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OVERT AGGRESSION, FANTASY AGGRESSION,  
AND AGGRESSION ANXIETY  
IN A POPULATION OF YOUTHFUL OFFENDERS

Thesis for the Degree of M. A.  
MICHIGAN STATE UNIVERSITY  
Ronald Norman Luehrig  
1964

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## ABSTRACT

### OVERT AGGRESSION, FANTASY AGGRESSION, AND AGGRESSION ANXIETY IN A POPULATION OF YOUTHFUL OFFENDERS

by Ronald Norman Luehrig

This study addresses itself to the nature of the relationships among overt aggression (the independent variable), "aggressive tendencies," aggression anxiety, and fantasy aggression (the three dependent variables). The psychological concepts of aggression, fantasy, and anxiety are discussed, followed by a review of the literature bearing on these relationships. Briefly, the literature suggests that aggression (making no distinction between overt aggression and "aggressive tendencies") and aggression anxiety are in an inverse linear relationship to one another, while aggression and fantasy aggression have a direct linear relationship.

Three hypotheses are proposed based on the empirical findings reviewed. (1.) If a prison population is divided into three groups according to the degree of overt aggression (as indicated by their present offences), the higher the overt aggression, the higher the scores on the aggression measure will be. (2.) Given these three groups, the higher the

overt aggression, the lower the aggression anxiety scores. (3.) Again, given these three groups, the higher the overt aggression, the higher the fantasy aggression scores.

The tests used to measure the three dependent variables are (1.) the Zaks and Walters twelve item scale of aggression, (2.) Sears aggression anxiety scale, and (3.) a combination of two group-administered versions of the Thematic Apperception Test: the Iowa Picture Interpretation Test and the Objectively Scoreable Apperception Test. The IPIT and the OAT are combined by converting to standard scores, adding a constant, and taking the arithmetic mean of the two scores to get the fantasy aggression score. A product moment correlation is computed between the hostility scale on the IPIT and the aggression scale on the OAT and is found to be  $+0.599$ , indicating that the two scales are related.

Out of an original population of 423 male prison inmates, 343 who met the criteria of age and minimum IQ were retained as subjects in this study. They were divided into three groups--Violent Personal, Violent Non-personal, and Non-violent--based on the classification of their crimes by three independent raters. The three groups are comparable in terms of IQ and education, but the Violent Personal group is

significantly older than the other two groups.

The data were analyzed by means of a single classification analysis of variance, and the individual comparisons were made by means of three t-tests for independent means. With the exception of the aggression scale, where the moderate overt aggression group showed the highest mean "aggressive tendency" score, all analyses of the dependent variables across the three groups are insignificant. The lack of statistically significant results is attributed primarily to the small *n* in the middle group. Despite the generally statistically insignificant results among the three groups, the data did suggest some interesting relationships between the independent and dependent variables. In all cases the relationship is curvilinear. When a Pearson *r* was computed for pairs of the dependent measures, two were found to be significant. "Aggressive tendencies" and fantasy aggression were positively correlated, and aggression anxiety and fantasy aggression were negatively correlated. There was no correlation between "aggressive tendencies" and aggression anxiety. Speculations based on these trends lead to suggestions for the modification of the hypotheses and the techniques of investigation, to be incorporated into future research. The significant findings are

discussed in light of the literature in this area.

APPROVED BY

A handwritten signature in cursive script, appearing to read "Lucy Rau", is written over a solid horizontal line.

THESIS CHAIRMAN



OVERT AGGRESSION, FANTASY AGGRESSION  
AND AGGRESSION ANXIETY  
IN A POPULATION OF YOUTHFUL OFFENDERS

By

Ronald Norman Luehrig

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

MASTER OF ARTS

Department of Psychology

1964

## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude and appreciation to by Thesis Chairman, Dr. Lucy Rau, for her interest, encouragement, and instruction related to this investigation. In addition, I am grateful to Dr. John Hurley and Dr. Bertram Karon for their informative and helpful discussions of the issues involved in this research. I extend my gratitude to Dr. Shelley, Supervisor of Treatment, Department of Corrections of the State of Michigan, for his interest and encouragement and, especially, the assistance he rendered in speeding the proposal through the necessary red-tape. I also extend my gratitude to Mr. Harrison, Director of the Department of Corrections, and his staff for their assistance; to Mr. Hanland, Supervisor of the Michigan Training Unit and his staff, for facilitating the collection of the data; and to the three men--Roger Olive, John Taliafarro, and Larry Levey--who arose early on Saturday mornings to proctor the testing sessions. Last, but by no means least, I would like to express my deepest gratitude to my wife, Laurel, for the long hours she spent typing and proofreading this thesis and for her confidence and encouragement, without which this thesis might have been impossible.

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## HISTORY

The literature dealing with the problem of the relationship between overt and fantasy aggression and overt aggression and aggression anxiety is not very definitive, either empirically or theoretically. For the sake of clarity, it seems necessary to deal with the three fundamental aspects of this problem separately before attempting to deal with the theoretical and empirical issues of the problem at hand. That is, the author will discuss briefly the topics of aggression, fantasy, and anxiety before focusing on the problems of the relationship between overt and fantasy aggression, and overt aggression and anxiety over aggression.

Sears, et al (25) define aggression as "...behavior that is intended to hurt or injure someone...." We will attempt to refine this definition by making a distinction between personal aggression, i.e., harm to another person, and object aggression, i.e., behavior that results in damage to property public or private.

Freud, about the time of the first world war, became astounded by the aggression that man was exhibiting towards his fellow man, and felt it necessary

to attempt to integrate this with psychoanalytic theory. He posited the concept of the death instinct, relating this with the biological fact of gradual deterioration of the organism with age, and indicated that along with the sexual drives (Eros) of man there are also aggressive drives, which he called Thanatos. Yet, psychoanalytic theory as we know it today is split on this issue. This split is reflected by Fenichel (9) when he says, "aggressive tendencies of all kinds constitute a considerable proportion of all human drives. In part, they manifest a reactive character; that is, they are the response to frustration and have as their goal the overcoming of frustration. In part they appear closely connected with certain sexual drives, especially with sexual drives that are predominant in pregenital levels of libido organization. Other aggressions seem to arise quite apart from sexuality." In this statement, Fenichel reflects not only Freud's notion of aggression as a drive, but also the hypothesis set forth by Dollard, et al, at Yale University in 1939 (7). The basic postulate of this hypothesis is that "...aggression is always a consequence of frustration. More specifically, the proposition is that the occurrence of aggressive behavior always presupposes the existence of frustration, and, contrariwise, that the existence of frustration always leads to some form of aggression."

Bandura and Walters (2), in a large scale study of adolescent aggression, formulate a more specific, theoretically precise statement of the antecedents of aggression. Briefly,

...the theory of anti-social aggression that is offered...assumes that such a disorder originates primarily from the disruption of a child's dependency relationship to his parents....the frustration of the child's dependency needs through a lack of affectional nurturance on the part of one or both of his parents provides the child with continuing instigation to hostility and aggression.... An impaired dependency relationship may not only be a source of aggressive feelings, but may also limit a child's capacity to handle such feelings adequately once they are aroused.... A child who is severely frustrated and rejected has little or nothing to gain through controlling the anger and aggression that the frustration provokes. This aggression at least brings temporary relief, and at the same time, forces others to attend to him.

It is evident throughout their book that these authors follow the conceptual framework set up by the Yale scholars some twenty years before. Yet, Dollard and his colleagues (7) posit a different set of frustration-factors as the stimulator of the aggression. They are the attainment of sexual maturity which is in conflict with society's taboo against premarital sexual gratification and the attainment of functional skills which would allow for economic autonomy but which is resisted by the society's economic structure.

It is by now quite apparent that these three



theoretical systems have attempted to deal with the phenomenon of aggression and have basically come to agree that frustration is the prime factor underlying aggressive behavior. There is less agreement as to the specific source of the frustration, but this is understandable because there may be many sources of frustration that can lead to aggressive behavior. These approaches to the problem have suggested only a few of the sources of frustration.

