of Eysenck's scales, such as the Psychoticism scale, and the scales of the MMPI are more indirect measures of personality because their questions do not blatantly ask persons how much of a personality trait they have.

Self-report questionnaires are particularly susceptible to the subjects' tendencies to want to manipulate the impression others have of them. Paulhus (1984) called this phenomenon "impression management," or "other-deception," which he considered to be the crucial component in social-desirability responding. Impression management is likely to be an even greater problem for the researchers who use direct self-report questionnaires that ask subjects to report how aggressive they are, because of our society's generally negative view of most aggressive behaviors.

The information the respondent discloses about him/herself in self-report questionnaires is usually readily available to him/her. Zubin, Eron, and Schumer (1965) state that self-report questionnaires assess what facts about the subject are inwardly accessible and outwardly reportable. However, one must not overlook the presence of unconscious forces within a person, which produce a lack of self-knowledge, thereby preventing the subject from accurately describing him/herself.

Measures of overt aggressive behavior. In an attempt to circumvent the problems inherent in the use of self-report questionnaires, some researchers and clinicians make use of observations of a person's aggressive behavior. A variety of people can observe and rate aggressive behavior, including the person him/herself, a family member, a peer, a friend, and a researcher or a clinician. The measures of overt behavior derived from ratings provide an indicant of a person's expression of aggression which researchers can use to make comparisons

with the aggressive behavior of others.

Observations of overt behavior, however, are not without problems. Sometimes the observation is made in an artificial setting. —
Therefore, behavior may be unrepresentative because of the influence of factors such as conscious deception and unconscious lack of self-knowledge, which makes prediction to the more crucial situation ineffective. Second, persons making the observations may be self-interested or incompetent in observing, or unwilling to say disparaging things of another. Nunnally (1967) named the tendency of observers to want to report only good things about another as "other-deception." Third, the rating scheme can be technically deficient (e.g., instructions are inadequate, raters lack training, descriptions of the observable behavior are too complex).

A self-report questionnaire which allows one to derive inferences about a person's tendencies to aggress is discussed next.

Eysencks' Psychoticism Scale and Aggression

The Eysencks' Psychoticism (P) scale is a self-report measure which evolved as part of the PEN scale (Psychoticism-Extraversion-Neuroticism) and the Eysenck Personality Questionnaire (EPQ). The Eysencks (1976) described this scale in their text, "Psychoticism as a Dimension of Personality." They (1976; 1977) intended it to be a measure of psychoticism as a dimension of personality that complements the extraversion and neuroticism dimensions. My perusal of the P scale items leads me to discern the following themes: Hostility or aggression (items 11, 26, 33, 79, 90), impulsiveness (items 2, 46, 57,

74), lack of planfulness (items 6, 9, 18, 67), paranoid tendencies

(items 30, 65, 76), unconventionality (item 43), and sensation-seeking

(item 22). There is only one item, concerning bland tastes (item

50), which could be construed as implying - on the face of it - some

psychopathology.* Therefore the P scale, despite its name, does not in

any obvious way reflect a psychotic symptom pattern, as I understand

such pathology.

Now I will present research that raises further questions about the association between the \underline{P} scale and psychoticism.

Using various versions of the \underline{P} scale, Verma and Eysenck (1973) found psychotics to score high on the \underline{P} scale -- which would be required if the \underline{P} scale is meant to be a measure of psychoticism. In addition, male prisoners (Eysenck & Eysenck, 1973), female prisoners (Eysenck & Eysenck, 1973, 1976), and creative people (Woody & Claridge, 1977) also get high scores on the \underline{P} scale. Groups with impulse-control problems such as drug addicts, prisoners, and psychopaths have higher means on the \underline{P} scale than psychotics. Of all groups female prisoners have the highest means on the \underline{P} scale.

Therefore the type of person who produces high scores on the \underline{P} scale appears to act out, having stronger tendencies to express aggression than to inhibit aggression. Accordingly, the \underline{P} scale may provide an indication of a person's tendencies to express aggression than to inhibit aggression. The Eysencks (1976) described the normal high scorer on the \underline{P} scale, who is usually a male as "...solitary, troublesome, and cruel, lacking in feeling, lacking in empathy, hostile to others, sensation-seeking..." (p. 202).

Davis (1974), like Bishop (1977) and Block (1977a, 1977b), questioned the \underline{P} scale as a measure of psychoticism. Davis, using a 32-item \underline{P} scale, found no significant difference between the means of psychotics and nonpsychotics who had been matched for IQ. The \underline{P} scale did load highly on a factor called "emotionality," along with the Buss-Durkee Hostility Questionnaire. Davis contended that the \underline{P} scale measures a component of hostility — a tendency to evaluate oneself and others negatively.

Verma and Eysenck (1973) found high positive correlations between female and male patients' \underline{P} scores and various subscales of Caine, Foulds, and Hope's Hostility and Direction of Hostility Questionnaire. This finding Tends further support to the hypothesis that the \underline{P} scale measures an aspect of hostility.

Singh and Seghal (1979) using a sample of Indian undergraduates correlated the three scales of the EPQ with measures of hostility derived from the Rorschach. They found that the \underline{P} scale and Bendig's Overt and Covert Hostility scales loaded almost exclusively on a factor named after the \underline{P} scale. The \underline{P} scale also loaded moderately and negatively on a factor named Tendermindedness. Thus the \underline{P} scale items appear to tap both hostility and a component of masculinity.

The Eysencks in their own research found an association between the \underline{P} scale and masculinity just as Singh and Seghal (1979) had. Normal and pathological males obtain higher \underline{P} scale means than females (Eysenck & Eysenck, 1976). The \underline{P} scale originated from a 210-item version named Toughmindedness-Tendermindedness (Eysenck & Wilson, 1976). Individuals with high scores on this questionnaire also got

high scores on scales measuring stereotypical masculine traits: Aggressiveness, Assertiveness, Achievement Orientation, Masculinity, Manipulation, Sensation-Seeking, and Dogmatism. Also males who had high scores on the \underline{P} scale reported preferring sexual practices considered more aggressive, more deviant, and more masculine (Eysenck, 1976). Women who had high scores on the \underline{P} scale reported sexual attitudes unconventional for their sex, attitudes conventionally considered more suitable for men. Eysenck (1976) wrote, "...the \underline{P} scale appears to be clearly related to the masculinity-femininity dimension" (p. 65).

The P scale, therefore, appears to be potentially an indicant of a person's tendencies to aggress. It is associated with masculinity rather than femininity. In contrast to self-report questionnaires whose items focus directly and exclusively on aggressive behavior (e.g., Buss-Durkee Hostility Inventory), the items on the P scale tap a range of themes (e.g., impulsiveness, lack of planfulness) including aggression. Thus I suspect that a person will experience less aggression-anxiety when he/she answers the questions of the P scale than when he/she answers the more direct questions about his/her aggression on other self-report questionnaires.

Thematic Apperception Test and Aggression

The stories elicited by the TAT and its derivatives (e.g., Bellak's CAT, Michigan Picture Test, Schneidman's Make A Picture Story, Symonds Picture Story Test) reveal personality from preconscious, conscious, and unconscious levels (Buss, 1961; Schneidman, 1949). The

storyteller's conflicts, needs, momentary moods and impulses, including those he/she is willing or able to tell, are present in his/her stories (Lindzey, 1952; Murray, 1938, 1943, 1951). Zubin, Eron, and Schumer (1965) contend that projective tests such as the TAT allow the researcher to gain access to these two things: (1) inwardly accessible but outwardly not reportable personality elements such as daydreams, wishes, weaknesses, and (2) inwardly inaccessible conflicts, ambitions, and struggles which could be apparent to the trained clinician.

Frank (1965) compared the TAT to a screen on which an individual's characteristic pattern of thinking, speaking, and perceiving are projected and thus are able to be compared to those of others. He believed that there is a complex interplay between the stimulus card and the storyteller's perceptions. According to Frank, the story productions involve an integration of a percept, influenced by the subject's present psychological state, his/her past experiences, and the test situation. The storyteller's needs are often reflected indirectly through story distortions. In the TAT, there is an interplay among the defenses against the expression of a need, environmental pressures to inhibit its expression, and egocontrol processes (Kagan & Lesser, 1961).

The advantage of using the TAT to understand the dynamics of aggression and the resolution of aggression-conflict is the possibility of making inferences both about the expressive and inhibitory tendencies and about their relation to each other. As

discussed above, the story produced represents the person's resolution of the conflict between the forces in his/her personality which push to gratify his/her aggressive needs and those which oppose this gratification.

Auld (1954) argued that it is useful to adopt Miller's conflict model (Miller, 1944; Miller & Dollard, 1941) for understanding the dynamics of the TAT story. The "approach" tendency to gratify the aggressive need is, he said, represented by the verbal expression of aggression in the story; while the "avoidance" tendency is represented by the person's subsequent modification or denial of the verbal expression of aggression in his/her story. The resolution of these competing tendencies in the TAT story can provide important information for understanding how a person deals with his/her aggression-conflict in real life. Atkinson (1965) viewed the TAT cards as providing cues that arouse one's expectations that one will gratify such aggression, as well as providing cues that arouse one's expectations of punishment for such gratification. According to the conflict theory, one must consider both the expression of aggressive content on the TAT and the manner in which it is done if one is to understand the dynamics of a person's aggression.

Indices of Aggression in the TAT

Researchers in their attempts to study the predictive validity of the TAT devised scoring schemes of various degrees of comprehensiveness from which they could infer the competing tendencies to aggress and to inhibit aggression. Patricia Pittluck Minuchin (1950)

in her doctoral dissertation, which used male neuropsychiatric patients as subjects, developed one of the most comprehensive scoring schemes for inferring aggression from the TAT that I have reviewed. Other schemes are those of Jensen (1957), of Lesser (1958), and of Mussen and Naylor (1954), and of Purcell (1965). Minuchin delineated story elements from which one can infer the subject's tendencies to aggress or his/her tendencies to inhibit aggression. Tendencies to outwardly directed aggression are inferred from these types of aggressive content: physical, antisocial, verbal, coercive, and passive-aggressive. Tendencies to inhibit the expression of aggression in the story are inferred from indications of the storyteller's use of defense mechanisms and his/her representation of punishment press.

The author, as Minuchin, adopts a psychoanalytic view of defenses. According to this view, a person's defenses are associated with the presence of anxiety and guilt over his/her aggressive impulses. A person's defenses serve to inhibit the expression of his/her aggressive impulses. Another view of defenses, expressed by Sykes and Matza (1957), holds that it is the very presence of a person's defenses which enable him/her to act out aggressively. Sykes and Matza believe that a person's defenses allow him/her to act aggressively without blame from either his/her conscience or those around him/her.

Minuchin identified four defense mechanisms which the storyteller can use to modify his/her representations of aggressive motives. These are: (1) rejection of aggression (i.e., mentioning

an aggressive act, then voicing disapproval of it); (2) denial of the aggression (i.e., mentioning an aggressive act then denying later that it occurred); (3) excusing the aggression by placing it in a socially acceptable context (e.g., accidental aggression or aggression for self-defense); and (4) non-completion of the aggression planned by a story character (i.e., a dream, thought, wish for aggression not completed in action).

Minuchin spoke of the aggressive content as being "modified" when there is evidence for a defense or a punishment theme or press from either an external source (e.g., the police) or an internal source (oneself).

Minuchin devised a number of indices of the balance between tendencies towards expressing aggression and the forces inhibiting it. Among these indices were these two: (a) unmodified physical and antisocial aggressive actions, divided by total aggressive content, and (b) major defenses against outwardly directed aggression, divided by all outwardly directed aggression. Haskell (1961) adopted similar ratios in his research.

Minuchin has shown that the TAT can provide not only information about the expressive and inhibitory aspects of aggressive tendencies but also information about whether these competing forces result in overt aggression.

The Picture-Preference Test, Aggression, and Inhibition of Aggression

Another projective test -- one that does not require verbalization to respond to it -- is the Picture-Preference Test (PPT), invented by

Cowan (1967). The PPT asks the subject to choose between pictures presented one pair at a time, for 10 seconds. Each PPT scale consists of a set of picture-pairs designed to measure a particular personality trait. A subject's choice of the keyed picture of a pair indicates the presence of the trait measured by that item. The assumption underlying the PPT is that a subject's motivations and predispositions are brought out through his picture choices. Auld (1979) pointed out several advantages of using the PPT to measure personality, namely: it holds the subject's interest; it requires minimal verbal skills of the subjects; and it is relatively free of such response sets as acquiescence and social-desirability responding. Cowan (1967) developed the first PPT scales as part of his doctoral investigation into the addictive personality. Auld and his associates continue to create and revise the PPT scales in order to extend the usefulness of the PPT.

With this nonverbal projective test, the subject must choose the picture he/she prefers under a time pressure. Unlike the TAT and other projective tests, the PPT does not require the subjects to give verbal responses which could elicit some defensiveness, especially in those who have strong tendencies to inhibit aggression. Thus I expect that subjects will have less of an opportunity to monitor or to modify their responses on the PPT than on verbal projective tests. Should a subject experience too much anxiety when observing a picture he/she can simply choose its partner.

The Picture-Preference Test, measures of aggression. Recent work with some of the PPT scales points to their possible usefulness as

indicants of a person's tendencies to express or inhibit his/her aggression. Kline, Auld, and Cooper (1983) administered a host of personality and ability scales to a group of male and female British undergraduates. These PPT scales were also included: Maladjustment, Impulse Control, Avoidance of Sexual Intimacy, Antisocial Tendencies, Introversion, and Primary Process Thinking. They factor analyzed the correlations among all the measures, obtaining 12 interpretable factors. In the present context, it is notable that three PPT scales loaded highly on Factor 3 of this study and did not load substantially on any other factor, namely: Maladjustment (.72), Antisocial Tendencies (.83), and Primary Process Thinking (.75). The P scale also loaded on Factor 3; and thus Kline et al. (1983) called the factor "Psychoticism."

If we look at the items included in the Maladjustment scale, we find very few if any items having a manifest theme of aggression. In general the items seem to deal with damage to self-esteem. The three items loading most heavily on this scale (Auld & Kline, 1984, p. 474) are the following:

- Item 17 A. A man giving a speech to an audience.
 - B. A man with his arm in a cast (Keyed choice)
- Item 87 A. A baby mouthing a baby's dummy (Keyed choice)
 - B. A baby looking at a mobile
- - B. A doctor with a stethoscope

Nevertheless, I am including this scale as a presumed measure of aggressive tendencies because in the Kline, Auld, and Cooper (1983) study this scale loaded on the same factor as the Antisocial Tendencies scale, the Primary Process Thinking scale, and the Eysencks' \underline{P} scale.

A perusal of the keyed pictures of the Antisocial Tendencies scale has led me to the judgment that these pictures depict themes of aggression, antisocial tendencies, and impulsiveness.

As for Rudzinski's Primary Process Thinking scale, my perusal of its keyed pictures reveals a mixture of bizarre pictures in which I discern, among other themes, the themes of aggression (woman with raised arm yelling at child) and bodily damage or expression of destructive impulses (a child falling, drooping flowers, picture of a girl split into segments, a broken chair). Rudzinski (1979) found support for considering his scale to be a measure of thought disorder; succeeding researchers, however, raised doubts about whether this scale unambiguously measured thought disorder. Verniero's (1981) and Apanasiewicz' (1982) research led them to view the Primary Process Thinking scale as a measure of a subject's tendency to respond in a nonconforming or deviant manner. Nonpsychotic psychiatric patients (from a broad range of social classes) as well as university students (mainly middle-class) were likely to get low scores on this scale; whereas thought-disordered patients and creative students (in / a fine arts course) got high scores. Verniero's sample of university Art students produced scores on Primary Process Thinking almost as

high as the scores of Rudzinski's thought-disordered patients.

Apanasiewicz' university undergraduates had a mean on this scale only slightly lower than that of the patients' who (as judged by Rorschach and TAT measures) were low in thought disorder.

Therefore choice of the keyed pictures of the Maladjustment,
Antisocial Tendencies, and Primary Process Thinking scales appears
to be expressive of aggressive, antisocial, and destructive impulses.
I believe that the persons who choose the keyed pictures of these
scales have tendencies to aggress, whether or not these tendencies
are expressed in overt aggressive behavior. Accordingly, the
Maladjustment, Antisocial Tendencies, and Primary Process Thinking
scales may be useful as indicants of a person's tendencies to
aggress.

A possible PPT measure of inhibition of impulses. In doing a factor analysis of the 17 PPT variables, Auld and Kline (1984) discovered a factor which they believed was related to overcontrol of impulse. In the present study, the scale that loaded most highly on this factor is used as a presumed measure of inhibition of impulse, with the hope that it will provide a measure of the inhibition of aggression.

The path by which Auld and Kline (1984) arrived at an impulse control factor was as follows: First they merged the data files of six previous studies, thereby having a sample of 854 presumably normal persons and 427 psychiatric patients, alcoholics, and members of self-help groups (such as Weight Watchers). There were in all 752

women and 529 men. The previous studies from which the data were derived were those of Amin (1974), Begin (1975), Berek (1975), Cowan (1967), Noel (1979), and Rudzinski (1980). By a series of complex scale-building techniques they created two new scales (Maladjustment and Impulse Control). Following this, they factor analyzed 17 variables -- including the two new scales -- and derived two relatively independent factors for the men and three factors for the women. These results, treating the two gender groups separately, were reported in a preliminary version of their study; the final, published version reports only an analysis in which the men and the women have been merged into a single sample. Of interest is the third factor, which in the preliminary study emerged only for the women and which is best defined by Auld and Kline's Impulse Control scale.

These investigators consider the keyed pictures of the Impulse Control scale as reflections of a person's overcontrol of aggressive and sexual impulses. High scores on this scale may indicate overcontrol of one's aggressive and sexual impulses; while very low scores may indicate pathological undercontrol of one's aggressive and sexual impulses.

In research that Auld and Kline did in the course of preparing their paper (Auld & Kline, 1984) on factor analysis of the Picture-Preference Test, they found that women's scores on the Defensiveness and Desirability scales of the Differential Personality Inventory (DPI) correlated significantly and positively with their scores on the factor which measures impulse control. The items of the Defensiveness scale measure the tendency to describe oneself as doing

the right thing, while the items of the Desirability scale measurethe tendency to describe oneself favorably. Women with low scores on the Impulse Control factor indicated that they have little control over their aggressive and sexual impulses, and also described themselves as less defensive and less socially desirable. On the other hand, women with high scores on the Impulse Control factor indicated that they have excessive control over their aggressive and sexual impulses, and also described themselves as more defensive and more socially desirable. Thus I expect that women who have little control over their aggressive impulses, based on their very low scores on the Impulse Control scale, should have stronger tendencies to express aggression rather than to inhibit aggression. In addition, women who have excessive control of their aggressive impulses, based on their very high scores on the Impulse Control scale, should have stronger tendencies to inhibit rather than to express aggression.

It is difficult to understand why the Impulse Control factor failed to emerge for the male subjects. The gratification of aggressive and sexual drives may be a less potentially conflictful issue for men than for women, hence the absence of this factor in the analysis of the data on the men. We are reminded of the evidence of women who experience more anxiety and guilt over their aggression than men. Nevertheless, the Impulse Control scale may prove useful as an indicant of a person's tendency either to express aggression or to inhibit the expression of his/her aggressive drive.

Further light on gender differences in response to picturepreference items is shown by the research of Ryan (1976). Ryan found
several sex differences on the PPT scales in a group of undergraduates.

He correlated 15 PPT scales with the 15 scales of the DPI. In the
present framework, we take note of the findings on Cowan's 'Antisocial
Tendencies scale, which correlated highly and negatively with the
DPI's Desirability and Defensiveness scales in the subsample of
women, but correlated only slightly with the Desirability and
Defensiveness scales among the men. Thus the males' preference for
the aggressive, antisocial pictures of Cowan's Antisocial Tendencies
scale was associated neither with favorable nor unfavorable descriptions
of themselves. On the other hand, the females' preference for these
aggressive, antisocial pictures was strongly associated with less
favorable descriptions of themselves (i.e., as less socially desirable
and less defensive).

How can we explain the above differences between the sexes in Ryan's results? As we know from the research on the sex differences in aggression and on the socialization of aggression in children, males experience less conflict and anxiety over the expression of aggression than females. Society views aggression in males as more acceptable than aggression in females if the aggression is not extreme.

Accordingly, we neither expect a relationship between the expression of aggression in males and the indices of their self-esteem (as measured by the scores on the Desirability scale) nor do we find one in Ryan's study. On the other hand, research indicates that women experience anxiety, guilt, and conflict over the expression of their

aggression. A woman who is aggressive may view herself as unconventional for her sex and as less acceptable to society. Thus we expect that the expression of aggression for females would be associated with indices of their self-esteem as found in Ryan's study. Similarly, one could discuss the relationship between a person's expression of aggression and his/her scores on the Defensiveness scale.

<u>Use of PPT scales</u>. I have reason to believe, therefore, that several PPT scales may provide indications of a person's tendencies to express-aggression (Maladjustment, Antisocial Tendencies, and Primary Process Thinking), or his/her tendencies to inhibit aggression (Impulse Control).

Statement of the Problem and of Hypotheses

Aggression is a problem for the individual as well as for society. From childhood onwards all of us experience frustrations, and annoyances which incite us to act aggressively. Through the processes of social learning (e.g., identification and modeling of parental figures) we acquire certain patterns of behavior which equip us to cope with our aggressive drives. We learn that the overt expression of aggression is strongly prohibited in our society under most circumstances. We begin to anticipate negative consequences for the expression of our aggression, consequences such as punishment from society, punishment from ourselves (e.g., anxiety and guilt), and rejection by others.

These expectations of negative consequences from being aggressive

contribute to a person's aggression-anxiety and lend support to his/
her tendencies to inhibit his/her aggression. He/she must cope with
the competing forces within his/her personality, those which
motivate him/her to seek the gratification of his/her aggressive drives
and to inhibit them. Females experience more anxiety and guilt about,
and more fear of their aggression than males do. Thus one infers
that women have stronger tendencies to inhibit aggression than men
do.

Some individuals have particular difficulties coping with their tendencies to aggress. These create more problems for them in their daily lives than other persons experience, and more problems for those around them. Neurotics tend to resolve the conflict between their tendencies to aggress and to inhibit aggression by controlling any direct expression of their aggression. The price which they pay for this resolution to their aggression-conflict is a slavish commitment to their symptoms, which provides some indirect gratification for aggressive impulses. Antisocial persons, who have a personality disorder, tend to gratify their aggressive needs more directly through acting on their aggressive impulses. They repeatedly incur society's punishment. Their manner of coping with tendencies to aggress is no more satisfactory to themselves than that of the neurotics.

Clinical psychologists and other mental health professionals come into contact with clients who are caught up in the struggle to appease the competing forces within their personalities, namely, forces which motivate them to express their aggressive drives and

forces which motivate them to inhibit the expression of their aggressive drives. If mental health professionals are going to treat these clients effectively, then they need to understand the dynamics of aggression and aggression-conflict. The person who seeks psychological help often needs guidance to cope better with his/her aggression. The measurement tools available to clinicians to aid them in the assessment of their clients' aggression include observations made by the clients themselves and by a variety of people (e.g., friends, peers, or relatives of the clients), self-report inventories, and projective methods. Researchers work to refine these measurement tools to contribute to the practicing clinicians' understanding of aggression.

At the present time, I suspect that clinicians still rely heavily on their informally acquired insights and their intuition to assess a person's aggression because of the paucity of reliable measurement tools. Observational ratings and self-report inventories that directly ask the person about his/her aggression are useful but provide limited insights into the dynamics of a person's aggression.

When a researcher uses a self-report inventory, the more aware a subject is that the researcher is attempting to assess his/her aggression, the more likely his/her responses are to be influenced by defensiveness and by social-desirability responding. The \underline{P} scale appears to be a measure that provides an indication of a person's tendencies to express his/her aggression but does not blatantly ask the

subject how aggressive he/she is.

Projective tests like the TAT and Rorschach ask the person to focus his/her attention away from him/herself and to engage in tasks that elicit his/her fantasy. The ambiguity of the projective material, the permissive test atmosphere, and the subject's lack of awareness of the meaning of his/her responses -- all these contribute to the lowering of the subject's defenses. His/her responses provide the clinician or the researcher with insights into a host of underlying personality elements which the subject is mostly unaware of. The TAT provides insights into a person's tendencies to aggress, his/her tendencies to inhibit aggression, and his/her aggression-conflict. Minuchin's scoring scheme appears to be comprehensive in comparison to the others I reviewed. Several of the PPT scales appear to be indicants of the person's tendencies either to aggress or to inhibit aggression.

The purpose of this research, therefore, was to help increase our understanding about the dynamics of aggression and aggression-conflict by developing measures of aggression and of inhibition of aggression, using the picture-preference approach. The author investigated the relationship of the PPT and \underline{P} scales to each other, as well as to various TAT indices of aggression and aggression-conflict. She also explored any sex differences in the responses to the PPT, to the P scale, and to the TAT.

The hypotheses which were tested can be summarized as follows:

1. The picture-preference scales that are believed to measure aggression (namely, Antisocial Tendencies, Maladjustment, and Primary

Process Thinking) and the \underline{P} scale will be positively correlated with a TAT measure of aggression, a measure that strips away those TAT themes that give evidence of modification by defensive forces. (Such a TAT measure should give a purer reading of the strictly expressive side of the aggression-fear conflict).

- 2. There will be a positive relationship between the PPT Impulse Control scale and an index, derived from the TAT, of the proportion of outwardly directed aggressive themes that are defended against. Other TAT indices of inhibition of aggression should also correlate positively with the Impulse Control scale.
- 3. All the measures of the tendencies toward expressing aggression the Antisocial Tendencies, Maladjustment, and Primary Process PPT scales, and the Eysencks' \underline{P} scale should be positively correlated with each other because all are believed to be measures of aggressive motivation.
- 4. Men will have higher scores on measures of outwardly directed aggression (unmodified by defense), and women will have higher scores on measures of inwardly directed aggression. These measures are all derived from the TAT; Minuchin's indices are to be used.

CHAPTER II

METHOD

Subjects

The subjects in the main study consisted of 48 male and 63 female undergraduates from day and evening Introductory Psychology classes at the University of Windsor. The subjects ranged in age from 18 to 65 years old with 68.5% of the subjects' age falling between 18 and 24 years. The average age for the group was 25.5 years old. Seventy percent of the sample was single.

Another sample of 25 men and 47 women, also Introductory

Psychology students, participated in a pilot study required to select
the pictures which best elicited stories of aggression. The pilot
subjects' ages ranged from 18 to 51 years with a mean age of 23.2
years. The female's average age of 23.8 years was slightly higher
than that of the males (21.9 years).

Subjects from the main and pilot studies received credit-points towards their grades in the Introductory Psychology course.

Materials

TAT Pictures Eliciting Aggression

Pilot study for the selection of TAT pictures. Nine pictures
-- thought by the author to best elicit stories of aggression -- were
selected from the many reviewed in magazines. In addition, seven of

Murray's TAT pictures were used which previous investigators (Auld, Eron, & Laffal, 1955; Murstein, 1963, 1965) found to be useful in eliciting stories of aggression from subjects. These TAT pictures were the following: 3GF, 3BM, 4, 8BM, 13MF, 18BM, 18GF. In all there were 16 pictures selected for the pilot study.

Each subject wrote a story to each of eight pictures presented in a booklet. The order of pictures varied randomly from subject to subject. The investigator instructed the subjects to spend about five minutes on each story. Groups of three to ten subjects were tested by the author at one test session with the largest group tested consisting of about twenty-five subjects. The instructions to the subjects and the format of the booklets were the same as used in the main study to be discussed later. A test session for these subjects lasted about 50 minutes.

Final set of TAT pictures. The number of aggressive stories the pictures elicited varied from 2.8% to 90%. I chose the six pictures which best fulfilled these criteria: (a) a picture which elicited a moderate number of aggressive stories from which estimates of a person's tendencies to aggress and to inhibit aggression could be made, and (b) a picture which elicited a variety of aggressive themes. The new pictures of the final set of pictures, the booklet they are part of, and a sample protocol are reproduced in Appendix A. Three of Murray's pictures (8BM, 13MF, 18BM) are included in the final set of pictures. Murray (1943) describes these three pictures as follows:

8BM. An adolescent boy looks straight ahead out of the picture. The barrel of a rifle is visible at one side, and in the background is the dim scene of a surgical operation, like a reverie-image. (p. 19)

13MF. A young man is standing with downcast head buried in his arm. Behind him is the figure of a woman lying in bed. (p. 20)

18BM. A man is clutched from behind by three hands. The fingers of his antagonists are invisible. (p. 20)

The number of aggressive stories elicited by the pictures range from 36% to 51%. Picture 2 elicited the lowest number of aggressive stories (9%) and was used in the final set of pictures to mask the purpose of measurement. It elicited more aggression in the main study than expected.

The Aggression Scale

The investigator developed an eight-point scale to measure the aggressive content of the stories written to the six pictures. In the development of the scoring scheme, the investigator ranked half of the stories in the pilot study on aggression from highest to lowest. She based her ranking of the aggressive content of the stories on previous researchers' work with aggressive story content (Stone, 1956; Mussen & Naylor, 1954; Jensen, 1957; Lesser, 1958; Minuchin, 1950) and on her own clinical insights. Once the stories were ranked, the criteria for each scale point of the scoring scheme evolved from the ranked stories. Aggressive themes were given a score of 0

to 7 depending on the degree of aggression expressed in the story.

The scoring scheme for the Aggression Scale is available in Appendix

B. The total of the aggression scores for the six stories is used in one of the important ratios adopted from Minuchin (1950) to be discussed later.

In order to check on the interjudge reliability of the Aggression Scale, I trained a second rater to use the scoring scheme. The investigator and the second rater scored 60 randomly selected stories over seven trials -- stories which were from the pilot study and not used in the development of the scale. Product—moment correlations ranged from .68 to 1.00 with a mean interjudge reliability of .91. I rated all the stories in the main study for aggression.

The Inhibition of Aggression Scale

A scoring scheme to measure the inhibition of aggression expressed in the stories was also developed by the author. Inhibition of aggression refers to the unconscious processes of modifying the aggression expressed in the story. The author believes that storytellers use inhibition to defend themselves from anxiety and guilt over the expression of aggression. Stories were scored on a six-point scale from 0 to 5 with high scores indicating the presence of a greater amount of inhibition of aggression (See Appendix C for the Inhibition of Aggression Scale). Ten defense mechanisms are defined by the author; several (Rejection, Denial, Excusing, Noncompletion) are borrowed from Minuchin (1950), while others

(Distancing, Punishment, Undoing, Admission) come from the author's review of previous investigators' work and her clinical insights.

These defenses are used in important ratios to be discussed later in this section.

The interjudge reliability of this scale was obtained in the same manner as the Aggression Scale. Over the course of seven test trials and 53 stories, the product-moment correlations ranged from .38 to 1.00 with an average interjudge reliability of .81. The more subtle criteria of the Inhibition of Aggression Scale, as compared to those of the Aggression Scale, no doubt contributed to the Inhibition's Scale's lower interjudge reliabilities. The author rated the stories in the main study for inhibition.

Minuchin's Indices of Outward Aggression, Inward Aggression, Inhibition

Several of Minuchin's (1950) measures were used to test the hypotheses. The first of these measures was meant to represent outwardly directed aggressive impulses. For this purpose, the author computed the ratio of physical and antisocial aggressive actions unmodified by the major defenses to total aggressive content. In order to obtain the frequencies of physical and antisocial aggressive actions, the author scored the stories according to Minuchin's (1950) definitions. The sum of the scores on the Aggression Scale for the stories was used as the denominator of the ratio.

The second of Minuchin's measures that I used was intended as a measure of the inhibition of aggression. It was computed as the ratio of major defenses against outwardly directed aggressive actions to all

outwardly aggressive actions. In Minuchin's scoring scheme, outwardly directed aggressive actions are those that have been categorized as physical, antisocial, verbal, coercive, and passive-aggressive actions.

Minuchin (1950) found that the two measures just described had significant correlations with patients' behavior on hospital wards. The measure of aggression was associated with more acting out of paggressive impulses and the measure of inhibition of aggression was associated with less acting out.

The third of Minuchin's measures that I used combined several of Minuchin's TAT needs and press variables to provide an index of inwardly directed aggression. Two needs, abasement and self-injury, and nine categories of press, physical danger, death, physical affliction, mental affliction, physical aggression, coercive aggression, verbal aggression, passive-aggression, and blame, were included in this index.

In order to score the pictures properly, to get the measures just described, the author had to identify a hero (or heroine) in each story. As an aid in making these decisions, the author followed the rules set out by Stein (1955) and Foulkes (1978). Stein (1955) provides the following guidelines for selecting a hero: Choose as protaganist (1) the first character about whom the storyteller chooses to speak; (2) the character who occupies the storyteller's attention throughout most of the story; (3) the character who initiates the important activities; (4) the character about whom the story

revolves; (5) the character who is being acted upon by most of the other individuals; or (6) the character who is most like the storyteller in terms of age, sex, physical appearance, or psychological make-up, as determined by an analysis of the stories or biographical data. (p. 43-44)

Stein's sixth guideline is difficult to implement unless the subject is well known to the investigator. In stories where a closer examination of the sex or age of the subject was necessary in order to identify the hero or heroine of the story, Foulkes's (1978) rules for identifying the character a dreamer identifies with in his/her dream were used, adapted to a storyteller's presenting a story. In these rules, the X and Y refer to the characters in a dream, the E refers to the dreamer. Foulkes's (1978) rules follow:

- (1) X and Y are concordant for age and sex, $\tilde{E} = X$ (Principle of active voice).
- (2) X and Y are concordant for age but discrepant for sex,
 E = whichever character is of his or her own sex (Principle of sex identification).
- (3) X and Y are discordant for age but concordant for sex, and that sex is the same as E's, E = whichever character is of his or her own generational status (Principle of age identification).
- (4) X and Y are discordant for age but concordant for sex, and that sex is opposite to E's, E = X (Principle of active voice).

(5) X and Y are discordant both for age and sex, E = whichever character is of his or her own sex (Principle of sex identification). (p. 211)

The Picture-Preference Test

As discussed in the introduction, the PPT is a nonverbal projective test. Subjects choose between pairs of pictures presented on a screen, one pair at a time. A 144-item version of the PPT was used with the items of the following four scales of interest being randomly interspersed among other PPT items: (1) the Antisocial Tendencies scale, consisting of 18 items, (2) the Maladjustment scale, consisting of 26 items, (3) the Impulse Control scale, consisting of 22 items, and (4) the Primary Process Thinking scale, consisting of 14 items. The 144-item version of the PPT including the four scales of interest is found in Appendix D. Scores on these scales were obtained from the sum of responses in the keyed direction.

The four PPT scales used in the present study have respectable reliabilities. The Maladjustment and Impulse Control scales have K-R 20 coefficients of .62 and .66 respectively (Auld & Kline, 1984). Based on Fuerth's (1977) research, the Antisocial tendencies scale has both a K-R 20 coefficient and test-retest reliability of .77. Rudzinski (1979) reported K-R 20 coefficients of .75 for a nonpatient sample and .72 for a patient sample.

The Antisocial Tendencies and Primary Process Thinking scales have discriminant validity. Morrison (1973) found that the Antisocial Tendencies scale discriminated male alcoholics from male normals and

male neurotics. Rudzinski (1979; Rudzinski & Auld, 1980) found that the Primary Process thinking scale discriminated thought-disordered patients from nonpatients and from non-thought disordered patients.

Social desirability is not found to be a major factor in the PPT scales (Ryan, 1970).

The Eysencks' Psychoticism Scale

As discussed in the introduction, the Eysencks' Psychoticism scale is a self-report measure which is part of the Eysenck Personality Questionnaire. The P scale contains 25 questions to which the subject responds with a "Yes" or a "No." The total number of responses answered in the keyed direction is the scale score. The P scale was presented alone, not in the context of the full Eysenck Personality Questionnaire. The Eysencks (1976) report a test-retest reliability of .81 and internal consistency reliabilities of .74 (for the males) and .68 (for the females) for the P scale.

Background Information Questionnaire

The subjects of the main study provided information about their age, sex, occupation, marital status, and education by filling out answers to questions on the cover sheet of their test booklets (See Appendix A). To obtain an index of social status, the author used Warner's (1957) codes for levels of education and occupation. Blishen's (1973) list of occupations was referred to when there was difficulty coding a particular occupation. Warner's codes and the formula used to calculate the index of social status appear in Appendix E.

Scores on this index of social status range from 11, which indicates the highest social status, to 77 which is the lowest social status. If the subject was not financially independent, his/her parent's (or spouse's) social status was used.

Procedure

Subjects were told that they were participating in a study of imagination. They were tested individually and whenever possible in groups of up to eight people. A test session lasted for about an hour and a half.

Each subject was given a test booklet which contained all the test materials. The investigator assured the subjects that their responses would be kept confidential. They were not to leave any marks in the booklets which could identify them. A test session began with the subjects filling out the cover sheet.

Next, the subjects viewed the PPT items projected on a screen in front of the test room. Each item appeared on the screen for 10 seconds. The test began with two sample test items (Items X and Y). The investigator read aloud the following instructions which were also printed at the top of the response sheet in each booklet:

This part of the study concerns an individual's preferences. Your task is simply to choose which of two pictures presented together you like better, circling the "A" if you prefer the picture on the left marked "A", or "B" if you prefer the picture on the right marked "B". Each pair of pictures will be shown for 10 seconds. You will mark your choice within this time period. Please make a choice for every pair even if it is difficult to do so. Any questions? (Pause) A sample item is shown now on the screen. You should circle "A" on the answer sheet opposite the "X" if you prefer

the left-hand picture of the lamp, and "B" if you prefer the right-hand picture of the tree. Next is another sample item. Circle the "A" on the answer sheet opposite the "Y" if you prefer the left-hand picture, the "B" if you prefer the right-hand picture. The pictures will begin with number one.

After a brief pause, the subjects began writing stories to the pictures. They were introduced to the imagination part of the study with these words -- also printed in their test booklets:

This is a study of your imagination. The next pages in this booklet show six pictures. Your task is to make up as dramatic a story as you can for each picture. Try to fill up the page and a half (Investigator points in sample booklet) allowed for each one. It should not be necessary to spend more than seven minutes for each story. I will remind you when to go on to the next picture. Write your thoughts as they come to you, keeping in mind the following questions as guidelines for yourself: What is happening now in the picture? What are the characters thinking and feeling? What has led up to the event shown in the picture? And what will be the outcome? Are there any questions? Let's begin with the first picture. Remember not to look ahead at the next picture until I tell you that the seven minutes are up.

Each of the six pictures were reproduced at the top of the left side of the page with the guide questions following. The right side of the page was left blank should a subject need more space to write his/her story (See Appendix A).

The investigator used the following instructions for the \underline{P} scale -- instructions also printed in their test booklets.

Here are some questions regarding the way you behave, feel, and act. After each question there are "Yes" and "No". Try and decide whether "Yes", or "No" represents your usual way of acting and feeling, then circle the appropriate response. Work quickly, and don't spend too much time over any question. We want your first reaction, not a long drawn-out thought process. The questionnaire

shouldn't take more than a few minutes. Be sure not to omit any questions. There are no right or wrong answers. This isn't a test of intelligence or ability, but simply a measure of the way you behave. Any questions? Please begin.

All subjects were invited to write their names and addresses on a separate sheet of paper should they wish feedback on the study mailed to their homes.

Degree of Blindness to Gender in the Scoring of the TAT

In scoring the Aggression and the Inhibition of Aggression scales for the TAT, the investigator was blind to the gender of the storyteller. The use of Minuchin's TAT measures, however, required the investigator to identify a hero in each of the stories written to the six pictures, and sometimes this made it necessary to know the storyteller's gender. Out of a total of 660 stories, from 10 to 15 percent, therefore, were not scored blind to the gender of the storyteller.

CHAPTER III

RESULTS

Internal Consistency of Aggression and Inhibition Scales

I measured the internal consistency of the Aggression and the Inhibition of Aggression scales using the subprogram Reliability from the Statistical Package for the Social Sciences Update (Hull & Nie, 1979). Each of the six pictures served as a scale item in the calculation of Cronbach's alpha coefficients. Alpha coefficients were .427 for the Aggression scale (6 items) and .366 for the Inhibition of Aggression scale (6 items). Both scales have rather low internal consistencies. The small number of items is a partial explanation.

By inspecting the alphas when items are deleted from the Aggression scale (Table 1), one notes that all the items of the Aggression scale contribute to its internal consistency. This is not the case for the Inhibition of Aggression scale as shown in Table 2. The deletion of Items 1, 2, and 4 from the Inhibition of Aggression scale increases the scale's internal consistency (alpha = .45). The shortened Inhibition of Aggression scale consists of Items 3, 5, and 6 (See Table 3).

Internal Consistency of Minuchin's Scales and Extended Scales

Internal consistencies were calculated for several of Minuchin's scales and of the author's scales which extended or supplemented

Table 1

Item-Total Correlations and Alphas for Aggression Scale

	Item	Corrected item-total correlation	Alpha if item deleted
Aggression Scale			1
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5 Picture 6	.212 .145 .273 .148 .206 .256	.381 .417 .335 .412 .383 .352

Note. Alpha coefficient for scale = .427

Table 2 *.

Item-Total Correlations and Alphas for Inhibition of Aggression Scale

	Item	Corrected item-total correlation	Alpha if item deleted
Inhibition of Aggression			
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5 Picture 6	.173 .126 .304 019 .142 .263	.322 .353 .211 .406 .350 .265

Note. Alpha coefficient for scale = .366

Table 3

Item-Total Correlations and Alphas for Inhibition of Aggression
(Shortened Scale)

	Item	Corrected item- total correlation	Alpha if item deleted
Inhibition of Aggression (Shortened Scale)			
•	Picture 3	.259	.321
	Picture 5	.261	.320
	Picture 6	.302	.293

Note. Alpha coefficient for scale = .450

Minuchin's scales. These scales were the following: (1) Minuchin's Major Defenses scale, composed of the defense mechanisms Rejection, Denial, Excusing, and Noncompletion, (2) the author's Other Defenses scale, composed of the defense mechanisms Punishment, Distancing, Undoing, and Admission--defense mechanisms which Minuchin had not included, (3) Total Defenses scale, which is the sum of Major Defenses and Other Defenses scales, (4) Outwardly Directed Aggressive Actions scale, composed of five of Minuchin's variables, (5) Punishment Scale of outwardly directed aggressive actions, based on Minuchin's definition of punishment, (6) Bad Consequences of outwardly directed aggressive actions, based on the author's extension of Minuchin's Punishment scale by counting bad consequences to the protagonist -consequences which Minuchin had not included, and (7) Punishment plus Bad Consequences scale which is the sum of Minuchin's Punishment scale and the author's Bad Consequences scale. A subject's score on these scales was the sum of the frequencies of these variables appearing in his/her stories.

The alpha coefficients for the above scales are fairly low as shown in Table 4. Total Defenses (12 items) and Punishment plus Bad Consequences (11 items) scales which are based on a combination of two scales achieve near-respectable internal consistencies of .526 and .609 respectively. When one reviews the alphas if an item is deleted for these scales, one concludes that the internal consistencies of all these scales except Minuchin's Punishment scale increase a little when one or two items are deleted. Item intercorrelations for the Minuchin's scales, for the extended Minuchin scales, for the

Table 4

Internal Consistencies of Minuchin's TAT Scales and Extended Minuchin
Scales

				
Scale	No. of items	Cronbach's alpha		
Major Defenses	6	7,332		
Other Defenses ^a	6	.266		
Total Defenses	12	.526		
Outwardly Directed Aggressive Actions	6	- .344		
Punishment (Minuchin)	5 ^b	.358		
Bad Consequences C	6	.139		
Punishment plus Bad Consequences	* 11 ^b	.609		

^aGudas extended, or supplemented, Minuchin's Major Defenses scale by counting defense mechanisms which Minuchin had not included (Distancing, Undoing, Punishment, and Admission). ^bPicture 2 had no stories coded as having punishment press (according to Minuchin's coding scheme); therefore variance of punishment for that picture is zero, and the item could not be included in the scale. ^CGudas extended, or supplemented, Minuchin's Punishment scale by counting bad consequences to the protagonist, which Minuchin had not included.

Aggression, and for the Inhibition of Aggression scales can be found in Appendix F.

Interjudge Reliabilities for Several of Minuchin's Measures

The investigator and a second rater scored 36 stories from six randomly selected booklets for several of Minuchin's measures. These measures and their interjudge reliabilities, based on product-moment correlations, were the following: (a) Physical and antisocial, nonphysical aggressive actions (\underline{r} = .97), (b) Major defenses (\underline{r} = .94), and (c) Physical and antisocial, nonphysical aggressive actions unmodified by the major defenses (\underline{r} = .97). The investigator scored the remaining stories in the main study.

Descriptive Statistics

A summary of the demographic characteristics of the sample of lll subjects in the main study appears in Table 5. Age is the only variable of the four illustrated whose skewness and kurtosis deviates from those of a normal distribution. This is based on estimates read from \$liss's (1967) table of the critical values for normality, .49 for skewness and 1.04 for kurtosis.

The subjects were slightly older than one would expect of an undergraduate sample. Sixty-eight percent of the subjects were between 18 and 24 years old and 90% were between 18 and 38. The remaining 11 subjects' ages ranged from 39 to 65.

The sample was typical of undergraduate samples in that most subjects were single (70.3%); and 23.4% were married. A larger proportion of women than of men were married. Seven subjects were

Table 5

Descriptive Statistics for Subjects

					
Variable	<u>M</u>	<u>SD</u>	Skewness	Kurtosis	<u>N</u>
Age	25.50	8.69	2.24	5.43	111
Education	3.74	1.82	-29	81	104
Occupation .	3.67	1.66	.23	78	99
Social status	40.49	17.13	03	76	97

either separated or divorced. Warner's (1957) codes were used to express levels of education and occupation. The codes ranged from "1," indicating the highest level of education and occupation to "7," indicating the lowest level. The subjects' mean level of education (3.74) indicates schooling between high school and partial college. The subjects' mean level of occupation (3.67) indicates that the subjects (or their parents or spouses) work in office-related jobs, work in sales, or own little businesses. Scores on social status ranged from 11 (highest social status) to 77 (lowest social status). The subjects represented the lower middle class in social status. Forty-two subjects indicated a social status which was lower than the average social status for the group. In reporting the correlations of variables with social status, a positive relationship with a high social status will get a positive correlation and a negative relationship with a high social status appears as a hegative correlation.