Regardless of the sources of frustration, it is reasonable to assume from the above discussion that there is frustration throughout childhood. This being the case, how does the individual learn to deal with this frustration and the resulting aggressive impulses? Psychoanalytic theory tells us that part of the developmental process involves the growth of the ability for the delay of gratification. In non-psychoanalytic terms this means we attain the ability to tolerate frustration. But what if a child does not learn to tolerate frustration? Sears, et al (25) suggest that aggressive behavior is in part influenced by the social structure of the society in which one finds himself. These social limitations aid the individual, no matter how free from frustration his childhood was, no matter how great a tolerance for frustration he has developed, to adopt subtle and complex expressions of his aggression which is

approved by his society.

The complexity and subtlety of adult aggression is the end product of two or three decades of socialization...and bears little resemblance to the primitive quality of the infant's action pattern, from which it developed. All human societies...have rules to limit the kinds and direction of aggression that may be expressed. The most fundamental of these is the high degree of prohibition on in-group fighting [especially] in-family aggression.... Aggression... has a strong tendency to evoke counteraggression or punishment... [this] means that every child grows up with the experience of being punished in some degree for his aggressive behavior.... One significant effect of punishment is the production of anxiety [to be dealt with later]. If the punishment is repeated many, many times through early childhood, situations that provoke aggressive feelings gradually come to arouse anxiety.... Eventually the aggression itself or the accompanying feeling of being angry becomes sufficient to arouse anxiety [guilt].... The formulation of such a reaction has two kinds of consequences...one is the uneasiness and discomfort that becomes connected with the arousal of aggressive impulses...a second...is the development, by the child, of techniques for avoiding punishment. (25)

Bernabeu (3), taking a more eclectic, yet markedly Freudian, position, on the one hand reinforces Bandura and Walters' position--one of the prime factors in this issue is the disruption of the dependency relationship--and on the other hand supplies some important additional information. (Bernabeu's article deals with

delinquents, but for the present we have attempted to keep the discussion more general, although the population under investigation is youthful offenders.\*) She suggests, among other things, that fantasy--especially fantasy of omnipotence--is an important variable to be considered. Also, she suggests that aggressive behavior or "...action has become an evasion of reality rather than an adaptation to it, i.e., the negative alloplastic reaction. External controls [as described by Sears, et al, above] are not internalized.... This acting out, since it does not solve the fundamental problems of the individual, causes a continuing lack of socialization and therefore of opportunity for development of the various ego functions..., "primarily control of aggressive urges.

Aside from supporting the Bandura and Walters notion of aggression stemming from a frustrated dependency relationship and supporting Sears' notion of socialization of aggression, Bernabeu points to a factor which might be quite relevant to the study of aggressive behavior, i.e., fantasy.

Fenichel (9) points out that "as long as thinking

\*Youthful offenders refers to offenders sent to a house of correction by a court other than a juvenile court. Here we are not dealing with delinquents because this would pose many legal problems in terms of accessibility of subjects and their records.

is not followed by action it is called fantasy. There are two kinds of fantasy: creative fantasy, which prepares some later action, and day-dreaming fantasy, the refuge for wishes that cannot be fulfilled." Freud (11) does not make the distinction that Fenichel makes, although he does go into greater theoretic detail on the subject. "The common origin and normal prototype of all these phantastic creations are the so-called day-dreams of adolescence.... These phantasies are wish fulfillments, products of frustration and desire...." Freud sees these fantasy experiences--day-dreams--as concerned almost entirely with erotic pleasures.

Healy and Bronner (13) also deal, even though only secondarily, with the phenomenon of fantasy (as did Bernabeu--the fantasy of delinquents). These authors define fantasy as "...free wandering of thought[s] untrammelled by considerations of reality. [They] represent for all human beings...the unbidden expressions of feelings and desires that are potent in forming conduct tendencies...."

It should be noted that both Fenichel, and Healy and Bronner, use fantasy as thoughts allowed to wander free to be later used as a guide for future behavior. Yet, empirically, one would be hard put to define operationally the two types of fantasy proposed by Fenichel. For this reason, the most general definition of fantasy will be employed for the purposes of this paper;

fantasy is defined as those thoughts that occupy the mind, which may or may not lead to future behavior, and that are generally not verbalized and not immediately acted upon. These thoughts must also be guided more by primary process thinking than by secondary process thinking. This stipulation is added to distinguish fantasy from problem solving behavior; i.e., it is an attempt to de-emphasize the logical processes in the definition of fantasy.

We now begin to get a feeling that man, in his bio-social wisdom, has "provided" himself with possible ways of expressing aggressive urges, arising from frustrating situations, in socially acceptable behavioral modes. The one which is of interest to this author is the use of fantasy to handle one's aggressive urges.

From the above discussion we might expect, since fantasy is posited as a means of coping with one's aggressive feelings, that the following relationship holds: the greater the fantasy aggression, the less the overt aggression. This expectation is the same as the one that would be posited by psychoanalytic theory based on the notion of mental economics; i.e., "There is a 'mental energy exchange,' an economic distribution of energy at hand between intake, consumption, and output (Fenichel, 9). Gordon

and Cohn (12) state this theoretical formulation very clearly. "According to psychoanalytic theory instinctual energies may be discharged either motorically or in fantasy, as alternative discharge systems. Psychoanalytic theory would predict, then, that the presence of a fantasy discharge in a subject should reduce the overt expression of the drives that are expressed by fantasy."

The basic premise of the philosophy of science is to compare all theoretical statements with empirical findings to see if the theory is substantiated by fact. It is for this very reason that we turn away from theory momentarily to face the findings of empirical research designed to test the relationship between overt and fantasy aggression.

At the outset, it must be noted that the available literature is sometimes difficult to interpret for a number of reasons: (a) some of the findings that are reported are merely interesting by-products of larger and, more important, almost irrelevant studies; (b) the measures of overt and of fantasy aggression are many times subjective and based on different, incomparable instruments; and (c) the hypotheses forming the foundation of the studies are so stated that comparisons are virtually impossible to make. Generally, the literature in this area, although fascinating and provocative, does not clarify

the nature of the relationship between overt and fantasy aggression. However, a few studies seem to agree as to the nature of this relationship, and others suggest different relationships.

Marquis (22), using several TAT scales ("hypotheses") and correlating them with ratings of "many aggressive behaviors," concludes that less is known about fantasy behavior and aggressive behavior than is generally realized. Although Marquis' conclusions seem almost meaningless, they do express one aspect of this problem--we really don't know too much about the relationship between overt and fantasy aggression. Let us see what has been done to illuminate the situation.

Healy and Bronner (13) find as a by-product of their research that there is some evidence for a positive relation between overt and fantasy behavior. They feel that fantasy is some sort of rehearsal behavior for future action. The evidence for this, however, is more anecdotal than empirical. Cohn (6), in a study employing doll play and subjective measures of both overt and fantasy aggression, concludes that "Doll play aggression is comparable to overt aggression in that [the] characteristic of overt aggression is likely to show up in doll play aggression also, although not necessarily in the same form." Again, a positive relationship. Sears (24), with a firm

foundation of empirical findings, begins to make things a little clearer. In her study a frequency count of aggressive acts in a doll play situation is the index of aggressive fantasy. She compares her findings with the results of surveys on aggressive behavior in real-life situations and concludes that "the fantasy component of doll play...does not provide many reversals of behavior appearing in more realistic situations"; i.e., there is a positive relation between the fantasy and overt aggressive behavior. Kagan (17) also finds a positive relationship between overt aggression (ratings of children as to the likelihood of their getting into fights) and fantasy aggression (fight themes of TAT stories).

In Lasky's study (18) three questions are asked, only one of which is relevant to the present study; i.e., what is the relationship between spontaneous fantasy and behavioral measures of hostility. Lasky uses reported day-dreams as an index of fantasy hostility and finds that there is a significant curvilinear relationship between day-dream fantasy and self-ratings of hostility ( $P < .01$ ). Those who rated themselves high or low in hostility had higher day-dream productivity scores than the intermediate self-rating group. This study does not really allow us to draw any definite conclusions because the index of "fantasy aggression" is unclear: is the day-dream



productivity an adequate measure of fantasy aggression; what is the content of the day-dreams being considered? Jensen (15), on the other hand, finds himself unable to support the hypothesis of a positive relationship between overt aggression (in high school students as rated by their teachers) and fantasy aggression (as measured by TAT stories). The conclusion reached regarding this relationship is: "There was very little, if any, relationship between aggression in fantasy and in overt behavior...."