Males and females did not differ significantly on the demographic variables, as shown in the comparisons of Table 6. Like the women in the pilot study, these women were on the average slightly older than the men. They were also slightly lower in education, occupation, and social status than the men.

Descriptive statistics for the personality variables are presented in Table 7. The Total Aggression, Total Inhibition of Aggression, and Impulse Control scales were normally distributed whereas the remaining PPT (Antisocial Tendencies, Maladjustment, Primary Process Thinking) scales and the P scale were positively skewed.

Table 6 Comparison of Men and Women on Demographic Variables

Variable	Groups compared	<u>M</u>	<u>SD</u> .	<u>df</u>	. <u>t</u>
Age	Males Females	24.27 26.42	7.36 9.54	109	1.30
Education -	Males Females	3.48 3.93	1.80	102	-1 • 26
Occupation	Males Females	3.59 3.72	1.64 1.70	97`	41
Social status	Males Females	38.70` 41.73	16.15 17.81	95	86
			: 1	;	\$

Table 7

Descriptive Statistics for Personality Variables

<u>M</u> .	SD	Skewness	Kurtosis	<u>N</u>
19.03	6.31	04	02	110 ^a
7.70	3.72	.17	53	110 ^a
3-44	3.33	1.34 ^b	1.84 ^c	111 ,
9.10	3.38	.01	56	111
5.60	3.20	.99 b	.98	111
3.12	2.46	1.43 ^b	2.48 ^c	111
3.98	2.48	.55 b	03	111
	19.03 7.70 3.44 9.10 5.60 3.12	19.03 6.31 7.70 3.72 3.44 3.33 9.10 3.38 5.60 3.20 3.12 2.46	19.03 6.3104 7.70 3.72 .17 3.44 3.33 1.34b 9.10 3.38 .01 5.60 3.20 .99 b 3.12 2.46 1.43 b	19.03 6.310402 7.70 3.72 .1753 3.44 3.33 1.34b 1.84c 9.10 3.38 .0156 5.60 3.20 .99 b .98 3.12 2.46 1.43 b 2.48 c

One female subject did not write a story to Picture 5 and to Picture 6; therefore a total score on this scale could not be calculated for her. The sample size is therefore 110 for this scale. DSignificant skewness at the .05 level of significance based on estimates read from Bliss's (1967) table of the critical values for normality. CSignificant kurtosis at the .05 level of significance based on estimates read from Bliss's (1967) table of the critical values for normality.

Table 8 contains a summary of the statistics describing these scales' frequency distributions. Scores on three scales (Total Inhibition, Maladjustment, \underline{P}) did not exceed 75% of their maximum scores with the scores on the Primary Process Thinking scale reaching 85.7% of its maximum. \underline{P} scale mean scores for the group (3.98) and for the women (3.51) exceeded those reported by the Eysencks (1976) for female students (2.42), for normal females (2.63), and for female neurotics (3.25). \underline{P} scale mean scores for the men (4.60) exceeded those reported by the Eysencks (1976) for the groups mentioned above and also for male students (4.36), for normal males (3.78), and for male neurotics (4.19).

If the Antisocial Tendencies and P scales are indeed measures of aggression as hypothesized, the gender differences found in Table 9 are in the expected direction. The men had significantly higher scores than the women on both these scales. The women had a slightly higher mean on Total Aggression (19.53) than the men (18.40), which is unexpected. This result is more understandable if one considers that the Aggression Scale measures all aggressive content, including both inwardly and outwardly directed aggression. If the women had substantially more inwardly directed aggression than the men, their Total Aggression mean could even be higher than the males'.

Table 10 presents the descriptive statistics for Minuchin's TAT measures and the author's extensions of Minuchin's TAT measures.

The low frequencies of these variables in the subjects' stories are reflected in the small group means, as shown in Table 10. Because of

Table 8

Frequencies and Percentages of Subjects in Selected Ranges of Scores
for Personality Variables

Variable	Maximum score	Ranges - of scores	Frequency of subjects	Per cent of subjects
Total Aggression	.42	2-12 13-24 25-34	12 · 78 20	10.9 71.0 18.1
Total Inhibition of Aggression	30	0-2 3-10 11-16	7 80 23	6.3 72.8 20.8
Antisocial Tendencies	18	0-3 4-7 8-15	66 34 11	59.4 30.6 9.9
Impulse Control	22	1-5 6-11 12-17	17 66 28	15.3 59.4 25.2
Maladjustment	26	1-5 6-9 10-16	59 40 12	53.1 36.0 10.8
Primary Process Thinking	14	0-2 3-6 7-12	54 47 10	48.6 42.3 9.0
<u>p</u>		0-4 5-7 8-11	68 34 9	61.2 30.6 8.1

Table 9

Comparisons of Men and Women on Personality Variables

Variable	Groups Compared	<u>M</u>	<u>SD</u>	<u>df</u>	<u>t</u>
Total Aggression	Males Females	18.40 19.53	6.68 6.04	108	93
Total Inhibition of Aggression,	Males Females	7.50 7.85	3.84 3.66	108	49
Antisocial Tendencies	Males Females	4.44 2.68	3.42 3.06	109	2.84**
Impulse Control	Males Females	9.33 8.93	3.04 3.64	109	.61
Maladjustment	Males Females	5.94 5.35	3.76 2.70	109	92 ^a
Primary Process Thinking	Males Females	2.98 3.23	2.18 2.68	109	55
<u>P</u>	Males Females	4.60 3.51	2.62 2.29	109	2.35*
•					

^aSeparate variance estimate

^{*&}lt;u>p</u> <.05; **<u>p</u> <.01.

Table 10

Descriptive Statistics of Minuchin's TAT Measures and Extended

Minuchin TAT Measures

TAT Measure	<u>м</u>	<u>SD</u>	Skewness	Kurtosis
P,A AGG WNMOD/ TOT AGG	.02	.04	2.13	3.41
Total Major Defenses/ Total Outwardly Directed Aggressive Actions	.41	46	.76	17
Inwardly Directed Aggressive Actions	2.86	1.86	43	01
Outwardly Directed Aggressive Actions	1.71	1-67	.97	.64
Major Defenses	,93	1.23	1.33	1.90
Other Defenses	.68	1.03	2.11	6.27
Total Defenses	1.61	1.83	1.28	1.83
Unmodified Physical Aggressive Actions	.23	.54	2.25	4.07
Unmodified Antisocial, Nonphysical Aggressive Actions	.17	43	2.46	5.62
P,A AGG UNMOD	.41	.85	1.94	2.49
Punishment (Minuchin)	.33	.81	2.60 4	6.33

(Table Continues)

Table 10 (Continued)

TAT Measure	<u>M</u> .	SD	Skewness	Kurtosis
Bad Consequences	.53	.92	1.72%	2.14
Punishment plus Bad Consequences	.86	1.66	2,25	4.83

N = 110

Note. Key to abbreviations: P,A AGG UNMOD/TOT AGG = Physical and antisocial, nonphysical aggressive actions unmodified by defenses to total aggression; P, A AGG UNMOD = Physical and antisocial, nonphysical aggressive actions unmodified by defenses.

their rare incidence, one expects the distributions of these variables to deviate from normality, and most do.

The raw data file and its documentation for the subjects can be found in Appendix G.

Testing the Major Hypotheses

Hypothesis 1. The first hypothesis predicts a positive relationship among the scales expected to measure aggression (PPT Antisocial Tendencies, PPT Maladjustment, PPT Primary Process Thinking, P) and Minuchin's most fundamental measure of aggression: the ratio of physical and antisocial, nonphysical aggressive actions unmodified by the major defenses to total aggression (P,A AGG UNMOD/TOT AGG). From the intercorrelations provided in Table II, we conclude that the hypothesis is partially confirmed and partially disconfirmed.

The Antisocial Tendencies and \underline{P} scales are significantly and positively related to Minuchin's measure of expressive aggression (P,A AGG UNMOD/TOT AGG) for the total scores from all the pictures and for part-scores based on three pictures (P,A AGG UNMOD/TOT AGG, 3, 5, 6) -- pictures which elicited high Aggression Scale scores and contributed substantially to the internal consistency of the Inhibition of Aggression Scale. From the above evidence, it appears that subjects' getting higher scores on the PPT Antisocial Tendencies scale and the \underline{P} scale is strongly associated with their expressing aggressive TAT content. The Antisocial Tendencies scale is also significantly and positively related with TAT measures of total antisocial, nonphysical (\underline{r} = .221, \underline{p} **<.**05) and total physical (\underline{r} = .299,

Table 11

Intercorrelations of PPT and P Scales with TAT Measures of Aggression

	- 			
• •	P,A AGG UNMOD/ TOT AGG	P,A AGG UNMOD/ TOT AGG 3,5,6	P,A AGG UNMOD -	P,A AGG UNMOD 3,5,6
Antisocial Tendencies	.324***	.413***	.301***	.322***
Maladjustment	.044	.184*	.068	.189*
Primary Process Thinking	052	-001	031	.005
P (Eysencks')	.355***	.254**	.316***	. 269**

Note. Key to abbreviations: P,A AGG UNMOD/ TOT AGG = Physical and antisocial, nonphysical aggressive actions unmodified by defenses to total aggression for all pictures; P, A AGG UNMOD/ TOT AGG 3,5,6 = Physical and antisocial, nonphysical aggressive actions unmodified by defenses to total aggression for Pictures 3, 5, and 6; P, A AGG UNMOD = Physical and antisocial, nonphysical aggressive actions unmodified by defenses for all pictures; P,A AGG UNMOD 3,5,6 = Physical and antisocial, nonphysical aggressive actions unmodified by defenses for Pictures 3,5, and 6.

*p <.05; **p <.01; ***p <.001.

 \underline{p} <.001) aggression (both of these unmodified by the major defenses). The \underline{P} scale correlates significantly with the TAT measure of physical aggression unmodified by the major defenses (\underline{r} = .412, \underline{p} <.001); it does not correlate with the TAT measure of antisocial, nonphysical aggression unmodified by the major defenses (\underline{r} = .106). The \underline{P} scale also correlated significantly and negatively with the TAT measure of inwardly directed aggression (\underline{r} = .203, \underline{p} <.05). It was the only scale among the scales expected to measure aggression (Antisocial Tendencies, Maladjustment, Primary Process Thinking) to do so.

The Maladjustment scale is not related to the TAT measure of expressive aggression (P,A AGG UNMOD/TOT AGG) for all the stories. It did relate significantly and positively with this measure on the three strongest pictures (P,A AGG UNMOD/TOT AGG, 3, 5, 6) and a measure of physical and antisocial, nonphysical aggression unmodified by the defenses for the three pictures (P,A AGG UNMOD, 3, 5, 6). These correlations are low.

The Primary Process Thinking scale does not relate significantly to the TAT measures of aggression. This scale evidently is not measuring aggression as had been expected by the investigator. The Primary Process Thinking scale does relate significantly and positively with the TAT measure of Total Defenses $(\underline{r} = .205, \underline{p} \ \ .01)$ — a TAT measure of defense against the expression of outwardly directed aggressive actions.

Hypothesis 2. The second hypothesis predicts a positive relationship between the Impulse Control scale and a TAT index of the inhibition of aggression derived from the proportion of outwardly

Hypothesis 3. The third hypothesis predicts that the PPT scales which are expected to measure tendencies to express aggression and the P scale will be positively related to each other. This hypothesis is confirmed. From Table 13, one can see that the Antisocial Tendencies, Maladjustment, and P scales are positively and significantly related to each other. The Primary Process Thinking scale is significantly and positively related to the Antisocial Tendencies and Maladjustment scales; it is not related to the P scale.

Hypothesis 4. The fourth hypothesis states that the men will have higher scores on outwardly directed aggressive actions unmodified by defenses and the women will have higher scores on inwardly directed



Table 12

Correlations of Impulse Control Scale with TAT Measures of Inhibition of Aggression

Impulse Control with	Product-momer correlation	Probability level	
Major Defenses/ Outwardly Directed Aggressive Actions	183		.056
Major Defenses	204	•	.03
Other Defenses	085		.37
Total Defenses	 173		.07
Punishment (Minuchin)	.020		.83
Bad Consequences	106	V	.27
Punishment plus Bad Consequences	049		.61

Table 13

Intercorrelations among PPT and P Scales

•	Maladjustment	Primary Process Thinking	<u>P</u>
Antisocial Tendencies	.626**	.443**	.348**
Maladjustment		.463**	.219*
Primary Process Thinking			.097

^{*&}lt;u>p</u> **⟨.**05; **<u>p</u> **⟨.**001:

aggression. As Table 14 shows, the fourth hypothesis is confirmed. The TAT stories of males had a significantly higher number of physical and antisocial, nonphysical aggressive actions unmodified by defenses ($\underline{t} = 3.15$, $\underline{p} \langle .01$) than the stories of the females. The stories of the females had a significantly higher number of inwardly directed aggressive actions (t = 4.49, p \angle .001) than those of the males. The corresponding point-biserial correlations for these \underline{t} values are -.312 (\underline{p} **(**.001), for physical and antisocial, nonphysical aggressive actions unmodified by the major defenses, and .397 (p **<**.001), for inwardly directed aggressive actions. There was no difference between the sexes in the total number of outwardly directed aggressive actions, in the total number of major defenses, or in the ratio of major defenses against outwardly directed aggressive actions to outwardly directed aggressive actions. Stories by men and women were, however, significantly different in the amount of punishment press and bad consequences associated with outwardly directed aggressive actions. Stories of males had a significantly higher number of punishment press and bad consequences than those of females. Stories of the males also had a significantly higher number of physical and antisocial, nonphysical aggressive actions (both of these unmodified by the major defenses).

Correlations of PPT, P, and TAT Measures with Demographic Variables

The correlations between several variables of interest and the demographic variables -- age, education, occupation, and social status -- are reported in Table 15. Most of the personality and TAT

Comparisons of Men and Women on Several TAT Measures

TAT Measure	Groups Compared	<u>M</u>	<u>SD</u>	df	<u>t</u>
P,A AGG UNMOD	Males Females	.70 .18	1.07	108	3.15**
Inwardly Directed Aggressive Actions	Males Females	2.02	1.61	108	-4.49***
P,A AGG UNMOD/ TOT_AGG	Males Females	-04 -01	* .06 .02	108	3.42*** ^a
Total Unmodified Physical Aggressive Actions	Males Females	.44	.68 .33	108	3.34*** ^a
Total Unmodified Antisocial. Nonphysical Aggressive Actions	Males Females	.27 .09	.49	108	2.07* ^a
Total Outwardly Directed Aggressive Actions	Males Females	1.98 1.51	1.86	108	1.44
Major Defenses	Males Females	.85 .98	1.11 1.13	108	60
Major Defenses/ Outwardly Directed Aggressive Actions	Males Females	.37	.46 .45	108	87

(Table Continues)

Table 14 (Continued)

TAT Measure	Groups compared	<u>M</u>	SD	df	<u>t</u>
Punishment (Minuchin)	Males Females	.60	1.08	108	2.87** ^a
Bad Consequences	Males Females	.79 .32	1.11 · , .69	108	2.56** ^a
Punishment plus Bad Consequences	Males Females	1.40 .45	2.13 1.02	108	2.83** ^a

Note. Key to abbreviations: P, A AGG UNMOD = Physical and antisocial, nonphysical aggressive actions unmodified by defenses; P,A AGG UNMOD/TOT AGG = Physical and antisocial, nonphysical aggressive actions unmodified by defenses to total aggression.

^aSeparate variance estimate

<u>*p **<.**05; **p **<.**01; ***p **<.**001.</u>

Table 15

Correlations of PPI and P Scales, and TAT Measures, with Demographic Variables

	<u>· \</u>	<u> </u>		
·	ge	Education [Occupation	Social Status
Antisocial Tendencies	280**	.008	103	.095
Impulse Control	122	109	.001	065
Maladjustment	204*	034	043	.050
Primary Process Thinking	139	124	060	.104
<u>P</u>	209*	.028	045	.023
P,A AGG UNMOD/ TOT AGG	124	.030	113	_084
P,A AGG UNMOD	→ 116	.021	089	.072
Total Unmodified Physical Aggressive Actions	084	023	076	.079
Total Unmodified Antisocial, Nonphysical Aggressive Actions	125	.069.	083	.045
Major Defenses/ Outwardly Direct Aggressive Actio		.025	.004	008
Total Outwardly Directed Aggress Actions	271** ive	.164 .	.057	106

(Table Continues) .

Table 15 (Continued

	Age	Education	Occupation	Social Status
Inwardly Directed Aggressive Actions	007	.156	-041	098

Note. Key to abbreviations: P,A AGG UNMOD / TOT AGG = Physical and antisocial, nonphysical aggressive actions unmodified by defenses to total aggression; P,A AGG UNMOD = Physical and antisocial, non-physical aggressive actions unmodified by defenses.

*p **⟨**.05; **p **⟨**.005.

variables are not significantly related to education, occupation, and social status. But some of the personality and TAT variables are significantly related to age. As expected from the research on aggression, the older the individual is the less likely is he/she to endorse the aggressive choices to the items of the Antisocial Tendencies, Maladjustment, and \underline{P} scales or to have in his/her stories to the TAT a large number of outwardly directed aggressive themes. The Eysencks (1976) as well found a negative correlation between age and their \underline{P} scale.

Both Sexes' Identification with Central Figure(s) in Pictures

Males' and females' identification with the central figure(s) in each picture is reported in Table 16. All of the subjects except two identified with the woman in Picture 2 and the man in Picture 5. In pictures 3 and 6, both sexes identified fairly closely with the same figure even though the percentages were not as high as for pictures 2 and 5. For Picture 1, the group of males was nearly evenly divided in their identification between the male figure and the female figure. In contrast, the women demonstrated a clear preference in Picture 1 for a character of their own sex (77.8%) rather than a character of the opposite sex (22.2%).

For Picture 4, half of the males and half of the females identified the couple as the central figure(s). The remaining subjects of each sex tended to identify the central figure as one of their own sex. The subjects' identification with the couple and their giving themes of celebration and rejoicing to this picture

Table 16

Comparison of Males' and Females' Identification with Central

Figure(s) in TAT Pictures

Picture	Central Figure(s) in TAT Picture	% of Men	% of Women
Picture 1	Man Woman	47.9 52.1	22.2 77.8
Picture 2	Woman Other	97.9 2.1	100.0
Picture 3	Man Woman	97.9 2.1	82.6 17.4
Picture 4	Couple Man Woman	50.0 33.3 16.7	52.4 6.3 41.3
Picture 5	Man Other	100.0	98.4 1.6
Picture 6	Man/Boy in forefront Man on his back Both men standing in background Man with knife in his hand	75.0 16.7 8.3	64.6 17.7 14.5

Note. These percentages are based on a sample size of 62 women and 48 men.

help explain the low amount of aggression elicited by this picture -the lowest amount of aggression among the pictures.

Despite a similarity in identification for the males and females in Picture 2, the stories of females contained a significantly greater number of inwardly directed aggressive actions ($\underline{t} = 2.40$, \underline{p} (.05) than the males. In a like manner, the stories of the males to Picture 5 contained a significantly greater number of physical ($\underline{t} = 2.66$, \underline{p} (.05) and antisocial, nonphysical aggressive actions ($\underline{t} = 2.02$, \underline{p} (.05) -- both of these unmodified by the major defenses.

Examination of the Intercorrelations among Measures for Men and Women

Three sets of correlations — the sets used to test the first three hypotheses — were examined for the men and women separately. They were the following: (a) correlations of the PPT and \underline{P} scales with the TAT measures of aggression, (b) correlations of the Impulse Control scale with TAT measures of inhibition of aggression, and (c) intercorrelations among the PPT and \underline{P} scales.

Tables 17 and 18 present the correlations of the PPT and \underline{P} scales with the TAT measures of aggression for the men and women respectively. The significant correlations of the Antisocial Tendencies and \underline{P} scales with the TAT measures of aggression found for the group as a whole are upheld for the men as shown in Table 17. The Maladjustment scale is significantly related to a TAT measure of aggression (P,A AGG UNMOD, 3,5,6) for the three most aggressive pictures only. All the correlations of the PPT and \underline{P} scales with the TAT measures of aggression for the women are low and none is significant.

A

Table 17

Intercorrelations of PPT and P Scales with TAT Measures of Aggression for the Men

	P,A AGG UNMOD/ TOT AGG	P,A'AGG UNMOD/ TOT AGG 3,5,6	P,A AGG UNMOD	P,A AGG UNMOD 3,5,6
Antisocial Tendencies	.361**	.544***	:360**	.439**
Maladjustment	.059	.261	.117	.300*
Primary Process Thinking	005	.076	.025	.115
P (Eysencks')	.399**	.283*	.376**	.316*

^{*&}lt;u>p</u>**<.**05; **<u>p</u>**<.**01; ***<u>p</u>**<.**001.

Table 18

Intercorrelations of PPT and P Scales with TAT Measures of Aggression

for the Women

-	P,A AGG UNMOD/ TOT AGG	P,A AGG UNMOD/ TOT AGG 3,5,6	P,A AGG UNMOD	P,A AGG UNMOD 3,5,6
Antisocial Tendencies	.097	.005	.060	018
aladjustment	118	183	115	143
Primary Process Thinking	101	123	060	 116,
2 (Eysencks')	.166	.080	.101	.078

3

^{*&}lt;u>p</u> **<**.05; **<u>p</u> **<**.01; ***<u>p</u> **<**.001.

The correlations of the Impulse Control scale with the TAT measures of inhibition of aggression for the men and women are reported in Tables 19 and 20 respectively. For the men, the Impulse Control scale is significantly and negatively related to three TAT measures of inhibition (Major Defenses/Outwardly Directed Aggressive Actions, Major Defenses, and Total Defenses). Like the correlations for the group (See Table 12), the significant correlations for the men are also in the wrong direction from what one would expect. None of the correlations between the Impulse Control scale and the TAT measures of inhibition of aggression is significant as shown in Table 20.

Tables 21 and 22 present the intercorrelations among the PPT and P scales for the men and women respectively. When subjects of both sexes were combined (See Table 13), the correlation between the Maladjustment scale and the Eysencks' P scale was significant, though small; when the sex groups are separated, this correlation falls short of significance. For the men, the Antisocial Tendencies and Primary Process Thinking scales are not related to each other. In contrast to the findings for the men, the Antisocial Tendencies and Primary Process Thinking scales are highly related to each other for the women.

Partial Correlations with Aggression Controlled For

Correlations of the PPT and \underline{P} scales with the non-ratio TAT measures of aggression were computed for the group as a whole (See Table 23) and for the men and women separately (See Table 24), with aggression partialled out. The partial correlations for the whole group, for the men, and for the women reflected the original zero-order correlations for each respective group. In some cases the partial correlations were

Table 19

Correlations of Impulse Control Scale with TAT Measures of Inhibition of Aggression for the Men

Impulse Control with	Product-moment correlation	Probability level
Major Defenses/ Outwardly Directed Aggressive Actions	378	.008
Major Defenses	393	.006
Other Defenses	127	.39
Total Defenses	320	.026
Punishment (Minuchin).	081	.58
Bad Consequences	230	.12
Punishment plus Bad Consequences	161	.27

Table 20

Correlations of Impulse Control Scale with TAT Measures of Inhibition of Aggression for the Women

Impulse Control with	Product-moment correlation	Probability level
. .		,
Major Defenses/	3	
Outwardly Directed Aggressive Actions	050	.70
Major Defenses	083	.52
Other Defenses	076	.56 ₃
Total Defenses	087 .	.50
Punishment (Minuchin)	.151	-24
Bad Consequences .	028	.83
Punishment plus Bad Consequences	044	.74

Table 21

Intercorrelations among PPT and P Scales for the Men

	Maladjustment	Primary Process Thinking	<u>Р</u>
Antisocial Tendencies	.642**	220	.342*
Maladjustment		.407*	.187
Primary Process Thinking		&	.070

^{*&}lt;u>p</u> <.05; **<u>p</u> <.001.

Table 22

Intercorrelations among PPT and P Scales for the Women

		•		
	Maladjustment	Primary Process Thinking	P	
		•		
Antisocial Tendencies	.616**	.664**	.277*	
Maladjustment		` .556**	.229	÷
Primary Process Thinking			.149	
		•		

^{*&}lt;u>p</u> **<**.05; **<u>p</u> **<**.001.

A.

Table 23

Correlations of PPT Scales and Eysencks' P with TAT Measures of

Physical or Antisocial Aggression, with Total Aggression Partialled

Out (Both Sexes)

		
•	P,A AGG UNMOD	P,A AGG UNMOD 3,5,6
ntisocial Tendencies	.299**	.330***
adjustment	.054	176
rimary Process Thinking	039	.001
(Eysencks')	.349***	.305***

Note. These correlations are based on a sample size of 62 women and 48 men.

^{*&}lt;u>p</u> **<**.05; **<u>p</u> **<**.01; ***<u>p</u> **<**.001.

Table 24

Correlations of PPT Scales and Eysencks' P with TAT Measures of

Physical or Antisocial Aggression, with Total Aggression Partialled

Out (Sexes Separately)

	Men $(\underline{N} = 48)$		Women $(\underline{N} = 62)$	
	P,A AGG UNMOD .	P,A AGG UNMOD 3,5,6	P,A AGG UNMOD	P,A AGG UNMOD 3,5,6
Antisocial Tendencies •	.362**	.448**	.029	029
Maladjustment	.099	.281	145	176 、
Primary Process Thinking	-010	.095	068	101
P (Eysencks')	.392**	.337*	.175	.151

^{*&}lt;u>p</u><.05; **<u>p</u><.01; ***<u>p</u><.001.

higher than the original correlations, while in other cases these partial correlations were slightly lower.

CHAPTER IV

DISCUSSION

In the task of developing new measures of aggression and inhibition of aggression, the author relied on the TAT measures that Minuchin (1950) developed to give her an overall impression of the validity of her new measures. Minuchin found her TAT measures of expressive aggression (physical and antisocial, nonphysical aggressive actions unmodified by the major defenses to total aggression) and defense against aggression (major defenses against outwardly directed aggressive actions to outwardly directed aggressive actions) to be significantly related to overt behavior. Thus the author relied on these measures as criteria. Fantasy material like aggressive TAT content is useful in assessing a person's tendencies to aggress and to inhibit aggression, but the fantasy material must eventually be linked to observable behavior to be of practical use to mental health professionals. The measures developed by Minuchin have been linked in this way.

The conclusions that can be drawn from the relationship of the author's new measures with the TAT measures are diminished -- as the author discovered by measuring the internal consistencies of her scales -- by the fact of very modest reliabilities. The small number of items in the scales helps account for this circumstance. Minuchin used 20 TAT cards and found her measures to be predictive of overt

behavior. We do not know the reliabilities of Minuchin's measures in her study, because she did not report them. If the reliabilities of all the pictures she used were as good as those of the six the author used, we would expect the reliability of her measures to be respectable. Increasing the length of the scales in this study to three times their original length in order to closely approximate Minuchin's number of items results in reliabilities of her measures ranging from .6 to .7.

With only six TAT pictures, the likelihood of finding a relationship between Minuchin's TAT measures and the new measures is reduced. Despite this handicap, the author found that the PPT Antisocial Tendencies scale and the \underline{P} scale strongly correlated with Minuchin's measure of expressive aggression. These scales are therefore useful measures of aggression -- measures of a person's predisposition to aggress. The PPT Maladjustment scale's significant correlation with Minuchin's measure of expressive aggression indicates that it is also a measure of aggression. The fact that the correlation between the Maladjustment scale and Minuchin's measure of expressive aggression was low and appeared only for the three most aggressive pictures points to the Maladjustment scale as a somewhat useful measure of a person's predisposition to aggress. If the Antisocial Tendencies, Maladjustment, and \underline{P} scales are all measures of aggression, they ought to relate to each other, which in fact they do.

The Primary Process Thinking Scale: What does it Measure?

The PPT Primary Process Thinking scale did not relate to

Minuchin's measure of expressive aggression as the investigator had expected it would. Therefore it is not a measure of aggression. Previous research provides evidence for the Primary Process Thinking scale as a measure of deviancy and nonconformity: deviancy as demonstrated by thought-disordered inpatients having high scores on it (Rudzinski, 1979; Rudzinski & Auld, 1980; Apanasiewicz, 1982) and deviancy as demonstrated by creative fine Arts students' (Verniero, 1981) scoring as high as the schizophrenics. In the present study, the Primary Process Thinking scale correlated with measures of aggression (the Antisocial Tendencies and \underline{P} scales) and with a measure of defense against aggression (Minuchin's Major Defenses). In the face of this varied evidence, the nature of the Primary Process Thinking scale remains unclear. Certainly it is not a measure of a person's predisposition to aggress. It may still be considered a measure of some kind of deviancy.

Gender Differences and Aggression

Previous research with the TAT and aggression has not shed much light on what to expect with adults in the way of sex differences on the TAT. Many of the major researchers who developed scoring schemes for aggression with the TAT and tested the predictive validity of the TAT for aggression used male subjects exclusively (Jensen, 1957; Mussen & Naylor, 1954; Kagan, 1956; Lesser, 1958; Stone, 1956; Minuchin, 1950). Murstein's (1963) review of the research on sex differences and the TAT left the author with the impression that most of the research focused on sex differences in adults for sexual need

and achievement need. The two studies Murstein reviewed which dealt with aggressive TAT content of stories told by male and female adults had contradictory results -- one study found sex differences, the other 'did not. The author's review of the literature to the present revealed a similar paucity of research dealing with sex differences in the aggressive TAT content of stories told by adults. A recent study by Pollak and Gilligan (1982) on men's and women's images of violence in the TAT did find a greater number of violent images in the stories of the males. Pollak and Gilligan defined aggression as "intent to hurt another" and violence as "the infliction of actual harm." These researchers encorporated themes into their scoring scheme which the author considered in her scoring scheme to be indicative of inwardly and of outwardly directed aggressive actions. This highlights the continuous problem of a lack of uniformity of scoring schemes for the TAT across researchers, which greatly contributes to difficulties when one wishes to compare two studies.

Despite the lack of consistent evidence in previous studies for or against sex differences in the aggressive TAT content of adults, this study revealed several differences. Men and women differed in the direction of aggression portrayed in their TAT stories. The stories of the men contained a significantly greater amount of unmodified physical and antisocial, nonphysical aggression. The stories of the women contained a significantly greater amount of inwardly directed aggression. Men's stories were also higher in the proportion of unmodified physical and antisocial, nonphysical aggression to total aggression.

Gender differences were also found in the new measures of aggression. Males endorsed the aggressive alternatives on items of the Antisocial Tendencies and \underline{P} scales significantly more often than the females did. This finding is in line with the research on gender differences and aggression. Men (and boys) have been found to be more aggressive than women (and girls). Thus it would make sense that men had higher scores on measures of aggression like the Antisocial Tendencies and \underline{P} scales, which they do in this study.

Age Differences and Aggression

Apart from sex, age was the only demographic variable which related significantly to other variables in this study. It correlated negatively with these measures of aggression: the Antisocial Tendencies, Maladjustment, and \underline{P} scales. Younger persons are more likely to be aggressive than older persons. This finding is consistent with previous research in aggression, using convicted criminals and juvenile delinquents as subjects, which has found aggressive behavior to be less prominent in older persons.

The finding of a significant and negative correlation between age and the TAT measure of defense against aggression (major defenses against outwardly directed aggression to outwardly directed aggression) is puzzling to the investigator because it is not consistent with the results just discussed. It cannot be explained by her.

What does the Impulse Control Scale Measure?

The author had hoped to find evidence that supported her hypothesis that the Impulse Control scale was a measure of a person's overcontrol of his/her aggressive impulses. The results of this study did not support this conclusion. The Impulse Control scale did not relate to Minuchin's measure of defenses against aggressive impulses (major defenses against outwardly directed aggression to outwardly directed aggression). It is therefore not a measure of a person's predisposition to inhibit his/her aggression.

The search for a definition of the nature of this scale continues. The author will speculate briefly as to what this experimental scale could be a measure of. In Auld and Kline's (1984) study, the Impulse Control scale loaded highly on a factor which discriminated normal. from pathological subjects. The Impulse Control scale also defined a factor which appeared for the women only in Kline, Auld, and Cooper's study (1983). It is conceivable that this scale may be measuring something relevant to both women and pathological persons just as the Primary Process Thinking scale may be measuring something relevant to inpatients and creative students. Since this scale was interpreted as a measure of the overcontrol of both aggressive and sexual impulses (Auld & Kline, 1984), it may still be a viable measure of the overcontrol of sexual impulses. On the face of it, the items of the Impulse Control scale do not appear to the author to depict themes of a sexual nature as clearly as the PPT Avoidance of Sexual Intimacy scale does. The subjects who choose the keyed choices of the Impulse Control scale as repeated stimulus patterns or

nonoverlapping figures may be motivated to do so by needs for structure, familiarity, and orderliness (in a normal sample) or by needs for control (in a pathological sample). Pictures depicting young children, young animals, or mothers feeding their young may address the regressive tendencies of pathological groups.

Picture Pull, Identification, and Gender Differences

The author will now discuss the TAT pictures as stimuli and the gender differences in the type of aggression projected onto the central figures of the pictures. Each picture presented to the subjects in this study had its own stimulus pull, that is, it set up a scenario onto which a storyteller had to place his/her own meaning. On the face of it, the pictures used in the main study lacked a clear depiction of a female aggressing against another person. Several pictures were used in the pilot study which did depict a female aggressing against another, but they were excluded from the main study because they did not elicit as much aggression as other pictures did. For example, Murray's card 18GF elicited many more themes of a woman caring for an ill child or spouse rather than a aggressing against another person. Could it be that our perceptions -- dictated to a major extent by the stereotypes in our culture -- more readily embrace the scenario of males as aggressors than females as aggressors?

Previous studies (Frodi et al., 1977) point to women being less sensitive to aggressive stimuli than men. From the results of the present study, there were no differences in the sexes' perceptions of

aggressive TAT stimuli. Both males and females had about the same amount of aggressive TAT content -- TAT content that included both outwardly directed and inwardly directed aggressive actions.—As for the subjects' identification with the central figure, both sexes identified with the same central figures in four of the six pictures. What differed between the sexes was the kind of aggression attributed to the male or female central figure. In Picture 2 where the sexes identified very closely with the female central figure, women projected more inwardly directed aggression onto this figure than the men. They made the character the recipient of aggression. In another picture where the sexes were almost identical in their identification with the male central figure, the men projected more unmodified physical and antisocial, nonphysical aggression onto the male central figure than the women (Picture 5). They made the central figure the aggressor. What can be made of this finding? It appears that both sexes attributed to the respective central figures stereotypical roles for aggression. That is, male as aggressor and female as recipient of aggression. Women and men are probably more comfortable adhering to these stereotypes than contravening them; it forms an integral part of their perceptions.

Dynamics of Aggression

A consideration of the gender differences in the TAT in this study and of the evidence that several of the PPT scales and the \underline{P} scale predict the criterion measures only for the men leads to the following statement about the dynamics of aggression: If aggression

is more acceptable to the self, i.e., ego-syntonic, as we would expect it to be for males, the new measures of aggression (Antisocial Tendencies, \underline{P} , Maladjustment) should be more likely to predict overt aggression (as indexed by Minuchin's TAT measures). On the other hand, if aggression is not as acceptable to the self, as we would expect to be so for females, the new measures of aggression are not likely to be as predictive of Minuchin's TAT measures of aggression. One is reminded that Minuchin's criterion measures of aggression were initially developed for males. The strong relationship between the Antisocial Tendencies scale $\stackrel{--}{-}$ a new measure of aggression $\stackrel{--}{-}$ and the Primary Process Thinking scale in the female sample suggests that a woman who is aggressive is likely to be more deviant, more nonconforming, and possibly more creative than an aggressive man. A deviant, nontraditional woman is more likely to accept her aggression as part of herself and to be less detensive about expressing her aggression than other women would.

Problems with Story-telling Technique for Measuring Aggression and Conflict about Aggression

Although the story-telling technique has been used extensively both in research and in clinical practice to measure a person's motives, it is a drawback of this approach that, in the absence of any expressing a motive theme in a story, no inhibition of the motive can be scored. Thus — in the case of aggression — the researcher cannot determine whether there is no aggression, since it is not expressed, or whether aggression has been thoroughly inhibited from

the start. This circumstance artifically increases the correlation between the Aggression and Inhibition of Aggression scales -- which are moderately correlated. For inhibition to be detected, the story must contain an aggression theme. Thus the correlation between the aggression and inhibition of aggression scales is inflated. (If an aggressive theme is present in a story, any modification of the theme is taken as an instance of inhibition of aggression).

Therefore the measures of aggression and inhibition of aggression derived from the subjects' stories are not adequately assessing the full force of these tendencies. The author speculates that the subjects' scores are underestimates of their aggressive and defensive tendencies, especially for the women. One would expect, as the author did, that there would be a difference between the men and women in the amount of inhibition of aggression contained in their stories. The data of this study did not support this expectation, although evidence from previous research on gender differences and aggression would support such an expectation. The stories of the women contained a slightly greater amount of inhibition than those of the men. The measures used in this study cannot detect a person's self-censoring his/her stories before his/her writing them down. However, the fact that the women in this study made the central figure they (and the men) identified with the victim of another's aggression, rather than making him/her the aggressor, suggests that the women were using a defensive mechanism against the expression of aggression.

Another concern researchers have when they score stories for aggression and inhibition of aggression is finding the appropriate

mathematical formula which best combines these two tendencies. investigators in the past (Lesser, 1958; Mussen & Naylor, 1954) used ratio indices combining measures of expressive aggression and measures of inhibition of aggression like punishment. Similar ratio indices could not be used in this study since the Aggression scale was designed to include both outwardly directed and inwardly directed aggression. Several mathematical combinations of total aggression and total inhibition scores were attempted by the author, however, all failed to be meaningfully related to the other measures of aggression or inhibition of aggression. Thus Minuchin's ratio indices were resorted to more extensively than had at first been anticipated. Her indices had the advantage of being predictive of overt aggressive behavior. This twist in the data analysis relegated the Inhibition of Aggression scale to a less important role than the author had initially intended. Minuchin's ratio indices of aggression (P, A AGG UNMOD/ TOT AGG) and inhibition of aggression (Major Defenses/ Outwardly Directed Aggressive Actions) have larger coefficients of variation in their numerators than in their denominators. This lessens the risk of obtaining spurious correlations with these ratio indices. These ratio indices are not correlated with any other ratio index, which also minimizes risk from using such indices in the study.

Evidence of Discriminant Validity

Although the study provided much evidence for the convergent validity of several PPT measures of aggression, there is only a little evidence for the discriminant validity of the new scales.

According to the Eysencks, the \underline{P} scale is a measure of psychoticism. We would then expect the \underline{P} scale to be related to the Primary Process Thinking scale -- another purported measure of psychoticism. The \underline{P} scale did not correlate with the Primary Process Thinking scale (\underline{r} = .097). The \underline{P} scale did significantly correlate with the new measures of aggression (Antisocial Tendencies and Maladjustment scales). Therefore this study furnishes us with further evidence against the Eysencks' claim that the \underline{P} scale is a measure of psychoticism.

In a like manner, it could be argued that my findings show that the Primary Process Thinking scale is not simply a measure of psychoticism. The Primary Process Thinking scale correlated significantly with the same two new measures of aggression as the \underline{P} scale did (Antisocial Tendencies and Maladjustment scales). It should not have correlated with these scales if it is a pure measure of thought disorder.

Caution on Accuracy of Individual Prediction

The author's enthusiasm for the new measures may have given the impression that these measures are ready to be used in clinical practice. The reader'is warned that though important relationships between predictor and criterion measures have been shown, the degree of relationships falls far short of what is needed for confident prediction in the individual case. This can be illustrated by a table showing the number of subjects whose criterion scores on Minuchin's TAT measures would be accurately predicted by their scores

on the PPT Antisocial Tendencies scale, and the number whose scores would have been wrongly predicted. See Table 25.

In the table, prediction is accurate for 66 out of 110 subjects, or 60%. Prediction is wrong for 40. By chance, one would be right 49% of the time. By using the PPT scale, one would improve one's prediction by 55% of the greatest possible improvement (with these marginal proportions, even perfect prediction would lead only to 69% accuracy.) The main point is: Prediction is not accurate enough to use in the individual case.

Table 25

Prediction of Minuchin's Criterion from PPT Antisocial Tendencies Scale

Actual Criterion Score

Lew High

PPT
Scale
Predicts

Low 48 5

APPENDIX A

TEST BOOKLET INCLUDING NEW
TAT PICTURES AND SAMPLE PROTOCOL

APPENDIX A

Test Booklet Including New TAT Pictures and Sample Protocol

Your answers to this questionnaire are anonymous—identified only by a code number which is in no way linked to you
personally. However, we do need some information about such
matters as your age, education, occupation, and family background,
in order to classify our subjects into various groups to see
whether these background factors are related to personality.
Would you therefore please answer the following questions:

1.	What is your age?years						
2.	What is your sex? malefemale						
3.	What is your martial status? singlemarried						
	widow widower separated divorced						
4.	What is your own occupation? (Please describe it fully; for						
	example, "telephone installer" rather than "Bell Canada")						
•							
5.	If you are the primary wage earner in your family or if you are						
-	fully self-supporting, please indicate the level of education you						
	have completed.						
6.	If you are supported financially by your family or by a spouse,						
	please indicate the occupation and level of education completed						
	by your father (or mother if she is the head of the household)						
	or your spouse.						
	Occupation:						
	Education:						

Thank you for your assistance in this research.

If you wish, a brief summary of the nature of this study and of some of the results will be mailed to you this fall. Please leave your name and address on one of the "Address" sheets provided before leaving the room.

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This part of the study concerns an individual's preferences. Your task is simply to choose which of two pictures presented together you like better, circling the "A" if you prefer the picture on the left marked "A", or "B" if you prefer the picture on the right marked "B". Each pair of pictures will be shown for 10 seconds. You will mark your choice within this time period. Please make a choice for every pair even if it is difficult to do so. If you don't like either picture mark the one you dislike less. Any questions?

A sample item is shown now on the screen. You should circle "A" on the answer sheet opposite the "X" if you prefer the left-hand picture of the lamp, and "B" if you prefer the right-hand picture of the tree. Next is another sample item. Circle the "A" on the answer sheet opposite the "Y" if you prefer the left-hand picture, the "B" if you prefer the righthand picture. The pictures will begin now with number one.

This is a study of your imagination. The next pages in this booklet show six pictures. Your task is to make up as dramatic a story as you can for each picture. Try to fill up the page and a half allowed for each one. It should not be necessary to spend more than seven minutes for each story. I will remind you when to go on to the next picture. Write your thoughts as they come to you, keeping in mind the following:

1. What is happening now in the picture?

2. What are the characters thinking and feeling?

3. What has led up to the event shown in the picture?

4. What will be the outcome?

New Pictures 1, 2, and 4 follow.

Other Pictures are:

Picture		Murray's	TAT	card	13	MF
Picture		Murray's	TAT	card	18	BM
Picture	6	Murray's	TAT	card	8	BM



What is happening now in the picture?
 What are the characters thinking and feeling?
 What has led up to the event shown in the picture?
 What will be the outcome?

(Picture 1)



What is happening now in the picture?
 What are the characters thinking and feeling?
 What has led up to the event shown in the picture?
 What will be the outcome?

(Picture 2)





What is happening now in the picture?
 What are the characters thinking and feeling?
 What has led up to the event shown in the picture?
 What will be the outcome?

(Picture 4)

Here are some questions regarding the way you behave, feel, and act. After each question there are "Yes" and "No.". Try and decide whether "Yes," or "No" represents your usual way of acting or feeling, then circle the appropriate response. Work quickly, and don't spend too much time over any question. We want your first reaction, not a long drawn-out thought process. The questionnaire shouldn't take more than a few minutes. Be sure not to omit any questions. There are no right or wrong answers. This isn't a test of intelligence or ability, but simply a measure of the way you behave. Please begin.

The P scale items followed.

Sample Protocol

Picture 1

Upon returning home, the husband finds his spouse in a very sorrowful and depressed mood for she just finds out that one of her parents, the mother, has just been in a terrible accident. Her condition is unknown. The husband is a caring and gentle man and tries to console his wife. His calming of his wife is quite a bit of help to her. Knowing someone is there to share her pain, the wife realizes that she has someone who truly loves her and someone that is strong when she is not. When they are calmer, the couple proceeds to the hospital where her mother has been admitted and found to be in stable condition. She will be released within a few days.

Picture 2

In this picture, the woman has just gotten off the bus and realizes that she is running late for her job interview. Realizing that she is already five minutes late, she becomes worried that her hopes of getting the job have been crushed. She takes a shortcut by darting through the traffic instead of crossing at the crosswalk in an attempt to still try to make it to the interview even though she realizes she will be at least ten minutes late. Upon arriving at the place of the interview, she is greeted by the receptionist who informs her that the employer has been tied up in a business meeting and is running about ten minutes late if she didn't mind waiting.

<u>Picture</u> 3

As William entered his apartment on the rainy Thursday night, he realized something was wrong when he called his wife's name (June) and there was no response. June, William had realized, was a very depressed person since she miscarried their first child six months ago. Entering the kitchen and then searching from room to room for his wife, he was almost afraid to enter the bedroom. Upon slowly opening the door, William saw June's figure lying quietly under the sheets. Approaching her, William realized that his wife had taken an overdose of pills and had taken the only way out of the depression she knew of.

Picture 4

Rick and Jane had been lovers since high school. They grew up in a small town together and each of their parents were friends.

They had known each other all their lives and cherished the time that they had been together. Ever since the beginning days of their romantic relationship, Rick and Jane knew that they would one day be married in the small United Church that the both of them attended.