There are other studies that are related to this issue. Lesser (20), besides finding a positive product moment correlation of .26 between fantasy and overt aggression ( $P < .05$ ), also finds a negative product moment correlation of -.23 between overt aggression and anxiety which prevents fantasy aggression. Sears (24), as we have seen, finds a positive relationship between two of the principle variables of this study (overt and fantasy aggression), but also finds that sex and presence or absence of father influence aggressive fantasy. Sears, et al (25) find that aggressive fantasy is not a function of parental permissiveness but a function of parental punitiveness. Lesser (19) finds another parent-centered variable which influences aggressive fantasy; "...under conditions of maternal encouragement of aggression, a greater degree of correspondence exists between fantasy

and overt aggression...than under conditions of maternal discouragement of aggression."

With the introduction of important secondary variables the relationship between overt and fantasy aggression becomes even more complex, yet these variables give us clearer understanding of the problem. The basic theoretical issue remains: is psychoanalytic theory's formulation of the relationship between overt and fantasy aggression supported by empirical evidence, or is it necessary to formulate a new theory to adequately deal with this phenomenon? The empirical evidence, although somewhat confused, suggests that the psychoanalytic formulation is inappropriate. We feel it is advisable to follow the lead of the empirical studies quoted and posit that the fundamental relationship between overt and fantasy aggression is positive and that the psychoanalytic formulation is inappropriate.

Before postulating specific hypotheses, we must consider the third major variable of this investigation. "Anxiety," which is less clearly defined than fantasy and aggression in that it covers a wide range of conceptual meaning, is a rather broad and nebulous term. May (23), who expounds the existential view of anxiety, is at one extreme. "Anxiety is not an affect among other affects such as pleasure or sadness. It is rather an ontological characteristic of man, rooted

in his very existence as such. It is not a peripheral threat which I can take or leave...it is always a threat to the foundation, the center of my existence." May then continues to make the distinction between anxiety ("anxiety strikes the center core of his self-esteem and his sense of value as a self, which is one important aspect of his experience of himself as a being") and fear ("a threat to the periphery of his existence; it can be objectivated, and the person can stand outside and look at it..."). The source of anxiety, according to May, is "at the point where some emerging potentiality or possibility faces the individual...but this very potentiality involves the destroying of present security, which thereupon gives rise to the tendency to deny the new potentiality." Therefore, anxiety is the inner conflict or choice between the fulfillment of one's own potentiality and one's present state of security. The fact of man's ability to choose is synonymous, for May, with anxiety--a central threat to the core of the self.

At the other extreme is the position which, unlike the phenomenological position of the existentialists, observes anxiety from a physio-biological point of view. Cameron and Magaret (5) define anxiety as "the predominately covert skeletal and visceral reaction which constitutes the unconsummated,

preliminary phase of emotional excitement. Like most covert reactions, anxiety typically remains unshared, un verbalized, and often inaccessible to one's own self reactions...." These authors also make a distinction between anxiety ("preparatory flight from danger which is not identified, is no longer present...") and fear ("preparatory flight from 'real' danger").

Freud (10), unlike May, views anxiety as an "affective condition." He also points out, in contrast to Cameron and Magaret, that anxiety when viewed from the position of "academic medicine" (the physio-biological position) is not very meaningful, nor informative. For Freud, anxiety is not a single entity. He concerns himself with two kinds of anxiety--objective or real anxiety and neurotic anxiety. The former is related, it is true, to preparatory flight but it is not nearly as rational and expedient as the term "preparatory flight" might suggest. For Freud "...the development of anxiety is never expedient [nor rational].... The anxious readiness, seems to me the expedient element..., " but this is not to say that it is derived from the ability to make rational choices, as May would lead us to believe.

According to Freud, anxiety "is generally understood to mean the subjective condition arising upon the perception of what is called 'developed' anxiety."

The source and prototype of all anxiety, according to Freud, is the trauma of birth resulting from the marked increase in stimulation upon leaving the womb and the individual's inability to deal with this stimulation. He continues, "...the development of (real) anxiety is the reaction of the ego to danger and the signal preparatory to flight [no anxiety as preparatory flight, as Cameron and Margaret suggest, but a signal preparatory to flight]; it is then not a great step to imagine that in neurotic anxiety also the ego is attempting a flight, from the demands of its libido, and is treating this internal danger as if it were an external one." When Freud compares phobias of children with neurotic anxiety he briefly points out that the libido "substitutes some other external object or some situation for the love-object which it misses."

Arieti (1) makes this last statement of Freud's much clearer, when he points out that the child requires an atmosphere of warmth, love, respect, and approval in order to develop a sense of self-esteem and self-identity. He then points out that "At times, however, the child is not surrounded by this atmosphere of love, acceptance and approval. His strivings toward self-esteem and self-realization are thwarted by the destructive influences that the surrounding adults have upon him. His security is attacked and

anxiety originates." It must be emphasized at this point that, although Arieti uses the concepts of "self-esteem" and "self-realization," his view of anxiety is not at all like that set forth by May.

In his discussion of anxiety, Fenichel (9) reiterates Freud's views of anxiety, yet places stronger emphasis on the concept of primary anxiety (hitherto not mentioned). He also combines the views of the psychological and physio-biological positions. Again, as for Freud, the source and prototype of anxiety is the trauma incurred at birth. Fenichel points out

The sensations of this 'primary anxiety' can be looked upon partly as the way in which the tension makes itself felt and partly as the perception of involuntary vegetative emergency discharges...certainly this primary anxiety is in no way created actively by the ego; it is created by external and internal stimuli, still unmastered, and insofar as it is experienced as a conscious painful feeling, it is experienced passively, as something that occurs to the ego and has to be endured.

As Fenichel indicates, anxiety results from both internal and external stimuli. Among the internal stimulation that might arouse anxiety are the aggressive impulses. In an attempt to understand aggression, Sears (26) has developed a scale (actually a sub-scale) which he feels can measure anxiety over aggression. He says that "this scale measured feelings of fear, discomfort, and dislike of aggression." Sears'

aggression anxiety scale is primarily based on a somewhat different concept of anxiety. Dollard and Miller (8), taking a social learning point of view, discuss "anxiety" in great detail. In their discussion they tend to use "anxiety" and "fear" interchangeably. They do, however, make the traditional distinction--fear is a response to an object or is associated with a specific stimulus, while anxiety is a response to some vague, non-specific stimulus; "...we say that fear is learned because it can be attached to previously neutral cues." The origins of this social leaning theory of anxiety are in the avoidance learning experiments with animals. Dollard and Miller have extended and refined this "avoidance" into a precise descriptive concept and have applied it to such phenomena as "fear of being alone," "the masturbation taboo," etc. It seems reasonable therefore, that Sears' scale might have the ability to measure the complex phenomenon of anxiety, since his definition and description of the scale contains some of the essential elements of anxiety.

Turning to empirical studies that relate the phenomena of anxiety and aggressive behavior, we find that their conclusions are congruent with one another. Lesser (20), as mentioned above, finds a correlation of  $-.23$  between overt behavior and aggression anxiety. In another study, Lesser (21) finds

that religion plays a major role in the anxiety over aggression, which in turn affects the quality, not necessarily the quantity, of aggressive fantasy. Sears (26), in a rather complex study, finds that antisocial aggression correlates negatively with aggression anxiety. Projected and self aggression, however, correlate positively with aggression anxiety.

From the above discussion of the nature of anxiety and the empirical studies relating anxiety with overt aggression, it seems fairly reasonable to expect that when aggression anxiety is high overtly aggressive behavior would be low and, conversely, when aggression anxiety is low, overt aggression would be high.

### Hypotheses

1 If a population of prison inmates is subdivided into three sub-populations (Violent Personal, Violent Non-personal, and Non-violent) on the basis of the nature of their offences, then the Zaks and Walters (28) aggression scale will differentiate these three groups with the Violent Personal having the highest score, the Violent Non-personal having the next highest score, and the Non-violent having the lowest score, i.e., a direct relationship exists between measured and overt aggression.

2. Given these three groups, the Sears (26) aggres-



sion anxiety scale will differentiate these three groups as follows: Violent Personal, low aggression anxiety; Violent Non-personal, higher aggression anxiety; and Non-violent, highest aggression anxiety, i.e., an inverse relationship exists between aggression anxiety and overt aggression.

3. Again, given these three groups, the fantasy aggression score will differentiate these three groups in the same manner as in Hypothesis 1, i.e., a direct relationship exists between overt and fantasy aggression.

## PROCEDURE

### Tests

Three tests were selected to obtain the measurements of the two dependent variables, aggressive fantasy and anxiety over aggression. A fourth test, measuring aggression ("aggressive tendencies") was also included.

(a) Aggression The Zaks and Walters (28) twelve item scale of aggression was included in the study to measure "aggressive tendencies" or aggressive impulses.

(b) Aggression anxiety Sears' (26) scale of aggression anxiety was chosen because of his successful use of the scale with eleven and twelve year old children. Since the subjects under investigation were primarily still in their teens, it was felt that the scale would still be appropriate.

(c) Fantasy aggression As was noted above, the majority of the studies concerned with the relationship between overt and fantasy aggression used one of two measures of the dependent variable. When young children were studied, doll play was used as the measure of fantasy aggression. On the other hand, when older subjects were studied, TAT stories were used to measure this variable. Two group tests

derived from the TAT and employing TAT cards were used in this study. This group technique was decided upon for two reasons. First, since no unequivocal conclusion could be drawn from the studies using small samples, it was felt that by employing a large sample such factors as sampling error and variance would be reduced. This in turn would permit some conclusive statement concerning the relationship between overt and fantasy aggression. Second, these group measures provide objective scoring criteria for the measurement of fantasy aggression. But why use two tests for the measurement of aggressive fantasy?

Three versions of group TAT's are available. The first one, the Iowa Picture Interpretation Test (IPIT), was constructed by Hurley (14). Two years later, in 1957, Johnston (16) came out with an "improved" version of this test, but did not make it very clear what these improvements were. In 1962, Stricker (27) brought forth what he considered to be a far more reliable, and even more valid, test than the original. He called this test the Objectively Scoreable Apperception Test (OAT). In the same year Buss, et al (4) used Hurley's original version of the IPIT in a study concerned with aggression in psychiatric patients. Aside from the main results of the study, these authors found a significant correlation between the IPIT and two other measures of aggression.

For the men there was a correlation of .60 between the IPIT and the scrambled sentences test and a correlation of .66 between the IPIT and the operant level test. This independent study by Buss and his associates gives some evidence as to the validity of the aggression scale on Hurley's original form of the test. Since this was the case, it seemed advisable to investigate the validity of the aggression scale in Stricker's test and, at the same time, increase the sensitivity of our measure by making more items available. (The tests, their instructions, and their scoring procedures can be found in Appendix A.)

#### Index of overt aggressive behavior

For the purposes of this study the independent variable, overt aggressive behavior, is defined in terms of the present offence (i.e., the offence which lead to the subject's present prison sentence) and the rating of three independent judges (see below). The judges classified the offences into Violent Personal, Violent Non-personal, and Non-violent, with the first being equated to high overt aggressive behavior and the last being equated to low overt aggressive behavior. These equalities follow the assumptions found in the literature.

In order to obtain some support for this assumption, i.e., that as we go from Non-violent crimes

through Violent Non-personal crimes to Violent Personal crimes, we are in fact following an increasing degree of overt aggression, five independent judges ranked the three classes of crimes as to which is most aggressive in terms of overt behavior. The five raters included one ex-state police captain, two psychologists, one hospital supervisor, and one attendant. All five are employed at a state hospital treating the criminally "insane." All five rated Violent Personal as the most aggressive classification in terms of overt aggressive behavior, and all five rated Non-violent as the least overtly aggressive classification. These independent raters support this assumption which is the key to the present study.

#### Data collection

There were two phases involved in the collection of the data, both occurring during the same time period. First, all the inmates of the Michigan Training Unit were tested in four groups. Each group consisted of the approximately 100-125 men in each living unit. Two groups were tested in the first session, and the remaining two groups were tested one week later, in a second session. During the week intervening, the case history data was collected. The testing took place in an auditorium which was semi-darkened. This was to insure that the projected image of the TAT card could be seen and that there

would be enough light for the subjects to read the printed material in the test booklets. The tests were presented in the order appearing in Appendix A. This was to permit the changing of the TAT slides, without interrupting the on-going testing, from the IPIT order to the OAT order. This was done while the subjects were engaged with the Zaks and Walters, and Sears scales.

Prior to the actual administration of the tests, a master list of inmates according to living units and rooms ("locks") was obtained. This list included the inmates' names and prison numbers. These numbers were then placed on the test booklets following the order on the master list. At the time of testing the inmates entered the auditorium in single file, each according to his living unit (only one unit tested at a time) and lock. As each man entered, his number was called and he responded with his name. This was to make sure that the right man received the right test booklet. This procedure was followed to avoid bias, in that the men had not been classified into the experimental groups prior to testing. Another step was taken to assure that bias would not enter into the study; another list was set up in the sequence of the inmates' prison numbers. This list was used to obtain the relevant information-- present offence, date of birth, marital status, race,

education, religion, and IQ--from their records. A third step was employed to avoid bias: the tests were scored prior to the classification of the crimes into the three experimental conditions (see below). Only immediately prior to statistical analysis were the three types of information--case history data, test scores, and experimental group--brought together and recorded on 5 x 8 index cards, one card for each subject.

#### Classification of crimes

As originally planned, graduate students classified the crimes into the three experimental groups--Violent Personal, Violent Non-personal, and Non-violent. (For the questionnaire used and the resulting classifications see Appendix B.) When the degree of agreement among the graduate student judges was measured by means of the proportion of crimes meeting the criteria of agreement (two out of three judges agreeing on a classification), it was discovered that only 80.95% of the crimes met this criteria. This 80.95% is just barely statistically beyond the chance level of agreement. Of the 42 different crimes classified only 45.24% were fully agreed upon by all three judges, while for 19.05% there was no agreement at all. These crimes and the subjects associated with them would have had to been dropped from the study. In order to

avoid losing more subjects and, even more important, in order to avoid the possibility of a type one error, it was felt that more experienced judges should be employed. Therefore, three professionals from the Michigan Department of Corrections classified the crimes following the same instructions that were given to the graduate students. When the proportion of agreement meeting the criteria was computed, 100% of the crimes were agreed upon by two out of the three judges, while 76.19% of the crimes had total agreement (as compared to 45.24% for the graduate student raters). Statistically this is significantly greater than chance well beyond the .001 level ( $Z=4.58$ ). Due to the increased agreement among raters, the classification provided by the professionals was chosen over the classification derived from the graduate students. (See Appendix B for the actual classification and the frequency of crimes in the population under investigation.)

### Subjects

With the exception of five men, the entire inmate population (428 men) of the Michigan Training Unit at Ionia, Michigan, was tested. Three of these five were involved in their duties at the unit and were unable to come for testing; the other two had visitors from out of town. Of the 423 men who were



tested, 51 were lost due to (a) their refusal to take the test; (b) their inability to follow the instruction on the IPIT and the OAT, despite the fact that there were two proctors and one examiner present at all times during the testing; and (c) minor omissions and errors encountered on the test forms, such as the omission of the response to one item or the use of tied ranks when the instruction specifically indicated that tied ranks were not to be used (see Appendix A). An additional 29 were lost because they did not meet the age and IQ requirements established prior to the testing. The age requirement was that the subject not be older than 29 years old. The IQ requirement was that the subject have at least an 85 IQ. Ten were lost because they were 30 years old or older, and nineteen were lost because they had an IQ of under 85. Thus, there was a total of 80 subjects lost who had taken the test leaving a total of 343 male subjects. The mean age of all 343 subjects at the time of testing was 19.76 years; and the mean IQ was 107.19, based on the Army General Classification Test.