On the bright, sunny, Sunday afternoon, Rick finally made their highschool dreams a reality when he gave Jane a small velvet box containing her engagement ring. Upon opening the box, tears came to Jane's eyes and Rick placed the ring on her finger. Grabbing Rick's hand, Jane pulls Rick along so that she can announce the happy news to her parents.

Picture 5

Walking down the street just opposite his office building, Sam gets a strange feeling as if someone is watching his every step.

Realizing that his car is just less than a half a block away, Sam reaches in his pocket for his car keys. But as he reaches footsteps behind him become closer and are at a faster rate of speed. Becoming anxious of what is going to happen, Sam decides to turn around, finding a strange man in a dark overcoat grabbing him from behind. Luckily Sam had remembered many of his martial arts moves from the military.

He apprehended the man until the police arrived.

Picture 6

The boy in this picture is trying to comprehend what the days of the war were really like when so many casualties were suffered by the men fighting for their country. He pictures the men being carried in on stretchers for immediate surgery. With a sickness in his stomach, he can smell the medications and hear the screams of the men asking the doctors to please let them live. The boy realized that war is wrong and causes unnecessary pain.

APPENDIX B
THE AGGRESSION SCALE

PICTURES

Picture 1 Man's hand over woman's mouth (new pic Picture 2 Woman running across a street (new pic Picture 3 Murray's TAT card 13 MF Picture 4 Man and woman joining hands (new pictu Picture 5 Murray's TAT card 18BM Picture 6 Murray's TAT card 8 BM	ture)
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THE AGGRESSION SCALE

Each story is scored on an eight point scale according to the degree of aggression expressed in the story. A score of 0 indicates no aggression, while a score of 7 indicates the highest degree of aggression.

Factors which were considered in the preparation of the scoring scheme for aggression included:

(a) the nature of the aggressive act(s) which is described in a story

(b) the amount of detail or elaboration which is used to describe the aggressive act(s)

(c) the importance of the aggressive act(s) which relate to the

main plot of a story

(d) the likelihood

(d) the likelihood of the picture to evoke a relatively high degree of aggression

Procedure

- (1) The scorer reads a story to gain a comprehension of its content.
- (2) The scorer identifies the aggressive act which is contained in the story. If a story contains more than one aggressive act then the most aggressive act is scored. The scoring scheme is used to determine the score which reflects the appropriate degree of aggression.
- (3) The most aggressive act is scored regardless of attempts by a storyteller in distance himself/herself from the aggression by:
 - (a) qualifying the aggressive act with words which connote the possibility of aggression (e.g., perhaps, might be, possibly)
 - (b) denying that the aggressive act occurred by the use of a negative verb (e.g., he did not hit her, they did not have a fight). If a storyteller states that a hero was not killed, then the incident is scored as a legitimate act instead of a defense mechanism.
 - (c) stating that an aggressive act occurred in the past
 - (d) making an aggressive act part of a dream or an altered state of consciousness
 - (e) speculating on the occurrence of an aggressive act (e.g., she may be hit by the car; he intends to kill her)
 - (f) mentioning two or more acts when one is more aggressive than the others (e.g., he may drown his sorrows or commit suicide)

Scoring Scheme

Score of 7

Description (7a) A character commits suicide or kills another at present or in the recent past. The acts are described in vivid or dramatic detail. A storyteller may narrate in the first person.

Examples

A man is described as throttling a woman to death in vivid detail. (Picture 1)

Why won't anyone run me over, I want to die...I don't want to live anymore...Shelly was mad she could not even kill herself, all her life she was a loser. BAM! a milk truck splattered her head against the side walk. "I WIN, FINALLY" Shelly said as, she closed her eyes. (Picture 2)

He wanted something kinky, but this was crazy. She had made love to a bucher knife while he applauded in the background. But why wasn't she getting up now...Mark noticed the long cut down her belly. "OH SHIT" Another one dead", Mark said. (Picture 3)

The man has just come home from his A.A. meeting to find a woman in his bed. He hears the shower going and instantly in a moment of jealousy and anger attacks the woman, putting out his hands and finding her long thin neck begins to strangle her. Then when no more movement occurs he stands wiping his brow still without realizing what he has done. (Picture 3)

I've got a real neat gun, too. I like to watch the skin flex as they pass through my victims' heads. (Picture 5)

Description (7b) More than one death is mentioned in a story. Other themes include:

- (1) A hero kills or intends to kill repeatedly
- (2) A hero is a witness to multiple killings*
- (3) A hero is a victim or a potential victim of a character who kills or intends to kill repeatedly -.
 - * Multiple deaths which occur in a war or a battle are <u>not</u> scored here.

Examples

Darkness enclosed them as Dean shut the door. Huddling into the corner he held on tight to Erma. He was out there. He wanted to kill them as he had done to all the other visitors in the hotel...She knew they would be killed that evening...He knew they were in there. (Picture 1)

The story is about a woman who has killed someone in the park. In her haste, she starts to cross the street but is hit by an oncoming car. She is pronounced dead on arrival at a nearby hospital. A death for a death. (Picture 2)

Suzanne had been raped and killed and Bill like a part of himself had died at that instant...Bill felt he could not make a fresh start now, not without Suzanne so he grabbed his hand gun and shot himself in the head. (Picture 3)

Chuck and Mary are finally getting married. They dance outside the cemetery, where the last obstacle lie. It took a lot of planning and waiting to reach their goal of marriage. First, the family had to be removed. Mama and Daddy, and two brothers...It took three years after their decision to get married to murder the entire family but it was finally done and mama was the last. She was the hardest of all. (Picture 4)

Wayne Connelly was accused of murdering his wife...he was convicted and was to be put to death in the electric chair... (outcome) Wayne was put to death. (Picture 5)

The man in the picture has just been given information that his wife has been killed in a car accident. The hands of the person are those of a friend comforting him. The man is closing his eyes wondering what he is going to do, how he is going to survive without her. Why did it have to be her that was killed, he is blaming God. The man may drown his sorrows in drink or commit suicide. (Picture 5)

This man is lying on the floor after being shot during a robbery. He feels no pain since he may possibly be dead. He was minding his variety store when a couple of hoodlums came in and demanded his money at gunpoint. He was getting the money from the safe when one of the thieves panicked by a noise in the street suddenly shot him. The result will be that the man will die and the thieves will get away only to steal and kill again and again. The man's family will grieve his death and sell the business. (Picture 5)

He was the cause of it all, because he had the power to control minds. He had forced many a man to do harm to another and his evil wishes were far from ended. His mother had not listened to his words and she paid for it. So would everyone else. He had planned to only kill those who were no longer needed or who proved unloyal. That would be few. Everyone was too afraid to disobey the boy with the power after what they saw done to his mother and others. (Picture 6)

A young boy seems to be turning his back with no expression of hurt or sorrow for the person in the background that is about to be cut open by a man. The man who is about to cut the dead body is a doctor who helps a murderer cut up people who he caught and kills after he has beat them to death. The boy sees this through his eyes. Since he has a possible ability to do so. (Picture 6)

Ted, the boy in the picture is having a nightmare. He is dreaming he is the witness to a dreadful slaying. Men killing others with both guns and knives and Ted just stands there unable to speak, unable to move. He wants to cry out for help but all his muscles are limp. He is awakened by his alarm clock. He shakes under his sheets still very upset from the imaginary violence that filled his night. (Picture 6)

Score of 6

Description (6a) A character kills another, commits suicide, or is a victim of a killer. These acts are reported with minimal detail.

"Accidents" which cause the death of a character are reported as a murder in disguise. Accidents which are reported in great detail and end in death.

The death of a character is discovered. There is mention of the goriness of the death.

Examples

This man is choking his estranged wife to death. (Picture 1)

Story about a woman who "accidentally" hit her neighbor with her car while her neighbor was crossing the street...she never liked this person and she was not upset about the incident... the neighbor dies...in fact she could not have planned to get "rid of" this neighbor any better. (Picture 2)

A young man has just murdered his lover. (Picture 3)

The man had just killed the woman on the bed. (Picture 3)

The woman is trying to pull away from her assailant. He takes her into the fields and does away with her. (Picture 4)

The man is unconscious. He has been stabbed in the back by a midnight stalker. He is being dragged off into the darkness where he dies alone. (Picture 5)

Oh no! Little Johnny has just killed Mr. Jones and robbed him. (Picture 6)

...The two unprofessional men are attempting to remove the splintered remains of the wooden knife from his side. The one that was originally put there from John. They had been brothers who never got along...So one day John decided to get even. While hunting one day he "accidentally" slipped and unfortunately ended stabbing his brother. He is sitting here looking not so worried. He gets away with murder. (Picture 6)

Description (6b) A character is a victim of violent physical aggression (e.g., rape) but there is no loss of life.

Arguments or fights involve much physical violence. A death does not result.

The violence of a battle or a war is elaborated on with reference to a massacre.

Examples

...The husband is an alcoholic which has severe violent tantrums. He beats his wife constantly. He is grabbing his wife's mouth as she moans for help. This is a beating which is at the beginning of his violence since she is unbruised. (Picture 1)

A lady on her way home from somewhere has been jumped from behind by an unknown assailant who is going to rape her. In desperation she fights but the man muffles her screams and overpowers her to the ground, where he commences to rape her. (Picture 1)

... They were both drinking and having a good time, then an old boyfriend's name came up and the husband was overcome with jealousy. They went home and continued arguing. He forced her to have sex and slapped her around and really hurt her. (Picture 3)

It seems some time before he left the man who was using the bathroom decided that he would enjoy a bit of sex. He was pleasant about it and asked nicely but the funny girl would not give him any. This made him mad so he decided the only way he would get anything was to do it in a nice but somewhat forceful manner. He threw her on the bed, stripped off her clothes and had sex with her. He was as gentle as possible considering the conditions but she didn't seem to be enjoying it as much as she could have...(Picture 3)

Story about a husband who beats his wife who told him or her plan to leave him...the beating has stopped for now...she is left with a swollen face, cuts and bruises, and a stiff warning to not call the police. (Picture 4)

A story about a man who has been wounded in a fight. His assailant is dragging his blood covered body into an alley as the man moans loudly. (Picture 5)

Norman is having surgery today. The doctors are trying to repair some of the damage the stabber had done. Norman was stabbed in the stomach by a co-worker of his. This co-worker was Tony... but one day it just got too much and Tony's emotions got out of control. He couldn't handle Norman's ridicule any longer... he just picked up the nearest thing and dug it into Norman's big belly! (Picture 6)

The doctor has arrived at last! The dying victim of a knife has seen his last days. The dusk is approaching and his blood is a painting on the side walk as the doctor cuts the broken blade out of the chest of the innocent victim. The young lad looks away in disgust not able to bear the sight his eyes forsee. (Picture 6)

This Allan is just home from a war far away. He is expected to fit into society and be a responsible member. This is hard for him. He has spent four years of his life killing people that he had not feelings for and witnessing atrocious acts committed against people. He keeps having visions in his head like this one in the picture. This is a recollection of his best friend who was mortally wounded. His friend was shot in the stomach and had to be operated on in the heat of the battle... (Picture 6)

Here we are in the bunker, the men are coming to the doctor's table like ants to a picnic. The man has no anaesthetic to give the soldier, he does not even have time to sterilize his instruments. In the forefront of the scene a young New York reporter looks out into the fighting outside watching the destruction, blood covered soldiers limping, crawling, begging for help...(Picture 6)

Score of 5

Description (5a) A murder, a suicide, or a death through illness or accident of a character is reported. A hero is faced with the consequences.

A hero contributes to the accidental death of another or receives news of the death of a relative or a friend.

Examples

The woman has been informed by the man of a death in the family...
Maybe the husband had died. (Picture 1)



The lady has just been told that her father has died and is being held by her husband. (Picture 1)

Hank is trying to comfort his wife because she has just received news that her parents have both passed away. (Picture 1)

Sue, in a hurry for work runs a stop sign, strikes a young girl on a bike coming the other way...Panicked, she begins to say she's sorry. But sorry won't do. "The girl is dead," says a man who has witnessed the accident. (Picture 2)

The man has just discovered the woman dead in bed...the woman was probably raped and then murdered by someone. (Picture 3)

The man just came home and he finds that his wife is dead in the bedroom...It seems that the woman was raped and killed because the woman was undressed and lying on the bed. (Picture 3)

The man has just found his wife who has committed suicide. (Picture 3)

The devasted man has just lost his wife because of an overdose. She had taken too many valium earlier in the day. (Picture 3)

...He entered the bedroom and saw her lying there, the pills beside the bed. "Oh my God", he cried. "Why has she done this." (Picture 3)

...The woman in the picture looks like she is dead perhaps by suicide...The lady could have died by natural causes but maybe she committed suicide because of pressures she faced during her life. (Picture 3)

A man walks into his room and sees his wife is dead, lying in bed...he can't explain the circumstances that could have led up to her death. (Picture 3)

The woman has just died and the man is very upset. He did everything he could to help her but the woman just did not have the strength to live. (Picture 3)

The man arrived at the apartment and found the woman he loved dead...The woman had been sick and she died...Here is the woman's body, dead and he must take care of the situation. (Picture 3)

Description (5b) A storyteller alludes to an impending death or concludes with a death or potential death of a character (e.g., may die, will probably die, willing to risk his own life). The cause of death could be an accident, an illness, a war injury, self-destructive behavior other than suicide, or an argument which goes too far.

A hero narrowly escapes death in an accident or similar situation. Phrases which imply a closeness to death are included here (e.g., near fatal accident, nearly died).

Examples

He could not believe that she would actually do it. She was depressed these past few weeks but he thought she would snap out of it. How could she swallow all those pills? He kept shaking her and asking her to wake up and tell him how many she swallowed. He is too late...she will die in his arms. (Picture 1)

The lady is running away from somebody probably a man. He has just chased her across the street...The lady has made it across one lane of traffic but I think she will be hit by the next lane of traffic...She seems frantic and will probably be hurt seriously if not fatally by the oncoming car. (Picture 2)

An emergency call a minute ago just drives Andy insane. Her car broke down and she could not get a cab. So, she ran to the hospital. "What is more painful than losing your loved one?" she keeps telling herself. "I must be strong if anything happens to Gary (her husband)." If Gary dies from the heart attack she has to take care of the business as well as being a responsible mother. (Picture 2)

A story about a man and woman arguing...the storyteller speculates that the man will begin hitting the woman...he hits her too hard...she may die. (Picture 4)

When I was twelve we stayed at a cottage up north. Days past and I found myself searching for things to occupy my spare time...I was at a loss until one day while sitting on the swing out back I was aware of a disturbance between Mr. and Mrs. Rothchild..."Let me go" pleaded Mrs. Rothchild "I hate being here at the cottage." "Its for your own good, you'll feel better after you face it" said Mr. Rothchild. I sat trying not to draw attention to myself as I listened to them arguing. I sat wondering why Mrs. Rothchild was so distraught about going into the house then I remembered. Last year they had a baby with them...they don't have it anymore. That's why she was so distraught. The baby died in there...I'm sorry Mrs. Rothchild. (Picture 4)

The man seems to be unconscious and is being carried so he can receive medical treatment. The man has over-exerted himself and the combination of drugs or alcohol has led him to a deteriorated state. He will probably die. (Picture 5)

Someone is having surgery and does not look like he is relaxed from the look on his face. From the look of the boy in the foreground, he is not optimistic over the outcome...From the looks of everyone's faces I think that the patient will die. (Picture 6)

...The boy is turning away from a necessary surgery on a wounded soldier...The man will survive the surgery, but many others will die. The boy will never see home. He will be killed saving someone's life. (Picture 6)

Score of 4

<u>Description</u> (4a) An incident (e.g., mugging, assault, fight, robbery, abduction) is mentioned which involves some physical aggression (e.g., pushing, grabbing, beating, slapping).

A highly aggressive act such as a murder or a rape is averted early in the story with the successful escape of a victim or the intervention of another character.

Surgery is described in graphic detail (e.g., much blood, cutting) or as producing a great amount of pain.

Examples

"Shh, or I'll have to hurt you," the rapist muttered through clenched teeth. The woman was in hysterics and was panicking. The rapist clamped his hand over her mouth and the woman took this as an opportunity to escape from his clutches and get help. (Picture 1)

...As Joanne left her friend's home, a man jumped her and grabbed her by her throat...she struggled free and ran home. (Picture 1)

The man has approached the lady and grabbed her. He is now pulling her towards him. She is trying to pull his hand away from her mouth so she can scream...The man looks more unfeeling than the woman and is the aggressor. I don't think he wants to physically harm her right now. But I believe he will end up striking her to prevent her from struggling further. It is probably late at night and this is probably occurring at the lady's house. The man was an uninvited guest. (Picture 1)

The man is being escorted out of a bar by a bouncer. He has had too much to drink and started becoming extremely wild and loud. He was at the point of assaulting some of the customers when the bouncer stepped in and helped him leave the bar. (Picture 5)

Fred is at the bar again, drinking his problems away...He asks for a beer. When the bartender repeatedly tells him there is no beer for the strike, Fred begins to show violent behavior. The bouncer has to take matters into his own hands by grabbing Fred away, forcing him out of the building. (Picture 5)

Someone has just grabbed the young man in the picture and the man is trying to look back and see who it is. However he cannot turn his head enough...The person doing the grabbing is probably another man judging from the size of the fingers and the idea that the first man is being pulled backwards... he is confused and does not know what will happen next. (Picture 5)

A well dressed man with one hand on his shoulders and the other one on his arm. He could be in a fight. All he thinks is to get rid of the hands on his body and try to fight him down. He could be a cop or private investigator...He could be trying to follow the guy that he is investigating, after he is discovered, so that guy punches him. (Picture 5)

This is Larry a Russian spy. He is selling secrets to the Russian government...Larry does not know that he had been found and watched for weeks. As he is leaving with company secrets he is grabbed. (Picture 5)

Jack stood silently. The room was dim, he could barely make out the tall massive figure standing in front of him...The figure came closer...Jack called out to him a crude remark. Suddenly two hands grabbed him. A quick blow to the face reminded him of his weakness. (Picture 5)

The child is in the midst of a dream where he sees himself back in the 1700-1800 wild west. The person lying on the table is himself and he is dreaming that he was shot in a shoot out with some wanted criminals...they must operate without the presence of anesthesia...He cannot watch as they cut into him, even to try to help him. (Picture 6)

...My friend Rolly had often-regressed back to the days that he was fighting the day he was injured. He recalled being cut open and the extreme pain because there was no drugs to put him out. He remembers that pain more than the war. (Picture 6)

Description (4b) A character is threatened with his/her life if there is no compliance with a mugger, thief, or abductor. A victim clearly expresses fear for his/her life.

A fear of death is stated or strongly implied in stories involving surgery.

A hero attempts or threatens to commit suicide when he/she is subjected to rejection or to betrayal or to the loss of a spouse or a lover. Life prevails in the outcome of the story.

Examples

In this picture the man is hurting the woman, and the woman is scared. The man is thinking "Don't scream and you won't get hurt," whereas the woman is worried for her life...she opens her door and a man jumps her and forces her into her apartment. The outcome of the picture will probably be some kind of assault, because the woman appears to be defenseless. (Picture 1)

The man is trying to keep the girl from screaming. She doesn't want to be there with him and tells him that. He has waited to be with her for such a long time and has admired her from afar that he just had to see her. She is very afraid that he might rape or kill her. (Picture 1)

A man broke into a lady's house and put his hand over her mouth trying to keep her from screaming for if she does he will kill her. He ties her up and gags her. Then he goes to the safe which the lady told him for if she didn't it would have been the end for her. (Picture 1)

Mary is so upset about what she found out about Steve...he had a mistress, in fact it wasn't the first one...She is shattered by this announcement and tells him of her plans to leave, knowing only too well that it will end in suicide...Unfortunately as it will continue he convinces her to stay. (Picture 1)

The woman is running from someone. There is a man chasing after her and she tries to escape from him. The woman is very frightened and she is afraid that the man will kill her. (Picture 2)

After being unable to satisfy Candy the stripper, Frank got out of bed, got dressed and began to feel very depressed...Frank jumped out of his third floor window, only to discover later that Candy was paid by Frank's friend to pretend not to be satisfied. After leaving the hospital Frank...(Picture 3)

Sarah pulled as hard as she could, still he refused to move...

Over the past several nights many graves had been exhumed and the bodies removed. Sarah believed that an evil force was behind the happenings but Paul would have nothing to do with the story. He felt it was obviously a cult group or a bunch of kids pulling a prank. Little did Sarah know that Paul was the leader of the cult that had performed these grisly deeds, nor did she know what was in store for her...(Picture 4)

...While walking home one night from a bar George was feeling quite good. He knew he was late...on the way home someone had followed him...as George was turning the corner to his street he was grabbed from behind...He knew he owed Max money and Max would do anything to get it. That meant kill if he had to. George didn't know what to do. He was paralyzed. Finally a voice came and George recognized it. It was Kelly, one of his best friends. It was all a big joke. (Picture 5)

A boy is waiting for his father to get out of an operation. The doctors are operating on his stomach...His son and only surviving relative convinced him to go because he didn't want to be an orphan. The father loved his son and didn't want to die either so he obeyed and took the advice of his son...When the operation is over the father recuperates and the two spend a long life together. (Picture 6)

Since Tommy was a sickly child from birth, he had undergone many surgeries. To him they were second nature. But this one was different. They would be cutting into his chest to replace his blocked aorta. He was scared, afraid that this time he would not make it. He knew the doctors were skillful, but they too reminded Tommy that this operation was a life or death situation. They were skeptical of the outcome. The operation scheduled for later proved successful. (Picture 6)

Description (4c) A hero, a relative, or a close friend is involved in an accident or a potentially dangerous situation. In the outcome there is reference to conditions other than death (e.g., an accident results in serious injury).

A hero is the cause of a character being exposed to a dangerous or a potentially dangerous situation. There is no mention of death (e.g., he ran over her accidentally).

Accidental disfigurement of a character results from surgery.

Examples

The wife is troubled as her son is in the hospital. Her husband is trying to comfort her. Both of them are terrified - will the little boy be okay. He ate some cleanser that the mother kept beneath the sink. Luckily they found the little boy and rushed him to the hospital...Because of their quick thinking the little boy will be ok. (Picture 1)

The lady is running from her car across the street. The road is wet because it could have rained. She is late for work...As she is crossing the street she slips on the wet pavement and narrowly escapes being hit by a garbage truck. (Picture 2)

Louise's first appointment for her dance audition and she had to be late. It would have taken too long to park the car so she runs out between moving vehicles. She fell and rips her dress. Lucky her it was raining out and it was slippery so she fell but she was lucky that she did not get hit. The car behind slams on his brake. (Picture 2)

This woman is very emotionally upset because her son has just been in a car accident. She learns that he has been brought to a local hospital and is in the intensive care unit...She rushes to the front desk and demands to see her son. The nurse tells her that he is in the operating room. The outcome is that he lives. (Picture 2)

This woman just got out of her car and is running into the school.