Before the placement of subjects into experimental groups is discussed, a word about the Training Unit is necessary. Four factors are involved in sending a man to the Training Unit: (a) he has to be young (except when a special skill is needed at the

Unit); (b) he has to have had at least one prior conviction; (c) he must have at least the equivalent of an eighth grade education; and (d) in conjunction with or instead of (c), he must be motivated to improve himself. Also, it must be pointed out that the Michigan Training Unit is not a maximum security installation.

When the subjects were subdivided into experimental groups, there was a significant difference in age, but not in education or IQ. (See Table 1. For the summary tables of the analysis of variance see Appendix C.)

TABLE 1. Means and Variances of Age, IQ, and Education for the 343 Subjects When Divided Into the Three Experimental Groups

	Violent Personal		Violent Non-personal		Non-violent		p
	$\bar{X}$	$s^2$	$\bar{X}$	$s^2$	$\bar{X}$	$s^2$	
Age	20.91	6.99	19.00	3.20	19.42	6.83	.01
Educ.	9.60	1.92	8.67	0.67	9.53	1.77	N.S.
IQ	107.86	128.36	101.67	239.87	107.04	125.43	N.S.
N	81*		6		156		

When individual comparisons were made (see Appendix C) with respect to the age variable, the Violent Personal group was significantly older than the Violent Non-

\*Except for Education, where there are 80 cases because one subject's education was not recorded.

personal group by 1.91 years (at the .05 level) and older than the Non-violent group by 1.49 years (at the .01 level). Unfortunately, the Violent Non-personal or the moderate overtly aggressive group (see above) had only six cases. This small group was retained because there is no reasonable justification for combining this group with either of the other two groups since (a) the degree of overt aggression is different, according to the five independent judges, and (b) the object of the aggression is different for this group than for the other two. Thus, the Violent Non-personal group was left intact.

## RESULTS

The data were analysed by means of single classification analysis of variance. Individual comparisons were made, when a significant F was obtained, by means of three separate t-tests for independent means. The smaller degrees of freedom was used when entering the t tables in order to counter-balance the effects of serial t-tests.

### Aggression

When the Zaks and Walters scores were subjected to analysis, the over-all F was significant at the .05 level (see Appendix C). The means and variances for the three groups are given in Table 2.

TABLE 2. The Means and Variances of the Zaks and Walters Scores Across the Three Experimental Groups

	Violent Personal	Violent Non-personal	Non-violent
Mean	5.04	6.83	5.39
s <sup>2</sup>	3.88	8.97	3.18

When the aggression data were analysed by means of individual comparisons, the Violent Personal group was significantly lower on the aggression measure than the Violent Non-personal. This was the only statistically

significant difference found (see Appendix C). As can be seen in Table 2, the scores in fact tend toward a curvilinear relationship across the three groups. Where there is high and low overt aggressive behavior there is low measured aggression, and where the overt aggression falls in the middle range the measured aggression is highest. This is assuming, of course, that the order of overt aggression from least to most (Non-violent to Violent Personal) as set forth by the five independent judges is in fact correct. This ordering of overt behavior must also be kept in mind when reading the next two sub-sections.

#### Aggression anxiety

An analysis of the Sears aggression anxiety scores (see Appendix C) showed no statistically significant differences. The means and variances for the three groups are given in Table 3.

TABLE 3. The Means and Variances of the Sears Aggression Anxiety Scores Across the Three Experimental Groups

	Violent Personal	Violent Non-personal	Non-violent
Mean	37.58	32.17	36.55
s <sup>2</sup>	46.71	44.56	37.18

Despite the statistically insignificant results, the trend suggests that a curvilinear relationship exists

between overt aggression and aggression anxiety. More specifically, when overt aggression is high and low the aggression anxiety is high, while the middle range of overt aggressiveness has a lower level of anxiety over aggression.

### Fantasy aggression

Before the data could be analysed, it was necessary to combine the scores from the two fantasy aggression measures. The raw scores on the IPIT and OAT had to be converted to standard scores, in order to be sure that the two sets of scores were comparable. (See Appendix D.) To facilitate computation all values were multiplied by 100 to eliminate decimal points in the new scale. For the purposes of this study this new value will be called the corrected standard score.

A product moment correlation between the two sets of standard scores was computed. The resulting correlation was  $+0.599$ . (This is a slight under-estimation due to rounding error.) This correlation value is significant beyond the  $.01$  level. Thus, the IPIT and OAT scores could be combined into one fantasy aggression score. This was achieved by taking the mean value of the corrected standard score for each test. When this fantasy aggression score was analysed no statistically significant results were obtained (see Appendix C). The means and variances for the three groups are given

in Table 4.

TABLE 4. The Means and Variances of the Fantasy Aggression Scores Across the Three Experimental Groups

	Violent Personal	Violent Non-personal	Non-violent
Mean	412.79	351.17	397.85
s <sup>2</sup>	6909.89	334.57	8880.47

Again, as with the aggression anxiety scores, no statistically significant differences were found. Yet the relationship is interesting and suggestive. Before looking at the nature of this relationship, we must understand the nature of the measure more precisely. Unlike the other measures used in this study, where a high numerical score means a high variable score, the IPIT and the OAT variable scores have an inverse relationship to the numerical scores obtained. Thus, the higher the numerical score the lower the fantasy aggression score, and the lower the numerical score the higher the fantasy aggression score.

With this in mind, we note that, as in the case of the aggression scores, there is a tendency towards a curvilinear relationship between overt and fantasy aggression. That is, when overt aggressive behavior is high and low, fantasy aggression is low; and where overt aggression is in the middle range, fantasy aggression is high.

The relationships among the dependent measures

When product moment correlations were computed for the relationships among the three dependent variables, it was found that two Pearson  $r$ 's were significant and one was not. When aggressive tendencies and aggression anxiety were correlated, Pearson's  $r$  was found to be  $+.06$ , which is not significant. "Aggressive tendencies" and fantasy aggression correlated  $-.32$  (significant at the  $.01$  level). The correlation between aggression anxiety and fantasy aggression was  $+.31$  (significant at the  $.01$  level). But these relationships are not what they seem because of the scoring of the fantasy aggression measures. As was mentioned above, a high numerical score is actually a low fantasy aggression score and vice versa. In other words, there is a direct relationship between "aggressive tendencies" (or impulses) and fantasy aggression, while there is an inverse relationship between anxiety over aggression and aggressive fantasy.



## DISCUSSION

We can now ask two questions: (a) what interpretations can we make from these findings concerning aggression, and (b) how do the findings relate to what is already known?

Two brief tangential comments are necessary before answering these questions. First, it was seen that a statistically significant difference of age exists between the Violent Personal groups and the other two groups; i.e., they are older than the other two groups by 1.91 and 1.49 years respectively. Although this age difference is statistically significant, the psychological significance is questionable due to the small magnitude of the mean differences. Second, although it may be superfluous to explain insignificant results, a brief word is relevant here: it seems reasonable that the insignificant results can be in part explained by the very small  $n$  in the Violent Non-personal group. With an  $n$  this small a large mean difference would be needed for statistical significance. In terms of future research it would seem appropriate that close attention be paid to sample size, i.e., an attempt should be made to keep the groups relatively equal in size.

Despite the small sample size in the moderate overt aggression group, the Zaks and Walters aggression measure (28) ("aggressive tendencies") does show a statistically significant difference in favor of this group (see Table 2). This finding is contrary to the hypothesis of the study. Nevertheless, it is congruent with subjective impressions based on the author's clinical experience. A therapy group of six male murderers seems far less overtly aggressive than other groups of men committed for less overtly aggressive behavior, also conducted by the author. In combining the clinical experience and the statistical evidence that the most aggressive group (Violent Personal) in terms of overt behavior has lower measured "aggressive tendencies" than a group rated moderately aggressive (Violent Non-personal) in terms of overt behavior, we find a novel curvilinear relationship between overt aggression and aggressive impulses. The generality of this relationship might well be questioned in terms of the small  $n$  for the middle group. It is, however, an interesting finding and further research seems in order to confirm both the clinical experience and the statistical findings of this study. Such research would determine whether this curvilinear relationship between overt aggression and "aggressive tendencies" (impulses) is in fact descriptive of the relationship. If, after further research is completed and this relationship is

confirmed, an explanation will be necessary, and we would like to speculate at this point as to what it might be.

In this study we find a tendency toward a curvilinear relationship between overt aggression, based on the subject's present offence, and aggression anxiety. This relationship is opposite in direction to that found for overt aggression and "aggressive tendencies." When we look at Table 3, we find that anxiety over aggression tends to be highest for the most overtly aggressive group (Violent Personal) and lowest for the moderately overtly aggressive group (Violent Non-personal) and high, but not as high as for the Violent Personal group, for the least overtly aggressive group (Non-violent). Thus we might speculate that high anxiety is a factor which lowers the measured "aggressive tendencies." Therefore, it seems reasonable to speculate that anxiety over aggression is the key to the relationship between overt aggression and "aggressive tendencies."

How do the other variables of this investigation tie in with these speculations? Fantasy aggression has the same relationship to overt aggression as "aggressive tendencies." This is confirmed by a statistically significant direct relationship (product moment correlation) between these two dependent variables (see Results). This tends to support the notion that fantasy,

more specifically fantasy aggression, is a form of behavior which is preparatory for future action rather than a mode of control over aggression, as suggested by Healy and Bronner (13) and Fenichel (9). That is the fantasy takes the impulses and derives a "plan of action." But since, as we have speculated, the impulses are monitored by anxiety when there is high aggression anxiety, the fantasy aggression should be lower because the aggressive impulses are lower. The correlation between aggression anxiety and fantasy aggression confirms this line of reasoning, since there is an inverse relationship between these two variables (aggression anxiety and fantasy aggression).

Turning now to the second question, how do the findings relate to what is already known, we see that a number of new hypotheses are suggested by this research. First, the literature, although equivocal, tends towards a direct relationship between aggression and fantasy aggression. But, it makes little or no distinction between overt aggression and "aggressive tendencies." This study points out that there is a direct relationship between aggressive impulses and fantasy aggression, while there tends to be a curvilinear relationship between overt aggression and fantasy aggression (see Table 4). This distinction between overt aggression and aggressive impulses is not clearly made in the literature. Second, the literature

points out that there is a negative relationship between aggression and aggression anxiety. Again, there is no distinction made between overt aggression and "aggressive tendencies." In this study there was no relationship found between "aggressive tendencies" and aggression anxiety and there was only a tendency toward a curvilinear relationship between overt aggression and aggression anxiety.

Basically, then, this study, by making a distinction between overt aggression and "aggressive tendencies" (impulses), raises the possibility of novel and hopefully meaningful relationships. These relationships are only speculative and require confirmation in future research.

### Summary and conclusions

In short, we see that there is the possibility of a complex dynamic interrelationship among the three dependent experimental variables and the independent variable. For the sake of clarity, conclusions concerning each of these will be stated separately.

Aggression The aggressive impulses tend to get strong as the overt aggression increases, but their measured value first increases and then decreases. The decrease may be attributed to the concept of anxiety over aggression.

Aggression anxiety Anxiety over aggression tends

to be high in both the high and low overt aggression groups and low in the middle range of overt aggression. This tends to indicate, as seen in the body of the discussion, that anxiety over aggression is one variable that might control aggressive impulses. The suggested relationship found in this study does not conform to the relationship discussed in the literature, i.e., it is not an inverse linear relationship.

Fantasy aggression The suggested relationship found in this study again does not conform to the direct linear relationship predominately found in the literature. One study by Lasky (18) found a curvilinear relationship between day-dream fantasy and self-ratings of hostility. He found that when the hostility variable was high and low the fantasy variable was high. This is just the opposite of the trends found in this study.

The parallel between fantasy aggression and aggression ("aggressive tendencies") suggests that fantasy is a form of preparation for future action rather than a mode of control over aggressive impulses.

#### Implications for further research

The discussion of the trends found in the data suggests hypotheses for future research, although the significance of the results is limited by failure to control the size of the groups involved in the study. This study suggests that a distinction must be made

between overt aggression and aggressive impulses. Finally, the speculations derived from the results suggest that the relationships among the four variables are not simple and clear cut and need more precise investigation.

## APPENDICES



## APPENDIX A

The Four Tests Employed in This Study,  
Their Instructions,  
And Their Scoring Procedures

# IOWA PICTURE INTERPRETATION TEST

(Hurley)

INSTRUCTIONS: You will be shown a number of pictures, each indicated by an arabic numeral (number). On the paper before you, you will find four (4) descriptions that are rather frequently given for that particular picture. Rank the four alternatives in terms of their correspondence with YOUR idea of what the picture expresses. Make your rankings in the space provided at the left of each alternative.

Find the interpretation that you would most likely give. Mark it 1 at the space to the left. Then find the one that seems next most likely. Mark it 2. And so on. The idea that you would be least likely to give should be marked 4.

Here is an example:

- (8GF)      A. She is listening to her favorite radio program.  
     B. She is annoyed because she has to work while her friends go out.  
     C. She feels that she cannot go to the party because no one ever asks her to dance.  
     D. She is looking forward to her opening night as the star of a great show.

If choice B is most like your own interpretation, you would mark it 1. The next most likely interpretation would be 2. And so on.

Each picture will be shown for one minute. You must rank each choice. Even if you have difficulty deciding what the ranks should be, make the best decision you can. Remember, there are no right or wrong answers. All of these interpretations are possible and are sometimes given. Don't spend too much time trying to decide. Indicate your first impressions.

\*\*\*\*\*

1. AI A. He is dreaming of the day when he will become a great musician.  
(1)   I   B. He is afraid that he will never be able to play the violin well.  
  B   C. His violin is on the table and he is waiting for his music lesson.  
  A   D. He is angry at his mother because she makes him practice while he'd rather be outside playing.

- (2) 2. A A. She resents the fact that she must do more than her share of helping with the farm work.  
B B. She is looking for a nice quiet place where she can read and get a little relaxation.  
I C. She is rather sad because she feels that she doesn't fit in at school or on the farm.  
AI D. She is determined to get an education so that she can help improve the condition of her people.
- (4) 3. I A. He very much wants to stay with her but is afraid of other people's contempt.  
A B. He is determined to fight for what he thinks is right and will win in the end.  
AI C. He is disgusted with her and trying to get away as quickly as he can.  
B D. He is a patient being helped to his bed.
- (6BM) 4. B A. He is going to look for another room because her boarding house is full.  
A B. He is telling her that she must enter an old-age home because he refuses to support her any longer.  
AI C. He is telling her that he must leave home because opportunities are greater in the big city.  
I D. He is telling her that he has just lost his job and has little hope of finding another.
- (7BM) 5. AI A. The boy is determined to live up to the ideals and standards of this older man, whom he greatly admires.  
B B. The older man is telling about his childhood experiences.  
A C. The father is telling his son that if he does not stop his wild ways he will disown him.  
I D. The boy is distressed because he feels that he has let his father down.
- (7GF) 6. I A. The little girl has been left in the care of a governess and feels that she is less loved by her parents than other children.  
A B. The little girl is resentful because her mother insists upon drilling her over her homework.  
AI C. The little girl is listening to a story about Florence Nightingale and is thinking of the time when she might achieve so much.  
B D. The little girl listens while her mother reads her stories.

7. B A. He is in a gymnasium dressing room watching the  
(8BM) trainer prepare the players for practice.  
AI B. He is dreaming of becoming a skilled and famous  
surgeon.  
I C. He would like to go hunting with the others but  
is considering the dangers involved.  
A D. He has shot his cruel stepfather who has mis-  
treated and abused him.
8. A A. He is thinking of ways of getting back at his  
(13B) father, who won't let him leave the cabin.  
I B. He is wondering why he is unpopular and no one  
comes over to play with him.  
B C. He is just enjoying the warmth of the early spring  
sunshine.  
AI D. He is thinking of the great accomplishments of  
Abe Lincoln, who was also born in a log cabin.
9. I A. Things have not been working out for him and he  
(14) is wondering if life is worth living.  
B B. He is enjoying the night air just before retiring.  
A C. This is a kidnapper breaking into a child's bed-  
room under the cover of darkness.  
AI D. He is looking out into the night dreaming of  
great accomplishments.
10. B A. He is demonstrating the way to climb a rope.  
(17BM) A B. He is stealing up to attack a hated enemy.  
AI C. He is in a rope climbing contest and is exerting  
every effort to win.  
I D. Although he has tried his best, he sees that the  
race is lost.