She just got word from her daughter's teacher that there was an accident and her daughter is in serious condition...She will find out very soon that her daughter is not at school but has already been taken by ambulance to a nearby hospital where she is recovering from the blow to the head which a young boy accidentally gave her...(Picture 2)

The woman in this picture looks terrified and very unhappy. There seems to be a crowd of people in the middle of traffic. She either hit someone or knows the person involved in an accident... (Picture 2)

The woman is running across the street no matter how heavy the traffic is. She looks like she is chasing somebody...She didn't expect to see that person in the city, when she saw him/her she ran over. Maybe she will be knocked down by a car or she is safely across the street. (Picture 2)

This woman is late for a very important meeting...She forgot her portfolio in the car and is now running back to get it...she darts into the street and is hit by a car. She is only mildly injured but has to be taken to the hospital. She complains all the way about probably losing the account and not thanking the fact that she wasn't seriously injured...(Picture 2)

This lady has just spotted her child in a schoolyard and is running to greet her. Her husband had kidnapped the daughter several months earlier and she has been frantically searching for her everywhere...She has finally found her and is going to sweep her up and give her a big hug and kiss and take her away with her. (Picture 2)

This setting is a room in a hospital. The girl is a young beautiful woman who came to the Dr. to have a blemish removed from her face...She signed up with this great plastic surgeon and he promised great results. He has removed the bandages from her face and although she is still unconscious he sees terrible damage that cannot ever be fixed. (Picture 3)

The guy is shocked at what he sees. He's come home from work and found his wife passed out on the bed, and lying half naked. Has someone been here or has she been into drugs again? What will I do with her...she hates being at home all day. She just has to find a job. (Picture 3)

The man is being restrained from someone or some happening. The character is very unhappy and feels such tension. He has just come home to find that something has happened bad like maybe a fire and he knows his wife and child are in the house...The firefighters will save his family and all will be fine. (Picture 5)

Doctor Walsh has decided to remove the bullet which is imbedded in Fred's left arm. Fred's little boy, Jason, is not concerned with this because he doesn't love his father. Although the shooting was an accident, Jason knows that he will be published for playing with his father's gun. (Picture 6)

The person looking away from the male lying down is a friend. The person lying down has just been in a fight and requires patching up, he has a knife wound in his side. The friend standing up is wondering how he can get back at the people that stabbed his friend. The person lying down is awake and in no grave danger. (Picture 6)

Score of 3

Description (3a) A mugging or an abduction of a character is mentioned without details of the physical aggression.

Examples

In this picture there is a woman who is running away from somebody who is chasing her. The woman is crossing a busy street and has no thoughts other than to keep away from her

assailant. The people in the picture don't even notice her since it is a busy city and location. The woman was probably being mugged in the park across the street while walking. The outcome will be that the woman will get away from her mugger by attracting other people for help but will be afraid in the future when walking by herself in the park. (Picture 2)

The woman is running into the street because she finally sees her kidnapped daughter, with a strange man standing next to her. She is feeling happiness and joy and she calls out to her daughter. Previously in the day she received a phone call. The person on the phone told her to meet him in front of Central Park where he will have her daughter waiting for her. She agrees, but she is not to phone the police. Little does she know that her phone has been wired and the F.B.I. are in the car waiting for her to come. The outcome will be that she is finally reunited with her daughter and also captured because the F.B.I. were not well prepared ... the woman and daughter are both now kidnapped. (Picture 2)

This man, Rudy Baker, a wealthy financier is being mugged... With sweaty palms, Plumb approached Baker, as he left the jewelry store. (Picture 5)

Description (3b) An argument or verbal fight (e.g., bickering, squabbling, quarrelling) is accompanied with an act(s) of mild physical aggression (e.g., grabbing, striking, or slapping). The argument lacks ferocity and fails to escalate into violence (e.g., a continuous exchange of strikes or blows).

A conflict between two parties (e.g., spouses, lovers, acquaintances) is stated or implied where an instance of mild physical aggression is mentioned (e.g., pulling away from the other person, pulling the other person towards oneself, slapping). "Pulling away" or other such physical actions which are described as part of nonconflictful situations (e.g., lover's play) are not scored.

Reference to situations other than war or battle which imply the presence of a fair amount of physical aggression without the elaboration of such physical actions (e.g., a mob becomes vicious, cruel, brutal, or a life or death situation).

Examples

We walked into the elevator on the way down to go ower to Mom's. We were already in a frenzy because Kevin had forgot about the evening and really didn't want to go...the elevator stopped in between floors and we were stuck. After spending hours in there continuing to bicker and fight...as I tried to

scream he covered my mouth and told me to shut up. (Picture 1)

A story about a man and his wife arguing...She goes to bed and he thinks over the row they had and the fact that he slapped her...He feels ashamed of himself for losing control of his temper. (Picture 3)

Joe and Barbara met in the park Saturday afternoon to talk. They hadn't seen each other for some time but still were considered engaged...Upon seeing Joe, Barbara ran to him and embraced him. Joe did not return the embrace. He wanted to get this over with fast because he didn't want to be around when she began to cry. He threw her back a little and told her he felt nothing for her anymore. She began to run away from him and he grabbed her arm wanting at least to give some explanation. (Picture 4)

The two people are possibly lovers and in some sort of conflict at the present time. She is trying (not too hard) to escape the area while he is holding her back from leaving... It looks to be a conflict happened between them and it has come to the point where force is now taking place. (Picture 4)

The couple had an argument and the girl tried to run away. Instead of getting away the man caught the woman's hand. The girl is upset and doesn't want to talk to the man. The man who is aggressive is annoyed because the woman is trying to get away. There is hostility between the couple which lead to the fight. (Picture 4)

This couple has gone to a party and have been drinking quite heavily. They find themselves outside and he wants to-give her a kiss. She feels too ill and just wants to be left alone for a little while. She tries to walk away and he holds on to her hand and pulls her back. They start to argue and she smacks him one and not the smack he was hoping for. (Picture 4)

Twenty-three year old Erika still had very over protective parents...Finally when some of her friends asked her to attend a protest against the teachings of her church, she consented when Erika's dad found out he was furious. He slapped Erika. As she ran out of the house her dad grabbed her by the hand and told her that she could not go to the protest. (Picture 4)

Description (3c) A robbery or a potential robbery occurs where minimal physical force is used.

A character expresses nervousness about his/her or another's impending surgery or the aftereffects of the surgery.

Examples

Laura knew she shouldn't have walked home after work alone but she was tired and none of her friends were ready to leave...Bob was desperate. He needed money bad and would do just about anything to get it...It was unfortunate for Laura that she happened that way. A well dressed lady surely had money. Bob jumped her and demanded money. Laura gave him everything and he abruptly released her and was off. (Picture 1)

The woman is running away from someone who is chasing her. Some guy tried to steal her purse and when he failed he started to chase her. She has eluded him so far and is running for help. (Picture 2)

This is a young urban professional, I recognize her from highschool. She's well liked, you always see her out drinking with a group of trendy looking people. She's got money, and likes to throw it around...She makes good money and yet she has never left her drug related past. As a matter of fact, she deals with cocaine, not as much to make money but to save it. Right now she just purchased some cocaine and was about to get burned. She has just ran out of the car. She's afraid. The guy in the car still wants her money. She'll run and run...probably get away because she has never been caught before and she has run many times before. (Picture 4)

A story about a man who is being shaken by a thief to see if he has any more valuables in his pockets...The thief runs away into the night with a few dollars and a gold watch. (Picture 5)

A boy is daydreaming about an operation he is going to have in a week. He is scared and nervous because he has never had an operation before and he has heard a lot of bad things about operations...The outcome will be fine, but the next week will be hell. (Picture 6)

There is a doctor operating on a person, maybe a first aid case...The patient is in quite a bit of pain...it could be a war scene...The person will be saved. (Picture 6)

Score of 2

Description (2a) A conflict, an argument, or some bad feelings between characters is mentioned with no physical aggression. Strong feelings of pain or evidence of anger may be revealed.

A conflict or an argument between two people is speculated on.

A fight which involves no physical aggression is described.

Reference is made to the wounds which were incurred in a battle or to the surgery which is used to repair these wounds. No elaboration of the goriness of the wounds or the surgery is made.

Examples

They argued briefly...She burst into tears being hurt that they argued on their first anniversary...it was supposed to be their special day. He tries to comfort her...he tells her that he is sorry for causing her to cry. They make up. (Picture 1)

"Alright, let me go, I can see for myself that its seven o'clock and that we're going to be late." Tanya was always late, she'd been late for her own wedding. Paul had finally lost his temper and decided to have her hurry up...When Tanya came down dressed and on time, Paul was a mess. It was he who had made them late. (Picture 1)

She just couldn't let him leave without saying goodbye. The argument this morning had been very stupid and their bad tempers had gotten the better of them. He had slammed out of the house this morning on the way to the airport to catch his flight to Europe...(Picture 2)

Tony, a successful businessman, was also very happily married to Gail. One night Tony and Gail had an awaful disagreement and Tony went to a party in honour of him alone...That night Tony and Honey got to be quite close and better acquainted. Honey was Gail's best friend. Tony had too much to drink and stayed in a cheap hotel room with Honey that night...(Picture 3)

A story about a man and woman who argue briefly... She goes to bed with a headache... He feels drained by the day's events and their quarrel... He wipes his face and decides to call it an early night also. (Picture 3)

In this scene it looks like the people are playing around, even though they are adults...He seems to actually want to go with her but he is just being stubborn. There isn't any bad feelings between the two, although if they weren't feeling too good about each there probably would be an argument resulting. (Picture 4)

The man has just told the woman (his girlfriend) that he wants to end their relationship. She cannot accept this and begins to cry. She tries to leave without an explanation, but he doesn't want her to leave unhappy and he tries to stop her... The man feels quite bad about the situation, but knows that it is the best thing for both parties. The woman is very upset and will need time to think about what just happened. (Picture 4)

In this picture it appears to me that the woman and man are having some kind of argument...The event that has led up to the event in the picture is some kind of fight...(Picture 4)

In this picture, I think the girl who is sulking has just learned, that the man, her lover, is married and that he refuses to leave his wife for her...She is shocked and feels humiliated, used, and very depressed...he wants her to stay as his mistress. This adds insult to injury for her; she feels she wants to leave and go far away. He doesn't want her to leave...she leaves and tells him their relationship is over. (Picture 4)

Two people are on stage enacting a lover's tiff where the woman is trying to pull away from her lover. They are in a play since their body postures seem to be too exaggerated for the normal everyday occurrence. (Picture 4)

Gary and Sonya decided to take a long, relaxing walk on Sonya's very large grounds. They need to discuss their problems. Gary is relatively older than Sonja and they both find this somewhat disturbing. He loves her terribly but he feels as if he is robbing the cradle... She just knows that she wants to share her life with him. However Gary feels as if he has lived alot of his life and he doesn't want to tie Sonya down to an old man... Gary explains his feelings and Sonya is deeply hurt... she just wants to run away and forget the whole walk. (Picture 4)

As far as everyone knew, Bill and Sandy were happily in love, but something had happened to change this. Their wedding was only one week away and continuous arguing and fighting had suddenly developed. They had always seemed like the perfect couple; doing everything possible together. They were a couple in love. This day was very different; however, their moods had changed drastically, and Sandy wouldn't even look at Bill... (Picture 4)

I think the man in the picture looks drunk, since he is not capable of holding himself up. His wife at the back is trying to make him control himself...The husband and wife had a fight before, which made him mad and get drunk in order to hurt her...(Picture 5)

<u>Description</u> (2b) An aggressive act is used in a story either to add suspense or drama or to bring it to completion. The aggressive act is not emphasized.

A hero experiences a great amount of tension or anxiety when he/she escapes from a character or a situation.

Examples

The lady is so intent and anxious to get away from someone that she has no concern for the traffic coming. She's just going as fast as she can...Her anxiety is high and she feels all panicky - her heart races and she has to move. (Picture 2)

A painting on the wall of an art museum holds a strange fascination to those who come and stare...Underneath the painting is a brief history of how this painting came into existence. It states, "the artist was a criminal sentenced to death, he painted this on the eve of his execution..." (Picture 5)

Tim slowly walked up to the chair. The courtroom was silent. He looked straight ahead. He knew what he saw, he didn't mean to see it but he did. He was in the other room. Mr. Jones came in with the body...He couldn't get the picture from his mind...They said it was Mr. Carruthers who was murdered. He couldn't remember. They said they had no idea who the other man was with Mr. Jones that evening...He turned toward the judge. With a gasp he jumped back. It was him. He and Mr. Jones were the murderers. (Picture 5)

Score of 1

Description (1) Stories which involve minimal aggression as in the following themes:

- The hero criticizes himself/herself or is criticized by another character.
- The hero rejects or is rejected by a Gharacter with no elaboration of the painful feelings or anger which may be involved.

- The hero gives in or passively resists another character (e.g., getting drunk to retaliate, to annoy, to avoid, or to spite another).
- Law enforcement officials curtail a character's aggression with mild physical aggression.
- The hero mags or is magged by a character.
- The hero, a relative, or a close friend suffers from a non-fatal illness or ailment (e.g., a cold, chronic backpain).
- Property which belongs to the hero is stolen, ruined, or criticized.
- The hero is unfaithful to a spouse or an intimate friend with no mention of disagreements or arguments.
- The hero is drunk with no mention of belligerent, aggressive, or violent behavior.
- The hero teases or is teased by a character.
- The hero is stubborn or hesitant to follow another or experiences the same from another character.
- The hero falls down or is alluded to as having physical problems.
- The hero indulges in mild anti-social pranks (e.g., pulls fire alarm).
- The hero has mental problems or experiences low feelings (e.g., sadness, feeling upset or hurt).
- The hero's pet has been killed or hurt in some fashion.
- The hero hears bad news other than a death or an accident (e.g., spouse's layoff, spouse's losing a job).

Examples

They are breaking up. It is really hard for her to accept this for she is very in love with him. (Picture 1)

...Stupid boss keeps me late tonight. He says I get time and a half for working late. I say who cares...(Picture 2)

He must leave her...his lover of the past few months since he realizes that their affair is hurting his work not to mention his ever deteriorating marriage ...He hates to leave her without saying a word but he has no words adequate to say to her...He feels it is better this way and expects her to feel the same way eventually. (Picture 3)

Joyce was looking so forward to her wedding day. She had everything done and ordered for this big event months in advance. But a dreadful thing happened when her big day arrived. She was pressing her gown that morning when the phone rang. She stood the iron up carefully, away from the dress. She tripped over the cord on the way to the telephone and pulled along with it the bottle of water. Her dress was ruined: (Picture 4)

The man in this picture looks exhausted. It appears like he has either tried and tried to do something and failed or more likely he has tried countless times to resist something and is exhausted now...in the long run the man will give in to this creep because his confidence in himself has dwindled. (Picture 5)

The man is being held upright in a chair by his friend. He's feeling ill, it's probable that he has the flu...(Picture 5)

...The man on the train had been pestering him all the way home. This faceless man...(Picture 5)

... The man has probably consumed so much alochol because it is his form of fighting back. This way he can retaliate safely at his job and wife without saying anything directly to them. (Picture 5)

It was to be the biggest night of John's life. He had ordered the most expensive food and wine he could find ...Katie and him had been going out for seven years and all John ever got was a goodnight peck...she knew what he was up to...yes she thought to herself, he will not make a fool of me. Then she proceeded to get drunk. John realized what she was doing just a little too late...she passed out cold on the bed. (Picture 5)

"Ahhh" that feels nice." Down further on my back. That's it, perfect. All day I've been sitting at this desk doing research for this case. My back and neck are killing me." John had just graduated from law school and passed his bar exams... (Picture 5)

Dick hated his life. He had everything a man could ever possibly want. He had a nice home, a good job, a family and lots of money. However he wasn't happy. He couldn't stand the pressures put on him. He didn't like his job. Every night after work Dick went to the bar and got drunk. One night the cops grabbed hold of Dick and had to take him home. (Picture 5)

The boy is thinking of his father's career as a surgeon. He thinks his father was a good doctor...a little too strict and arrogant but nevertheless a good role model for his own career in medicine. (Picture 6)

A real man, who in the front thinks about his future. What he wants to be...he may want to be a doctor. He is feeling sorry for those people who are sick...he may have a relative or best friend who is always sick and right now he can't help them...(Picture 6)

This man, Herman Grimsby, is an art enthusiast...One day while gazing through a book on Rembrandt's best works he saw a picture of the Anatomy Class...he decided to do a new, updated version of it...He dressed up in his finest suit and took the painting to galleries, museums and auctions. No one was impressed, however, instead of fame he found revulsion and disapproval. This hurt his pride deeply so he finally ended up burning the painting and becoming a neurosurgeon. (Picture 6)

Score of 0

<u>Description</u> (0) The story contains no aggression.

Examples

Looks like the woman is bothered by something...the man next to her is feeling sorry for the woman and wants to help her. I think the woman will feel better soon, since she has someone who cares close to her. The outcome of this story will be that they will talk to each other and try to get rid of whatever is bothering the woman by talking it over. (Picture 1)

I'm late again. For sure this time I shall lose my job. I already used the excuse of the alarm clock but it really was true. Oh why didn't I listen to myself and buy a new clock this weekend as I planned. I wish my feet ran faster, these shoes don't help. Maybe the clocks will be slow or maybe even better Mr. Johnstone won't be in yet. (Picture 2)

Terry wipes the sweat from his brow on the sleeves of his shirt. Mona had been sleeping so silently while he studied the hours away for his last law exams. He stretches. He turns to look at his wife in the glow from his study lamp. She snores softly, reaches over to kiss her while brushing back the lock of hair from her forehead. Her arm dangles alongside the bed. He places her hand on her tummy. He undresses, switches off the light and climbs into bed next to her. (Picture 3)

Two lovers, dressed well, are "playing" in their garden. They are not very young, holding their hands just like the first time. They have held each other's hands many times. Of course, what is better than having a loved one with you? They are waiting for the bell to chime tomorrow. Happiness is just everywhere around them. (Picture 4)

The man was touched by a woman. It may be his girlfriend. The man has a good feeling. Since his face looks more relaxed in the picture. He may be thinking about a very good time in his life like a peaceful dream. The event shown in the picture had led up by a movie or a comedy. However, the hand hasn't a long finger nail so it may not be a woman's hand. The man will have a sudden surprise if that hand is not his girlfriend's but his male friend's. (Picture 5)

This young guy thinks about how helpful he is going to be when he gets older and becomes a doctor. He thinks that in his future there is going to be a war and he is going to be sent away to cure the soldiers and people fighting in the war He thinks he will be able to make it but he has to be taught... full of energy and understanding of people. He cannot back up now, because he knows that people, many people, will need him and he has to be there for them. (Picture 6)

APPENDIX C

THE INHIBITION OF AGGRESSION SCALE

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PICTURES

Picture 1	Man's hand over woman's mouth (new picture)
Picture 2	Woman running across a street (new picture)
Picture 3	Murray's TAT card 13 MF
Picture 4	Man and woman joining hands (new picture)
Picture 5	Murray's TAT card 18BM
Picture 6	Murray's TAT card 88M

THE INHIBITION OF AGGRESSION SCALE

Definition of Inhibition

The inhibition of aggression refers to the unconscious processes of modifying or alleviating the aggression expressed in a story. Storytellers use inhibition to shield themselves from anxiety and guilt over the expression of aggression.

Each story is scored on a six point scale according to the degree of inhibition expressed in the story. A score of 0 indicates no inhibition while a score of 5 indicates the highest degree of inhibition.

There are several mechanisms which signal the presence of inhibitory tendencies in a story. These inhibitory mechanims which are outlined below differ in their degrees of inhibition. The inhibition scoring scheme differentiates the degrees among these mechanisms.

Defense Mechanisms

Rejection

A character rejects or disapproves of an aggressive act (e.g., her vicious act is unpardonable).

Denial

A character denies verbally an aggressive act (e.g., I don't think he killed her; I can't believe she's dead). A character expresses denial through his bodily gestures (e.g., she is turning away in disgust at what she did).

Rationalization (or Justification or Excusing)

The storyteller mentions a "reason" for aggression or the provocation behind an aggressive act (e.g., he did not know what he was doing because he drank too much that night; she had been depressed for so long that one more night alone was more than she could bear).

Qualification The storyteller demonstrates hesitancy or tentativeness in expressing the aggression through the use of qualifying words (e.g., maybe, might be, if, probably, possibly, seems to be, appears).

Displacement Aggression is directed at an object instead of an intended human recipient (e.g., in his anger he hit the wall, it was safer than hitting his spouse).

Noncompletion

An aggressive act is started but is not completed (e.g., she began to slap him but stopped once she saw what she was doing; he intended to argue with her but couldn't do it because he loved her too much).

Punishment

The aggressor is punished for the aggression (e.g., he went to jail for five years for one night of drunken violence; her family and friends chastised her after she had hit her child).

Distancing

The storyteller distances himself/herself from the aggression through several measures as (a) placing the aggression in the past in time, (b) placing the aggression in a light vein as a practical joke, (c) having a character(s) outside the picture aggress, (d) not committing oneself to one theme or outcome but vacillating between milder and stronger aggressive acts.

Undoing

Attempting to "make right again" the "wrong" incurred by an aggressive act by undoing the aggressive act as:

- (1) Having a murdered victim come back to life.
- (2) Having an aggressor and victim become friends.

(3) Having an aggressor "reform".

Admission

A character admits embarrassment, guilt, regret, remorse, shame, or grief.

Procedure

- (1) The scorer reads a story to gain a comprehension of its content.
- (2) The scorer identifies the phrases or sentences which indicate inhibition in the story. The scoring scheme is used to determine the score which reflects the appropriate degree of inhibition.
- (3) If the story contains several inhibitory mechanisms, the highest degree of inhibition is scored.
- (4) If several inhibitory mechanisms are contained throughout the story, the story is given a score of 4.

Scoring Scheme

Score of 0

Description

(1) There is no evidence of inhibition in the story.

(2) A victim suffers greatly or experiences many problems as a result of an aggressive act. The aggressor goes free.

(3) The aggressor continues his/her aggression.

Example

A lady on her way from somewhere has been jumped from behind by an unknown assailant who is going to rape her...She is emotionally weak after the attack and she fears that her husband will cast her aside because the rape was her fault. Due to this - she will not be able to develop their marriage properly and they will eventually drift apart. She has also never forgiven the man who raped her but she will not press any charges as she is too scared and drained. Her life is shattered. Her marriage is shattered. The rapist is free. (Agg = 6)

2

Code

Underlined phrases or sentences in the example focus on the inhibition of the aggression expressed in the story.

(Agg = 6) ...refers to the aggression score for the story (which is 6 in this case)

1...the number to the right of the aggression score refers to the number of the picture to which the story is told (which is picture 1 in this case)

2...the number to the far right refers to the description number of the inhibition in the story (which is 2 for this case)

Score of 1

Description

- (1) An aggressor is mildly anxious or nervous (e.g., he grabbed the man with sweaty palms; she wanted to get the act over with).
- (2) An aggressor avoids punishment that is due however he/she realizes that he/she has done something wrong.
- (3) A story ends with the aggression described as being a practical joke or hoax.
- (4) An aggressive act is qualified.
- (5) An aggressor who is minimally provoked performs a highly aggressive act.
- (6) For Story 6, the aggression which is expressed is part of a dream, a reverie, a memory, a nightmare, a painting, a play.
- (7) A highly aggressive act is minimally excused.
- (8) A victim or a relative of a victim blames himself/herself for the aggression (e.g., I knew I shouldn't have walked home so late) or expresses some guilt (repentence, regret) over the aggression.
- (9) In Stories 1, 3, and 4, an incident outside the picture results in aggression (e.g., an accident, a disaster).
- (10) Some rationalization for an aggressive act is given however the rationalization is qualified.