CODE:

AI = Achievement Imagery      B = Blandness

I = Insecurity      A = Aggression (Hostility)

SCORING: sum of the ranks given for each item for each  
of the four scales.

## ZAKS AND WALTERS 12 ITEM SCALE OF AGGRESSION

INSTRUCTIONS: To the right of each item you will find a bracket [ ], one marked "Agree," the other marked "Disagree." Please read each of the statements below and place an "X" in the bracket marked "Agree" if you agree with the statement, or place an "X" in the bracket marked "Disagree" if you disagree with the statement.

Please DO NOT put your name anywhere on this sheet, because we want you to feel free to agree or disagree as you see fit. Please respond to all items honestly and openly, since we are interested in your true opinion.

Thank you in advance for your cooperation and assistance.

	AGREE	DISAGREE
	[Score 1]	[Score 0]
1. There are two kinds of people in this world: the weak and the strong.	( )	( )
2. Dealings with policemen and government officials are always unpleasant.	( )	( )
3. Most people get killed in accidents because of their own reckless driving.	( )	( )
4. Horses that don't pull should be beaten or kicked.	( )	( )
5. At times we enjoy being hurt by those we love.	( )	( )
6. Many a decent fellow becomes a crook or a criminal because he can't stand to be pushed around so much.	( )	( )
7. I easily lose patience with people.	( )	( )
8. I often do things which I regret afterwards.	( )	( )
9. It makes me mad when I can't do things for myself the way I like to.	( )	( )

	AGREE	DISAGREE
10. Occasionally I was in trouble with the police or law.	( )	( )
11. I almost never dare to express anger toward people for fear I may lose their love or approval.	( )	( )
12. As an adolescent (or young kid) I often mixed with the wrong crowd.	<u>( )</u>	( )
TOTAL		
(Aggression Score)		

# SEARS AGGRESSION ANXIETY SCALE

INSTRUCTIONS: Here are a number of statements. In front of each one there are 5 brackets ( ). Read each statement carefully and then put an "X" in one of the 5 brackets to show how you feel about that statement. If you agree strongly, put your "X" in the left-hand bracket. If you disagree strongly, put your "X" in the right-hand bracket. If you are not sure how you feel, mark the middle bracket. (The words at the top of the columns of brackets show what each box means.)

- |   | Strongly<br>Agree | Agree | Not Sure | Disagree | Strongly<br>Disagree |   |
|---|-------------------|-------|----------|----------|----------------------|---|
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 1. It makes me uncomfortable to see two of my friends fighting.                                     |
| D | ( )               | ( )   | ( )      | ( )      | ( )                  | 2. If someone gets hurt in an auto accident, I usually try to get a good view of what happened.     |
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 3. It upsets me to think that some thoughtless word or crack of mine might hurt someone's feelings. |
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 4. When I get angry, I usually feel bad afterwards.   |
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 5. It makes me nervous to hear a gang of boys getting argumentative even when I'm not involved.     |
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 6. When I get too angry, I'm liable to get in trouble.  |
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 7. There are too many vicious crimes described in the newspapers.                                   |
| A | ( )               | ( )   | ( )      | ( )      | ( )                  | 8. I hate to hear people at a baseball game yelling "Kill the umpire!"                              |

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	
A	( )	( )	( )	( )	( )	9. I usually don't show it when I get angry, but it leaves me shaking inside afterward.
A	( )	( )	( )	( )	( )	10. Teachers should be <u>very</u> careful never to let a class discussion get too heated or too personal.
D	( )	( )	( )	( )	( )	11. I like to watch a real man-sized slugging match in a movie or on TV.
A	( )	( )	( )	( )	( )	12. Arguing nearly always leads to trouble in one way or another.

SCORING: When A is indicated at the left, score "Strongly Agree" 5 and in descending order to "Strongly Disagree" 1. When D is indicated, score "Strongly Disagree" 5 to "Strongly Agree" 1.



OBJECTIVELY SCOREABLE APPERCEPTION TEST

(Stricker)

INSTRUCTIONS: For each picture that is flashed on the screen, you will be given five alternative choices. Each of these choices represents a capsule plot or brief summary of a story which can be told about the picture. You will be asked to rank-order these choices, according to which summary you feel is most appropriate for the picture. Thus, what you are being asked to do is to place the number 1 next to that option which contains what you feel to be the most appropriate story summary, the number 2 next to the second most appropriate choice, and so on, until placing the number 5 next to the least appropriate choice.

Remember to place one, and only one, number next to each choice, so that when you are through with each set of choices the numbers 1-5 will have been assigned to them, according to their appropriateness in telling a story about the picture.

1. A The boy is angry at his parents because he would  
(1)        rather play outside.  
R The boy spends many hours alone, as his parents  
       have little time for him.  
I The boy is worrying about whether or not he  
       passed a test in school that day.  
D The boy can only play the violin when the  
       teacher encourages him.  
N The boy is waiting for his violin teacher to arrive.
2. A She resents the fact that she must do more than  
(2)        her share of helping with the farmwork.  
I She is worried that her homemade clothing is not  
       as good as her schoolmates'.  
R Her schoolmates don't invite her to parties be-  
       cause she is a poor farm-girl.  
N She decided to walk to school because it's a nice  
       day.  
D She doesn't like going to school because she has  
       to leave her family.
3. D She is seeking her husband's sympathy after an  
(5)        argument with a neighbor.  
N She is going to tidy up the room.  
R Her husband doesn't like her to be in the room  
       when he's discussing business.  
A She is coming into the room to scold her children.  
I She has always been afraid to be at home alone.

4. A The mother is angry at her son for disobeying her.  
 (6BM) D Whenever he has a decision to make, he asks his mother's help.  
R Her husband has deserted the woman and her son.  
N She has been visiting with her son for a while.  
I He is not sure he has the ability to meet his new responsibility.
5. N He is introducing himself to her.  
 (6GF) I Her sophisticated manner has him confused and unsure of himself.  
A He is blaming her for neglecting some work at the office.  
D He wishes that she were as affectionate as his mother always was to him.  
R She would like him to ask her out, but he never has.
6. D The son cannot do anything without first asking  
 (7BM) his father.  
I The young man is not sure how to ask his boss for a raise.  
A They are having an argument.  
R The father refuses to help his son.  
N The two men are having a discussion about working conditions.
7. D The little girl is interested in learning so that  
 (7GF) her parents will praise her for it.  
R The mother doesn't seem to care what the little girl wants to do.  
I The little girl is afraid that she'll never understand her lessons.  
A The little girl wants to play, but her mother is punishing her and making her stay home.  
N Mother and daughter are spending a rainy day together.
8. D One woman has been a little upset, and is running  
 (9GF) to the other for comfort and sympathy.  
A One of the women has deliberately frightened the other.  
I One of the women went to a dance, but she was so uncomfortable that she is running away.  
N The two women stopped at the beach on their way home from work.  
R One woman is hiding from the other because she doesn't want anything to do with her.

9. D He would like to go to college but he's afraid  
(14) R to leave home.  
R He doesn't understand why his schoolmates won't  
N associate with him.  
I He is closing the window before he goes to sleep.  
I He can't sleep because he's afraid he won't do  
A well on his tests tomorrow.  
A He is mad at his parents for not allowing him  
more freedom.
10. I The man is afraid that he will not succeed on  
(20) D his new job.  
D The man is new in the city, and is wishing that  
A he was back with his parents.  
A The man has just been criticized for showing poor  
R judgment in his dealings.  
R The man's wife has left him, and he now feels  
N all alone.  
N The man is standing by the lamppost waiting for  
a taxicab.
11. D The little boy doesn't like going to school be-  
(13B) A cause he has to leave his family.  
A The little boy is angry at his parents for  
N punishing him.  
N The little boy is waiting for a friend to call  
R for him.  
R None of the other children will play with the  
I little boy.  
I The little boy got a bad report card, and he's  
afraid to show it to his parents.
12. N She is waiting for a friend to arrive.  
(8GF) R Her husband always leaves her at home alone and  
I goes out to play golf.  
I She is worried that her wardrobe is inadequate  
D for her husband's social position.  
D She is daydreaming about her childhood, when  
A she had no responsibilities to worry her.  
A She is angrily waiting for her husband, who is  
late coming home.