Examples

This picture follows the same story line as the Burning Bed. The husband is an alcoholic who has severe violent tantrums. He beats his wife constantly. He is grabbing his wife's mouth as she moans for help. This is a beating which is at the beginning of his violence since she seems to be unbruised. Another clue which may second this, is her fighting mechanisms to pull him away and cry for help. Later as the beatings become more routine, she would seem to give up her fight, realizing she is unable to control the situation with her physical strength. (Agg = 6)

Hank is trying to comfort his wife because she has just received news that her parents have both passed away. He is trying to ease her pain, but she has become very emotional...she had known that her parents were not well and that the end was near but she realizes now that she should have went to them, even though they live thousands of miles away. (Agg = 5)

The lady is running away from somebody probably a man. He has just chased her across the park...she seems frantic and will probably be hurt seriously if not fatally by the oncoming car... (Agg = 5)

"Why don't anyone run me over, I want to die." That's what Shelly the stripper was screaming to all the dumbfounded people on King Street...I don't want to live anymore. It was probably the 40 ounces of rum that put Shelly in the strange mood. (Agg = 7) 2

The man has just come home from his A.A. meeting to find a woman in his bed. He hears the shower going and instantly in a moment of jealousy and anger attacks the woman. When his roommate witnesses what has occurred he runs to examine the beautiful young lady: Then the man at the table begins to speak, "I saw her, her beauty and youth, and I just went crazy. Her colour was so ripe as if she were to have eternal beauty. So I strangled her and in so doing have gained her youth. Don't you see any sane man would have done the same?..." (Agg = 7) 3

Joe and Barbara met in the park, Saturday afternoon to talk. They hadn't seen each other for some time but still were considered as being engaged...Upon seeing Joe, Barbara ran to him and embraced him. Joe did not return the embrace. He wanted to get this over with fast, because he didn't want to be around when she began crying. He threw her back and told her he felt nothing for her anymore. She began to run away from him and he grabbed her arm, wanting at least to give some explanation...

[Agg = 2] 4

This man is lying on the floor after being shot during a robbery. He was minding his variety store when a couple of hoodlums came in and demanded his money at gunpoint. He was getting the money from the safe when one of the thieves panicked by a noise in the street suddenly shot him. The result will be that the man will die and the thieves will get away only to steal and kill again and again...(Agg = 7) 5

George is a fairly tall man, educated and has a terrific job. Yet he is a compulsive gambler. While walking home one night from a bar George was feeling quite good. He knew he was late...He had just won a killing (one thousand dollars) and his mood was one of joy...As George was turning the corner to his street he was grabbed from behind. Terror struck. He knew he owed Max money... Finally a voice came and George recognized it. It was kelly one of his best friends. It was all a big joke. (Agg = 4) 5 3

This picture is really hard to figure out...This could be a war story. The man is wounded and the other two fellows are doing their best to save him. The young boy might have observed this and is now thinking back on it...The outcome will be the fellows will finish up their business and leave and the image will fade from the boy's memory. (Agg = 2) 6

A boy is <u>daydreaming about</u> an operation he is going to have in a week...(Agg = 4) 6

This child is in the midst of a dream where he sees himself back in the 1700-1800 wild west. The person lying on the table is himself and he is dreaming that he was shot in a shoot out with some wanted criminals. The local doctor and mortician are trying to save him and to do so they must operate without the presence of anesthesia. The boy who is dreaming this has projected himself into the dream to be an outside observer...

(Agg = 4) 6

In the army there were many casualties. Mostly young men, fighting to save their country at the risk of losing their lives... My friend Rolly had often regressed back to the days he was fighting the day he was injured...He recalled being cut open... He remembers that pain more than anything else...(Agg = 1) 6 6

Score of 2

Description

- The aggressor is very anxious or nervous (e.g., she had beads of sweat running down her face as she entered her victim's room. She was very anxious but still determined to have her way).
- (2) Some rationalization is provided for the aggressive act.
- (3) There is some denial of the aggressive act (e.g., I hope he didn't hurt her too badly; she doesn't want to believe it) or bodily gestures of mild denial (e.g., he is turning his head away from the terrible sight; she looks away in disgust).
- (4) The aggressor admits some remorse (embarrassment, shame, regret) or he/she expects punishment for his/her aggression.
- (5) Law enforcement officials are called but the aggressor is not apprehended.
- (6) For <u>Stories 1-5</u>, the aggression expressed is part of a dream, a reverie, a memory, a nightmare, a painting, or a play.
- (7) A character other than the aggressor rejects or disapproves of an aggressive act.
- (8) A victim or relative of a victim expresses strong guilt (repentence, regret) or grief (sorrow, pity) over the aggression.
- (9) In Stories 1, 3, and 4, a person or an animal outside the picture is aggressive.

Examples

Person <u>outside</u> of the <u>picture</u> is intent on killing these two figures in the picture. (Agg = 7) 1

5

The lady has just been told that her father has died and is being held by her husband. She is very upset and does not want to believe it...(Agg = 5) l

They are breaking up. It is really hard for her to accept this for she is so very in love with him. He is trying to soothe her but she keeps crying. "I don't mean to hurt you, we have to part sooner or later," said he...(Agg = 1)

We walked into the elevator on the way down to go over to Mom's. We were already in a frenzy because Kevin had forgotten about the evening, and really didn't want to go. I was upset with him because he was drinking again... After spending hours in there continuing to bicker and fight, Kevin tried to cuddle up to me but I wanted no part of him... (Agg = 3) 1

The man has approached the lady and grabbed her. He is now pulling her towards him. She is trying to pull his hand away from her. She is trying to pull his hand away from her mouth so she can scream. She is afraid of the man and has a very worried look. The man looks more unfeeling than the woman and is the aggressor. I don't think he wants to physically harm her right now. But I believe he will end up striking her to prevent her from struggling further... (Agg = 4) I

The woman is running away from someone. There is a man chasing after her, and she tries to escape from him...

After running for several blocks, she eventually finds a policeman and told him that someone is chasing after her and asked for protection. Then the policeman took her to the police station and found her protection. (Agg = 4) 2

This devastated man has just lost his wife because of an overdose. He had phoned from work to say he was coming home and there was no answer...She just couldn't face life anymore. She had been depressed for ages. Her husband should have seen this coming. Poor soul...The next few weeks he feels very depressed and guilty. (Agg = 5) 3 2/8

After coming home from such a long day at the office, he plunked his coat on the chair and called to his wife. "Honey are you there?" No answer...He entered the bedroom and saw her lying there, the pills beside the bed...Obviously, she could not handle the loneliness at home, the lonely meals, the going to bed without anyone...(Agg = 5) 3

The man has just discovered the woman dead in bed. The man is sad and has his arm over his eyes because he has been crying. The man looks as if he is walking over to the table to telephone the ambulance and/or the police...The police will come and begin an investigation. Questions will be asked and motives sought. (Agg = 5) 3

The man has just found his wife who has committed suicide. He is overcome with shock and grief...She probably even hinted at suicide several times and no one believed she would do it. (Agg = 5) 3

This man has beat the woman who is his wife. He is now wiping the tears from his face as he realizes how much he hurt her. They were both drinking and having a good time, then an old boyfriend's name came up and the husband was overcome with jealousy. They went home and continued arguing...

(Agg = 6) 3

A young man has just murdered his lover. He gets out of bed, and is confused, doesn't know where to go or what to do. As he wipes the cold sweat from his brow, he stands making plans of what to do with her body...police are still looking for the "bedroom murderer." (Agg = 6) 3

Two people are on stage enacting a lover's tiff where the woman is trying to pull away from her lover. They are in a park scene. It appears to be in a play since their body postures seem to be too exaggerated for the normal everyday occurrence. The woman has been upset by something that the man said, he is now regretting having said anything and would like them to discuss the matter...(Agg = 2) 4

In this scene it looks like the people are playing around, even though they are adults. I get the feeling that the lady wants something, that the man really doesn't want. So she is "sweet talking" him...There isn't any bad feelings between the two, although if they weren't feeling too good about each other, there probably would be an argument resulting...

(Agg = 2) 4

In this picture it appears to me that the woman and man are having some kind of argument. The woman is thinking "Leave me alone", whereas the man is sorry for causing the disagreement.. (Agg = 2) 4

The man is being held upright in a chair by his friend, he's feeling ill, it's probable that he has the flu...His friends are very concerned about him and will probably drive him home so that he doesn't have an accident. (Agg = 4) 5

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The man in this picture looks exhausted. It appears like he has either tried and tried to do something and failed or more likely he has tried countless times to resist something and is so exhausted now he is just giving in. The person is the antagonist in the situation, but he appears to be good. This antagonist in his mind is not malicious, he just wants his own way, and this is what he must do. In the long run the man will give in to this creep...(Agg = 1) 5

The man seems to be unconscious and is being carried so he can receive medical treatment. The man has over-exerted himself and the combination of drugs or alcohol has led him to a deteriorated state. He will probably die. He will have wished he could have changed his life...(Agg = 5) 5

"What?" whispers John. "What is it now?" The man on the train had been pestering him all the way home. This faceless man. John grew irritated at the constant nagging behind him, but he didn't want to look. This was, however, the last straw. "What do you want?" John glanced backward at the pest. The man, or thing, lunged into his lap. A feeble old gorgoyle with no teeth and a green complexion just wanted to see a real human being...(Agg = 1) 5

Doctor Walsh has decided to remove the bullet which is embedded in Fred's left arm. Fred's little boy, Jason, is not concerned with this because he doesn't love his father. Although the shooting was an accident, Jason knows that he will be punished for playing with his father's gun...(Agg = 4) 6

Score of 3

Description.

- (1) The story contains several disjointed themes or multiple alternatives which vary in their degrees of aggression.
- (2) An elaborate rationalization is provided for the aggressive act whether it is qualified or not.
- (3) There is a strong denial of an aggressive act through words (e.g., I definitely did not hurt her) or through gestures (e.g., She ran away not willing to face her violent actions; He turned his head away from his bloodied victim trying to block out the sight before him).
- (4) The aggressor admits strong guilt (remorse, regret) for his/her aggressive act.
- (5) Law enforcement officials apprehend or arrest an aggressor.
- (6) The aggressive act is averted late in the story or the aggressor does not complete the aggressive act.

(7) The aggressor rejects or disapproves of his/her aggressive act (e.g., I hit her and was disgusted with myself).

(8) A relative of a victim of aggression commits suicide out of guilt (repentence, regret) for the aggression. This is to be differentiated from suicide which results from a sense of loss.

(9) An aggressor holds himself/herself back from aggressing more severely. (She got drunk to retaliate against her husband, she really felt like smacking him).

Examples

The picture has an awful sense. The woman seems to be in a painful situation. The guy looks like he's attacking her, if not, then he's trying to comfort her, or stop her from screaming. But the expression of guy is really angry, like he's shouting at her, forcing her to say something. The woman probably will not say anything so he could beat her or something. Another possibility is that the guy is her lover. She could not leave her husband and go with him. So she appears with a sad expression, crying. They have met and he forces her to come with him. The decision is always unsure, she feels too insecure. Either she would not go with him or--- (Agg = 4) l

Laura knew she shouldn't have walked home after work alone but she was tired and none of her friends were ready to leave. She figured if she moved quickly enough she'd be home in no time. Bob was desperate. He needed money bad and would do just about anything to get it. He hid in an alley on a deserted street plotting against any unknown victim that happened to pass his way. It was unfortunate for Laura that she happened that way. A well dressed lady surely had money. Bob naturally jumped her and demanded money...(Agg = 3)

Joanne just left the apartment of a friend's house...As
Joanne left her friend's home, a man jumped her and grabbed her
by her throat...Joanne couldn't get away. She knew the man;
it was her friend's husband. He knew that his wife had told
Joanne what he had done. He wanted to make sure that Joanne
would not talk. Joanne did talk however when she got home.
She struggled free and ran home to call the police. Her friend's
husband had killed his own child. (Agg = 6)

The woman is running away from someone who is chasing her. Some guy tried to steal her purse and when he failed, he started to chase her... A guy approached her and asked if he could borrow a few bucks, "it was an emergency." When she said no he went for her purse. She got away and started to run. The lady will go to the police station and report the incident. However since no crime actually occurred the guy will get away. She also could not clearly identify him. (Agg = 3) 2

3

I see a man who looks very unhappy. He looks like he is crying or does not want to see what has happened. The woman in the picture looks like she is dead perhaps by suicide...The lady could have died by natural causes but maybe she committed suicide because of pressures she faced during her life. She could have had a sad life and felt very alone even though she was married. Maybe she had a husband that worked all the time and felt lonely...(Agg = 5) 3

The man arrived at this apartment and found the woman he loved dead. He is upset and doesn't even want to look at the body. He is crying and by covering his eyes he can block out what he has seen. The woman had been sick and she died...

(Agg = 5) 3

The man has just found his wife who has committed suicide. He is overcome with shock and grief. She probably even hinted at suicide several times and no one believed she would do it. (Agg = 5) 3

Suzanne had been raped and killed and Bill like a part of himself had died in that instant. Why hadn't he listened to her when she told him to get out of the organization...Now they took her life...Bill felt he could not make a fresh start now, not without Suzanne so he grabbed his hand gun and shot himself in the head. (Agg = 7) 3

The man arrived at this apartment and found the woman he loved dead. He is upset and doesn't want to look at the body. He is crying and by covering his eyes he can block out what he has seen. The woman had been sick and she died...(Agg = 5) 3 3

The man just came home and he finds that his wife is dead in the bedroom, he loved his wife very much and he starts to cry...It seems that the woman was raped and killed because the woman was undressed and lying on the bed...He can also see that his wife was raped and he doesn't want to see that so he just turns his back on her. After a few minutes he was a bit settled down and he finds the phone and called the police. (Agg = 5) 3 3

This man, Rudy Baker, a wealthy financier is being mugged. He brags a lot, boasting of his riches and yesterday he told everyone in a loud voice that he was buying a new ring (diamond 1/2 carat) for his wife. A co-worker, the janitor, Ed Plumb, overheard this and since his own debts were becoming overwhelming, he decided, in desperation, to steal the ring from Baker. "After all," he reasoned, "Baker doesn't really need it." With sweaty palms, Plumb approached Baker. He handed Plumb a velvet box and ran. When Plumb opened the case, however, it was empty. The next day, at work, Baker bragged to everyone how he had foiled a mugger. Plumb sat in despair. (Agg = 4) 5

This gentleman has been out with his friends at the local bar and has had a couple too many beers. Thus, his friends are helping him to get home as he is too drunk to drive and almost too drunk to walk... The man has probably consumed so much alcohol because this is his form of fighting back. This way he can retaliate safely at his job, and wife without saying anything directly to them...(Agg = 1) 5

Fred is at the bar again, drinking his problems away. Domestic uproar after work again today. After he has drank one of each of his favorite mixed drinks, he asks for a beer. When the bartender repeatedly tells him there is no beer for the strike, Fred begins to show violent behavior. The bouncer has to take matters into his own hands by grabbing Fred away, forcing him out of the building. (Agg = 4) 5

Norman is having surgery today. The doctors are trying to repair some of the damage the stabber had done. Norman was stabbed in the stomach by a co-worker of his. This co-worker was Tony and he was young and just new at the shipping plant. He was willing to learn but Norman didn't like watching the new slowly move in, so he was constantly bothering Tony and trying to make him give up. In spite of Norman's attempts lony kept working away, but one day it just got to be too much and Tony's emotions got out of control. He couldn't handle Norman's ridicule any longer. Tony gave into his true emotions and...

(Agg = 6) 6

The doctor has arrived at last! The dying victim of a knife has seen his last days. The dusk is approaching and his blood is a painting on the side walk as the doctor cuts the broken blade out of the chest of the innocent victim. The young lad looks away in disgust not able to bear the sight his eyes forsee...(Agg = 6) 6

A young boy seems to be turning his back with no expression of hurt or sorrow for the person in the background that is about to be cut open by a man...The boy sees this through his eyes. Since he has a psychic ability to do so. He tells the police and they are on their way to capture these men who are doing these bad things to innocent people. (Agg = 7) 6

Tim slowly walked up to the chair. The courtroom was silent. He looked straight ahead. He knew what he saw, he didn't mean to see it but he did. He was in the other room. Mr. Jones came in with the body. They said it was Mr. Carruthers who was murdered. He became frightened he didn't want to be responsible for anyone's death no matter what he did. (Agg = 2) 5

Score of 4

Description

- (1) The punishment for an aggressive act is more severe than the act justifies.
- (2) The aggressor brings punishment to himself/herself (e.g., The murderer later turned himself in).

(3) An aggressive act is totally denied.

- (4) There is a host of inhibitory mechanisms used throughout the story.
- (5) The aggressor is imprisoned or punished in other ways (e.g., The mugger escapes the law but leads a lonely, miserable, deprived life).
- (6) The aggressive act is averted early in the story.

Examples

"Shhh or I'll have to hurt you," the rapist muttered through clenched teeth. The woman was in hysterics and was panicking. The rapist clamped his hand over her mouth...She bit down with all her might and fled as he held his bleeding hand. The woman ran next door to her good friend an while she was telephoning the police she told her friend of the rapist. Obviously by now he had fled from her house but she was later informed that due to her act of bravery and the detailed description of the rapist he was arrested two blocks away from her house. (Agg = 4) 1 6

The setting is a room in a hospital. The girl is a young beautiful woman who came to the Dr. to have a blemish removed from her face. Her family kept saying it wasn't noticeable and not to go to all that trouble...He has just removed the bandages from her face and although she is still unconscious he sees terrible damage that cannot ever be fixed. He quickly covers his eyes and cries that he made a mistake. His career or her career are both ruined. Total despondency. (Agg = 4) 3

A man walks into his room and sees his wife is dead, lying in bed. He has just come home from work...<u>He rationalizes that nothing</u> out of the ordinary had happened recently, life was proceeding at a regular pace and he can't explain the circumstances that could have led to her death...(Agg = 6) 3

The man had just killed the woman on the bed. He feels guilt, shame, and scared that he had just hurt another human. He is crying and upset and can't believe he would go that far...He will end up getting caught and put in jail. (Agg = 6) 3

4/5

This woman is dead. She has been raped and murdered. The man is sorry. He didn't mean to do it. He has a history of losing his temper and beating her but she always came back for more. He will go to the police station and turn himself in. He is truly sorry. He loved her. It is a sad affair for everyone.

(Agg = 6) 3

A painting on the wall of an art museum, holds a strange fascination to those who come and stare... Underneath the painting is a brief history of how this painting came into existence. It states, "The artist was a criminal sentenced to death. He painted this on the eve of his execution, and he always pleaded he had not killed the person. Finally each one who viewed the painting left with a smile and said the bastard got just what he deserved. (Agg = 2) 5

The man is being escorted out of a bar by the bouncer. He has had too much to drink and started becoming extremely wild and loud. He was at the point of assaulting some of the customers when the bouncer stepped in and helped him leave the bar. He has just been passed over for a promotion at work which he felt he deserved and was feeling extremely bad as well as angry. So he went to the bar to let out some steam as well as calm down with a few drinks. (Agg = 4) 5

The boy with the smile, named John is obviously not touched by the scene behind him. In fact he appears to be a bit smug about it... The two unprofessional men are attempting to remove the splintered remains of the wooden knife from his side. The one that was originally put there by John. They had been brothers who never got along. Mark, the older, was always better at everything and never hesitated about letting John know. So one day John decided to get even...He gets away with murder but ends up living a short but bitter life filled with hate. (Agg = 6) 6

Score of 5

Description

- (1) An aggressor dies, commits suicide, or is punished by death.
- (2) A murdered person is brought back to life.
- (3) An aggressor goes insane due to his/her guilt over a relatively mild or accidental aggressive act.
- (4) The aggressor and the victim become close or the aggressor is reformed.

Examples

The man is trying to keep the girl from screaming. She doesn't want to be there and tells him that. He has wanted to be with her for such a long time and has admired her from afar. She had

wished she never decided to walk home from work that night then this would never have happened to her. She will begin to talk to him and try to understand that he is disturbed. She starts to feel sorry for him and finally talking to him for four hours she convinces him to take her home and they will talk some more. They will become friends and he is getting help to become a better person. (Agg \approx 4)

Sue, in a hurry for work runs a stop sign, strikes a young girl on a bike coming the other way. She stops and races to the scene of the accident. Panicked she beings to say she's sorry. But sorry won't do. "The girl is dead," says a man who has witnessed the accident. Sue is frantic. She goes into a hysteric fit. Frightened of what has happened Sue is taken to the hospital. She then seeks professional help because she can't forget that day of her life. She has just lost touch with reality. She has gone crazy. (Agg = 5) 2

On Tuesday March 26, 1980 Wayne Connelly was accused of murdering his wife...Two months later he was convicted and was set to be put to death in the electric chair...Attempts to console him were useless. Wayne was put to death. (Agg = 7) 5

APPENDIX D

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DESCRIPTION OF THE 144-ITEM VERSION OF THE
PICTURE-PRÉFERENCE TEST, INCLUDING THE SCORING
KEY FOR THE ANTISOCIAL TENDENCIES, IMPULSE
CONTROL, MALADJUSTMENT, AND PRIMARY PROCESS
THINKING SCALES

APPENDIX D

Description of the 144-item Version of the

Picture-Preference Test, Including the Scoring

Key for the Antisocial Tendencies, Impulse

Control, Maladjustment, and Primary Process

Thinking Scales

SCALES

- Maladjustment Scale (26 Items)
- 2. Impulse Control Scale (22 Items)
- Antisocial Tendencies Scale (18 Items)
- 4. Primary Process Thinking Scale (14 Items)

An asterisk (*) placed next to a picture description designates the keyed choice reflecting the trait.

Item		•	
No.	Picture A	Picture B	Scale
X.	Lamp on table	Tree	
Υ.	Triangle	Square	
1.	A hand cutting a difficult knot*	Same, with hand untying knot	1
2.	A roast turkey on platter*	A baby chick standing by egg it has just emerged from (one foot in shell)	2
3.	Four letter "M's" increas- ing in size - small to large	Four medium size letter "M's"*	2
4.	A news magazine	- A movie magazine	
5.	Large plus sign and large circle	Two large plus signs*	. 2
6.	A plain, well-developed man	A handsome boy of about 10	
7.	A man sitting, watching TV*	Same man sitting in chair, thinking	2
8.	A male sword swallower	A male fire-eater	•
9.	An older man feeding himself	Same man being fed by a hand holding a spoon*	1
10.	Rear view of tenement and alley*	A fun-house mirror with distorted reflection	1
11.	Shower room with several men, nude, with partition covering genitals	Soldier in fatigues peelin potatoes	ig
12.	A man and woman kissing.	Scene inside movie theatre	:
13.	Father reprimanding son in a loving way	Son kicking family cat*	3
14.	A large cactus, desert scene	A large clock showing 4:15*	2
1 5.	Spoon, fork, sword*	Spoon, fork, knife	4

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	No.	Picture A	Picture B	<u>Scale</u>
	16.	A skinný man	A fat man* .	1
	17 .	A view over the shoulder of a man giving a speech to a large audience	A man with his arm in a cast*	1 -
	18.	A refrigerator with door opened, amply stocked	Same with door closed	
	19.	Man opening a motel door for a woman	A woman typing	
• .	20.	Telephone receiver	Telephone receiver with mouth on listening end of receiver *	4
	21.	A boy being treated by a doctor	Boy escaping through window from scene of crime*	3
	22.	An upright baby bottle*	Same bottle tilted down and out at 45 degrees	2
·	23.	Medicine cabinet filled with toothbrushes, Band-aids, etc.	Same filled with pill bottle	S
	24.	Baseball and bat	Ball, and child crawling *	4
	25.	A piece of paper with a small figure drawn near bottom center of page*	Same paper, same figure, but filling most of page	1
٠.	26.	A young woman thinking about á gravestone*	Same young woman thinking about her husband and child	1
	27.	Simplified, childlike drawing of a figure*	Well drawn head of a man	4
	28.	Couple looking through a picture album	A couple dancing	
	29	Modern art representation of a figure close up	Same, at a distance	
	30.	Nails and a pail*	Hammer and nails	4
	31.	Bedroom, two figures in bed	Same, one figure in bed	
	32.	Birthday cake, fork, glass	Birthday cake and snake *	4

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	Item No.	Picture A	Picture B	Scale
	33.	Girl standing, intact figure	Same picture of a girl split into segments*	4
	34	A dog standing with no leash	Same dog with leash on*	2
	35.	A human heart	A human brain	
<u> </u>	36.	A man handing from cliff holding branch with one hand	Same man crumpled on ground at foot of cliff*	1
	37.	A man with mask and gun*	A policeman	3
•	38.	Two eyes behind a broken lamp*	Broken lamp in floor beside table	4
	39.	A rose with thorns*	A dead tree	2
	40.	An escalator	An express elevator with door closed*	2
	41.	A road going into distance with town in background	Same scene with no town in sight	
	42.	A double bed	Twin beds	
	43.	Superman*	A muscular stevedore	1
	44.	A car parked by side of road with hood up	A car driving on a mountain road with cliff on one side	
	45.	Mop and broom	Mop and ice cream cone that is dripping*	4
	46.	A strung bow (no arrow)	Same bow, unstrung*	1
	47.	A group of people throwing vegetables at a man carrying a PEACE sign	A group of soldiers in combat*	1
	48.	Sleeping Beauty and Prince Charming	Snow White and the Seven Dwarfs	•
	49.	Man driving big, expensive car*	Male graduate in cap and gown	1 .
	50.	A car going over a bumpy road	Road showing a detour sign pointing to another road at right angles*	2

Item No.	Picture A	Picture B	Scale
51.	A dog running through the woods	A cat curled up by fire	
52.	A scarecrow	A robot*	2
53.	A woman in a bathing suit	Same woman cooking at stove	
54.	A group of swans with one vulture	A group of vultures *	1
55.	A skinny woman	A fat woman*	1
56.	Stethoscope	Package of dynamite*	3
57.	Child asleep in a crib	A man and woman sleeping together	-
58.	A car being towed	A car being pushed by tow truck	
59.	Circle just touching an oblique square*	A circle slightly over- lapping an oblique square	2
60.	.Full length view of boy	Framed picture of same boy*	4
61.	Milk carton, shaving cream, and razor*	Milk carton, coffee cup, and spoon	4
62.	A-picture of a mouth	A picture of two eyes	
63.	A buxom woman	A normal-sized woman	
64.	Couple at a zoo	Man with his arm around a woman walking in a park	
65 .	A football player catching a pass	A football player bent over ready to hike the ball (rear view)*	1
66.	A person sleeping, dream cloud showing nondescript scene*	Same with no dream cloud	1
67.	A garage, empty, with door opened	A hand gun (automatic)*	3
68.	Long line of people wait- ing to go into a restaurant	An automat*	·

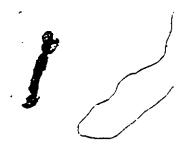
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Item No.	Picture A	Picture B	Scale
69.	A child sucking thumb (about 3 years old)*	Same child playing with pots and pans by cupboard	2
70.	A hospital (outside view)	A line of traffic stopped by train .	
. 71.	A baby being bottle fed, mother's face showing happiness*	Baby being breast fed, mother's face not showing	2
72.	Union picketers outside office building *	Men at negotiating table	3
73.	A medical journal	A detective magazine*	3
74.	Window with shade pulled	Same with shade up showing an outdoor scene	
75.	Pair of shoes and pair of sox	Pair of sox and a box*	4
76.	A roaring fireplace	A hot bath*	2
77.	A person lying in bed sick (pills on table)*	A doctor with stethoscope	1
78.	Man walking down street with group approaching on other side*	Same, with group approaching on same side of street	2
79.	Two men arguing	Same, with backs to each other, mad*	2
80.	Boy pulling girl's pigtails*	Girl reading	3
81.	A man drinking out of a bottle*	Same, drinking out of a glass	1
82.	A woman viewed at eye level	Same, viewed from below, as	
83.	A car wash showing dirty car going in and clean car coming out*	A caterpillar crawling into cocoon, butterfly emerging	2
84.	Soldiers in combat*	A line of men getting injections	1
85.	Man climbing rope with top swivel visible	Same with rope disappearing out of top of card	
		-	

Item No.	Picture A	Picture B	Scale
86.	Woman trying shoes with male salesman	Woman getting fitted for dress, seamstress working under her arm	
87.	A baby with pacifier in mouth*	Same baby looking at mobile	1
88.	Young bird pulling worm out of ground, mother in background watching	Mother bird feeding young b in nest*	ird 2
89.	Small child playing in sand- box*	Same child climbing tree	2
90.	A roller coaster ride seen from the first car	A close-up of a baby kangaroo in mother's pouch	
91.	A teddy bear	A pull-toy (duck)	
92 . .	Man sitting throwing cards into a hat*	A man resting in a hammock	1
93.	Man holding his forearm	Same with both hands on table	
94.	A beggar sitting on side- walk holding tin cup*	A man struggline to lift a heavy weight	1
95.	A cocktail lounge and bar*	An amusement park	1
96.	A man riding a bicycle down a road	Same man on an exercycle*	2
97.	A woman in bed being examined by a male doctor (with stethoscope)	Same scene with female doctor	
98.	A hamster in cage running in wheel	Same cage with hamster climbing slope to lege	
99.	A man passing a woman in street not turning to look	Same scene with man glancing back at woman's legs	9
100.	View over back of mouse looking out of hole at cat lying in wait	Mouse climbing to piece of cheese in baited trap*	2
101.	A room with everything in place	Same scene with some disorder and signs of living*	1.

Item No.	Picture A	Picture B	<u>Scale</u>
102.	A man wearing a smiling mask*	Same man, no mask, no expression	. 1
103.	A woman sitting on rock by pond looking at reflection in water	Same person sitting on log in woods looking down	
104.	A man in jail cell reading book	Same man sawing on bars of cell-windows*	3
105.	Christmas tree with presents	Birthday party table with presents	
106.	One ten dollar bill	Two five dollar bills	
107.	A group of women in a steam room	Woman in a bathing suit under a sunlamp	
108.	Masked man stealing money out of telephone box* .	Man reading at a desk	3
109.	Cob of corn	Half cantelope	
110.	People playing shuffleboard	Couple strolling on a tropical beach	
111.	A boy throwing a rock through a window*	Same boy being caught by a policeman	3
112.	Man straining under a heavy weight	Same man dropping the weight	
113.	Couple playing tennis	Girls playing volleyball	
114.	Two thugs*	Two businessmen	3
115.	Child touching sun with hand*	Same scene but child is not touching sun	4
116.	Frightened boy escaping down a dark street	Same boy walking along a bright street	
117.	A clock showing 10 a.m.	A clock showing 12 noon	
118.	Boy standing in front of father saying, "I promise" with fingers crossed behind his back*	Landscape scene	3

	•	
Item No.	Picture A	Picture B Scale
119.	Nurse weighing a man	Teacher talking to a little girl
120.	A rifle*	A hat
121.	Young boy feeding himself	Infant suckling at mother's breast
122.	Boy and girl playing separately	Adults kissing
123.	A man smoking	A man whittling
124.	Woman taking dictation from another woman	Nurse helping a male patient into bed
125.	Marshmallows	Candy cane
126.	Construction worker whistl- ing at a woman	Woman bank teller taking care of another woman
127.	Box of popcorn	Milk chocolate bar
128.	Classroom scene, student and teacher talking	Two boys arguing* 3
129.	People at a museum	Couple sitting in front of a fireplace
• 130.	Man walking through a field	Man running through a field
131.	A tennis player	A volleyball team
132.	Crime figure*	A horse 3
133.	Box of popcorn	Bowl of raspberries
134.	A dagger*	A pair of scissors 3
135.	Several boys fishing	Young boy and girl walking toward barn
136.	Car with hood up on deserted highway - man looking under hood	Car accident - two cars with crumpled fenders
137.	Two couples playing cards	Woman on a man's shoulders in a swimming pool

No.	Picture A	Picture B	Scale
138.	Licorice twisters	Lollipop ·	
139.	Couple on a blanket at the beach	Children roasting hot dogs	
140.	Bottle of poison*	Bottle of cod liver oil	3
141.	A palm tree	A cactus plant	3
142.	Figure of a girl	Girl attached to puppet- strings*	4
143.	Boy buttoning shirt	Boy blowing bubble	•
144.	Snow White asleep	Girl reading	



APPENDIX E

CODES FOR OCCUPATION AND EDUCATION

AND THE FORMULA FOR SOCIAL STATUS

APPENDIX E

Todes for Occupation and Education and the Formula for Social Status

Occupation Level (Warner)

- 0 Missing data
- 1 Executives and proprietors of large concerns and major professionals
- 2 Managers and proprietors of medium concerns and minor professionals
- 3 Administrative personnel of large concerns, owners of small independent businesses, and semiprofessionals
- 4 Owners of little businesses, clerical and sales workers, and technicians
- 5 Skilled workers
- 6 Semiskilled works
- 7 Unskilled workers
- 8 Students
- 9 Unemployed or retired
- Note. Codes 8 and 9 are special codes to indicate that the occupational level of students, of unemployed persons, and of retired persons cannot be compared with levels 1 through 7.

Education Level (Warner)

- 0 Missing data
- 1 Graduate professional training
- 2 Standard college or university graduation (includes HonoursB.A.)
- 4 High school graduate
- 5 Partial high school (completed tenth or eleventh grades)
- 6 Junior high school (completed seventh, eighth, or ninth grades)
- 7 Less than seven years of school

Formula for Index of Social Status

Index of Social Status = 7 X (occupation) + 4 X (education)

APPENDIX F

ITEM INTERCORRELATIONS FOR AGGRESSION AND INHIBITION OF
AGGRESSION SCALES, MINUCHIN'S SCALES, AND
EXTENDED MINUCHIN SCALES

APPENDIX F

Item Intercorrelations for Aggression and Inhibition of Aggression
scales, Minuchin's scales, and Extended Minuchin scales

	<u> </u>			•		
Scale		Picture 2	Picture 3	Picture 4	Picture 5	·Picture
Aggression						
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5	.138	.123	.122 045 .185	.113 .045 .162 .071	.084 .176 .189 .049
Inhibition of Aggression	of					·
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5	.242	.124 .073	108 .067 .188	.067 073 .167 152	.051 .065 .221 070 .284
Major Defenses						
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5	.210	.176 .095	.123 .017 .137	009 110 004 .149	.182 .161 .140 024 070
Outwardly Directed Aggressive Actions			·			
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5	053	.234	055 026 069	.045 .098 .087 .044	.018 .209 .054 037

Scale		Picture 2	Picture 3	Picture 4	Picture 5	Picture 6
Punishment - Minuchin						
•	Picture 1 Picture 3 Picture 4 Picture 5		.55	013 033	036 .213 .203	012 .226 018 .112
Other Defenses			÷			
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5	053	.234 .004	055 026 069	.045 .098 .087 .044	.018 .209 .054 037 .140
Bad Consequences	•			·		
	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5	017	.076 .188	024 012 046	074 .124 .107 .021	029 015 .091 021 .045

							€.	۶			,	
					Total Defe	Defenses						
-	Picture 2	Picture 3	Picture 4	Picture 5	Picture 6	Picture 1	Picture 2	Picture 3	Picture. 4	Picture 5	Picture 6	
Picture 1 g Picture 2 g Picture 3 g Picture 4 g Picture 5 Ficture 5 Picture 5 Picture 6	.210	.176	.124	009 110 004	.182 .161 .140 024 070	.385 087 .076 024 140	.278 .443 002 .161 066	. 162 . 043 . 048 . 039 . 010	.046 043 .028 .096 071	.095 .042 .047 .015	.021 .057 002 071 .036	
e Picture 1 e e Picture 2 e e Picture 3 Ge Picture 4 Picture 5							053	.003	059 026 069	.045 .098 .087	.018 .209 .054 .037	•
				Punishment	nent plus	Bad Conse	Consequences				-	
	Picture 2	Picture 3	Picture 4	Picture 5	Picture 6	Picture 1	Picture 3	Picture 4	Picture,	Picture 6		·
Bad Picture 1 Picture 2 Picture 3 Conseque Picture 4 Picture 5 Picture 5	017	.188	024 012 046	074 .124 .107	029 015 .091 021	.305 009 .411 012 039	.139 023 .734 031 .180	025 .703 .110 .304 .177	068 -143 .141 .032 .891	024 012 .153 016 .094		
Picture 1 First Picture 3 Pricture 4 Picture 5		· ·					.550	013 033	036 .213 .203	-, 012 .226 -,018	170	
					\	/	*	•				
				-		•						

APPENDIX G
DATA FILE AND ITS DOCUMENTATION

Documentation of Data File

Line 1

Columns (cols.)	Description
cols. 7-8 col. 10 cols. 11-80	subject's i.d. number line number (= '1') first 70 PPT scale items including items from the Maladjustment, Antisocial Tendencies, Primary Process Thinking, and Impulse Control scales. Code: 0 - Left-hand picture (A)

		PPT Item no.	Scale	Keyed Choice
col. col. col. col. col. col. col. col.	11 12 13 15 17 19 20 23 24 25 26 27	1 2 3 5 7 9 10 13 14 15 16 17 20	Maladjustment Impulse Control " Maladjustment Antisocial Tendencies Impulse Control Primary Process Thinkin Maladjustment Primary Process Thinkin	(0) (0) (1) (1) (0) (1) (1) (1) (1) (1)
col. col. col. col.	31 32 35 35 36 37	21 22 24 25 26 27	Antisocial Tendencies Impulse Control Primary Process Thinkin Maladjustment Primary Process Thinkin	(1) (0) ng (1) (0) (0)
col. col. col. col.	40 42 43 44 46 47	30 32 33 34 36 37	Impulse Control Maladjustment Antisocial Tendencies	ng (0) (0) (1) (1) (1) (1) (0)
col. col. col. col. col. col.	48 49 50 53 55 56 57	38 39 40 43 45 46 47	Primary Process thinking Impulse Control Maladjustment Primary Process Thinking Maladjustment """	ng (0) (0) (1) (0)

Columns'	PPT Item no.	Scale	Keyed Choice
col. 59 col. 60 col. 62 col. 64 col. 65 col. 66 col. 69 col. 70 col. 71 col. 75 col. 76 col. 77	49 50 52 54 55 56 59 60 61 65 66 67 68	Maladjustment Impulse Control Maladjustment Antisocial Tendencies Impulse Control Primary Protess Thinking Maladjustment Antisocial Tendencies Maladjustment Impulse Control	(0) (1) (1) (1) (1) (0) (1) (0) (1) (0) (1) (0) (1) (0)
Line 2	Ì		
cols. 7-8 col. 10 cols. 11-80	items from th	= '2') cale items (71-140) including me Maladjustment, Antisocial Primary Process Thinking, and	3
col. 11 col. 12 col. 13 col. 15 col. 16 col. 17 col. 18 col. 20 col. 21 col. 23 col. 24 col. 27 col. 28 col. 29 col. 32 col. 34 col. 35 col. 36 col. 40 col. 41 col. 42 col. 48 col. 51 col. 54	71 72 73 75 76 77 78 79 80 81 83 84 87 88 89 92 94 95 96 100 101 102 104 108 111	Impulse Control Antisocial Tendencies Primary Process Thinking Impulse Control Maladjustment Impulse Control Antisocial Tendencies Maladjustment Impulse Control Maladjustment Impulse Control Maladjustment "" Impulse Control Maladjustment "" Antisocial Tendencies "" Antisocial Tendencies	(0) (0) (1) (1) (1) (0) (0) (0) (0) (0) (1) (0) (1) (0) (0) (0)

Columns	PPT Item no.	Scale	Keyed Choice
col. 55 col. 58 col. 60 col. 68 col. 72 col. 74 col. 80	115 118 120 128 132 134 140	Primary Process Thinking Antisocial Tendencies	(0) (0) (0) (1) (0) (0) (0)
Line 3 ;		,	·
cols. 7-8 col. 10 cols. 11-14	subject's i.d. line number (= PPT scale item	'3')	
col. 12	142	Primary Process Thinking	(1)
cols. 15-39		Psychoticism scale items	(1-25)
		Code for Psychoticism (POD) - Yes) scale items:
	P Item no.		Keyed Choice
col. 15 col. 16 col. 17 col. 18 col. 19 col. 20 col. 21 col. 22 col. 23 col. 24 col. 25 col. 26 col. 27 col. 28 col. 29 col. 30 col. 31 col. 32 col. 33 col. 34 col. 35 col. 36 col. 37 col. 38 col. 39	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		(1) (1) (1) (1) (0) (0) (0) (1) (0) (1) (0) (0) (0) (1)

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cols. 41-46
                         Aggression scale score for each picture
                         (Range of scores: 0 to 7 for each picture)
col. 41
                         Aggression scale score - Picture 1
col. 42
                                                  Picture 2
col. 43
                                                  Picture 3
col. 44
                                                  Picture 4
col. 45
                                                  Picture 5
col. 46
                                                   Picture 6
cols. 51-56
                         Inhibition of Aggression scale score for
                         each picture
                         (Range of scores: 0 to 5 for each picture)
col. 51
                         Inhibition of Aggression scale score - Picture 1
col. 52
                                                                 Picture 2
col. 53
                                                                 Picture 3
col. 54
                                                                 Picture 4
col. 55
                                                                 Picture 5
col. 56
                                                                 Picture 6
cols. 58-63
                         Total of the frequencies of Minuchin's outwardly
                         directed aggressive actions (physical,
                         antisocial, verbal, coercive, passive-aggressive)
                         for each picture
                         (Range of totals: 0 to 5 for each picture)
col. 58
                         Outwardly Directed Aggressive Actions - Picture 1
col. 59
                                                                  Picture 2
col. 60
                                                                  Picture 3
col. 61
                                                                  Picture 4
col. 62
                                                                  Picture 5
col. 63
                                                                  Picture 6
cols. 64-69
                         Total of the frequencies of Minuchin's major
                        defenses (rejection, denial, excusing, non-
                         completion) against outwardly directed aggressive
                         actions
                         (Range of totals: .0 to 4 for each picture)
col. 64
                        Major Defenses - Picture 1
col. 65
                                          Picture 2
col. 66
                                          Picture 3
col. 67
                                          Picture 4
col. 68
                                          Picture 5
col. 69
                                          Picture 6
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Line 4
                         subject's i.d. number
cols. 7-8
                         line number (= '4')
col. 10
                         sex (male = 1, female = 2)
col.
      11
col.
     12-13
                         age
                         marital status
col.
     14
                         (married = 1, single = 2, divorced = 3
                         widow/widower = 4, separated = 5, other = 6
                         education (Warner's scale)
col.
      15
                         occupation (Warner's scale)
col. 16
                         Total of frequencies of Minuchin's inwardly
cols. 21-26
                         directed aggressive actions
                         (abasement need, self-injury need, and the
                         press of mental affliction, physical afflication,
                         physical danger, physical aggression, coercive
                         aggression, death, verbal aggression, passive-
                         aggression, and blame) for each picture.
                         (Range of totals: 0 to 11 for each picture)
 col. 21
                         Inwardly Directed Aggressive Actions - Picture 1
 col. 22
                                                                 Picture 2
 col. 23
                                                                 Picture 3
                                                                 Picture 4
 col. 24
                                                                 Picture 5
 col. 25
                                                                 Picture 6
 col. 26
 cols. 34-35
                         Index of social status (Range: 11-77)
 cols. 37-42
                         Total of frequencies of the author's other
                         defenses (distancing, undoing, punishment,
                         admission) against outwardly directed aggressive
                         actions for each picture.
                         (Range of totals: 0 to 4 for each picture)
                         Other Defenses - Picture 1
 col. 37
                               11
 col. 38
                                           Picture 2
                                tt
                                           Picture 3
 col. 39
 col. 40
                                           Picture 4
                                           Picture 5
 col. 41
 col. 42
                                           Picture 6
                         Total of frequencies for each picture of the
. cols. 44-49
                         author's bad consequences for the protagonist
                         for his/her outwardly directed aggressive actions.
                          (Range of totals: 0 to 5 for each picture)
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3

		177
col. 44 col. 45 col. 46 col. 47 col. 48 col. 49	Bad Consequences - Picture 1 Picture 2 Picture 3 Picture 4 Picture 5 Picture 6	
'cols. 51-56	The incidence of a physical aggressive unmodified by the major defenses (Score: 0 or 1 for each picture)	act 🎔
col. 51 col. 52 col. 53 col. 54 col. 55 col. 56	" . P	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5 Picture 6
cols. 58-63	The incidence of an antisocial, nonphy aggressive act unmodified by the major defenses (Score: O or I for each picture)	vsical
col. 58 col. 59 col. 60 col. 61 col. 62 col. 63	Unmodified Antisocial Aggressive Act	Picture 1 Picture 2 Picture 3 Picture 4 Picture 5 Picture 6
cols. 64-69	Total of the frequencies for each pick Minuchin's punishment for the protagor outwardly directed aggressive actions (Range of totals: 0-5 for each picture	nist's
col. 64 col. 65 col. 66 col. 67- col. 58	Punishment - Minuchin - Picture 1 Picture 2 Picture 3 Picture 4 Picture 5 Picture 6	

Note. Subject no. 58 received a '9' (missing data) for Pictures 5 and 6 on all the recorded TAT measures because she did not write a story to the pictures. She was therefore not included in the analyses involving these measures. Subjects no. 82 and no. 110 received '8''s for missing PPT items.

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14 303010000011110111003113111110 555365 313121 00000000000
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                     352002 000000000000
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30 421926e 310020
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31 4223135 010030
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32 4243113
     110320
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43 300000 TOTTTOTOTOTOTOTOTOTOTOTOTO 525231
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                                                                   - 032200 2001011C0100
     4226273 120123
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