CODE:

A = Aggression

D = Dependence

R = Rejection

N = Neutral

I = Insecurity

SCORING: sum the ranks given for each item for each  
of the four scales.

## APPENDIX B

### Classification of Crimes

# CRIME CLASSIFICATION QUESTIONNAIRE

INSTRUCTIONS: Below you will find a list of crime titles recently taken from the records of prisoners in one of Michigan's prisons. You are being asked to classify these crimes, to the best of your ability and judgment, in accordance with the following categories: Violent Personal, Violent Non-personal (or Violent Object), Non-violent, and Unclassifiable. Try to avoid using the last category (Unclassifiable) as much as possible. The following brief definitions will aid you in your classification:

Violent Personal - those offences that do direct (or indirect) harm or injury to another person. (V.P.)

Violent Non-personal - those offences that do damage to or destroy property in some way, whether public or private, but do not injure another person. (V.N-P.)

Non-violent - those offences that do not damage property or injure another person. (N-V.)

Unclassifiable - those offences that do not clearly fall into the above three classes. (UC.)

Check the appropriate column next to each crime listed.

CRIMES	V.P.	V.N-P.	N-V.	UC.
Breaking and entering, night	( )	( )	( )	( )
Forgery	( )	( )	( )	( )
Assault with intent to rob, armed	( )	( )	( )	( )
Perjury	( )	( )	( )	( )
Breaking and entering, day	( )	( )	( )	( )
Robbery, unarmed	( )	( )	( )	( )
Malicious destruction of property	( )	( )	( )	( )
Uttering and publishing	( )	( )	( )	( )
Robbery, armed	( )	( )	( )	( )
Unlawful driving away of an automobile	( )	( )	( )	( )
Felonious assault	( )	( )	( )	( )
Larceny from a person	( )	( )	( )	( )
Larceny from an automobile	( )	( )	( )	( )
Gross indecency	( )	( )	( )	( )
Larceny from a building	( )	( )	( )	( )
Assault with intent to rob, unarmed	( )	( )	( )	( )
Arson	( )	( )	( )	( )

CRIME	V.P.	V. N-P.	N-V.	UC.
Assault less than murder	( )	( )	( )	( )
Violation of check law	( )	( )	( )	( )
Indecent liberties	( )	( )	( )	( )
Inciting perjury	( )	( )	( )	( )
Unlawful use of an automobile	( )	( )	( )	( )
Grand larceny	( )	( )	( )	( )
Statutory rape	( )	( )	( )	( )
Assault with intent to rape	( )	( )	( )	( )
Manslaughter	( )	( )	( )	( )
Kidnapping	( )	( )	( )	( )
Pandering	( )	( )	( )	( )
Larceny by conversion	( )	( )	( )	( )
Safe breaking	( )	( )	( )	( )
Possession of burglary tools	( )	( )	( )	( )
Carrying a concealed weapon	( )	( )	( )	( )
Embezzlement	( )	( )	( )	( )
Second degree murder	( )	( )	( )	( )
Rape	( )	( )	( )	( )
Receiving stolen property	( )	( )	( )	( )
Larceny from a boat	( )	( )	( )	( )
Larceny from a store	( )	( )	( )	( )
Larceny from a church	( )	( )	( )	( )
Possession of stolen car	( )	( )	( )	( )
Violation of the drug law	( )	( )	( )	( )
Negligent homicide	( )	( )	( )	( )

CLASSIFICATION OF CRIMES  
USING GRADUATE STUDENT RATINGS

CRIME	CLASSIFICATION	NUMBER AGREEING
Arson	Viol. N-personal	3
Assault less than murder	Viol. Personal	3
Assault to rape	Viol. Personal	3
Assault to rob, armed	Viol. Personal	3
Assault to rob, unarmed	Viol. Personal	3
Breaking and entering, day	(No Agreement)	0
Breaking and entering, night	Viol. N-personal	2
Carrying a concealed weapon	(No Agreement)	0
Embezzlement	Non-violent	2
Felonious assault	Viol. Personal	2
Forgery	Non-violent	3
Grand larceny	Viol. N-personal	2
Gross indecency	Non-violent	2
Inciting perjury	(No Agreement)	0
Indecent liberties	Viol. Personal	3
Kidnapping	Viol. Personal	2
Larceny by conversion	Unclassifiable	2
Larceny from an automobile	Viol. N-personal	2
Larceny from a boat	Viol. N-personal	3
Larceny from a building	Viol. N-personal	2
Larceny from a church	Viol. N-personal	3
Larceny from a person	(No Agreement)	0
Larceny from a store	Viol. N-personal	3
Malicious destruction of property	Viol. N-personal	3
Manslaughter	Viol. Personal	3
Negligent homicide	Viol. Personal	3
Pandering	Non-violent	2
Perjury	Non-violent	3
Possession of a stolen car	Non-violent	2
Possession of burglary tools	Unclassifiable	2
Rape	Viol. Personal	3
Receiving stolen property	Non-violent	2
Robbery, armed	Viol. Personal	2
Robbery, unarmed	Viol. N-personal	2
Safe breaking	Viol. N-personal	3
Second degree murder	Viol. Personal	3
Statutory rape	Viol. Personal	3
Unlawful driving away an automobile	(No Agreement)	0
Unlawful use of an automobile	(No Agreement)	0
Uttering and publishing	(No Agreement)	0
Violation of check law	Non-violent	3
Violation of drug law	(No Agreement)	0

CLASSIFICATION OF CRIMES  
USING PROFESSIONAL RATINGS

CRIME	CLASSIFICATION	NUMBER AGREEING	f
Arson	Viol. N-personal	3	2
Assault less than murder	Viol. Personal	3	2
Assault to rape	Viol. Personal	3	4
Assault to rob, armed	Viol. Personal	3	7
Assault to rob, unarmed	Viol. Personal	3	0
Breaking and entering, day	Non-violent	3	17
Breaking and entering, night	Non-violent	3	110
Carrying a concealed weapon	Non-violent	3	2
Embezzlement	Non-violent	3	0
Felonious assault	Viol. Personal	3	7
Forgery	Non-violent	3	9
Grand larceny	Non-violent	2	5
Gross indecencies	Viol. Personal	2	2
Inciting perjury	Non-violent	2	1
Indecent liberties	Viol. Personal	3	6
Kidnapping	Viol. Personal	3	3
Larceny by conversion	Non-violent	2	1
Larceny from an automobile	Non-violent	3	6
Larceny from a boat	Non-violent	3	1
Larceny from a building	Non-violent	3	29
Larceny from a church	Non-violent	3	1
Larceny from a person	Non-violent	2	10
Larceny from a store	Non-violent	3	0
Malicious destruction of property	Viol. N-personal	3	3
Manslaughter	Viol. Personal	3	5
Negligent homicide	Viol. Personal	3	1
Pandering	Non-violent	3	3
Perjury	Non-violent	2	1
Possession of stolen car	Non-violent	3	0
Possession of burglary tools	Non-violent	3	1
Rape	Viol. Personal	3	2
Receiving stolen property	Non-violent	3	0
Robbery, armed	Viol. Personal	3	24
Robbery, unarmed	Viol. Personal	2	10
Safe breaking	Viol. N-personal	2	1
Second degree murder	Viol. Personal	3	2
Statutory rape	Viol. Personal	3	6
Unlawful driving away an automobile	Non-violent	2	36
Unlawful use of an automobile	Non-violent	3	9
Uttering and publishing	Non-violent	3	5
Violation of check law	Non-violent	2	8
Violation of drug law	Non-violent	3	1



MEASURED AGREEMENT  
AMONG RATERS

For Graduate Student Raters:

	N	%
All three agree	19	45.24
Only two agree	15	35.71
No agreement	8	19.05
% meeting criterion = 80.95		

For Professional Raters:

	N	%
All three agree	32	76.19
Only two agree	10	23.81
No agreement	0	0.00
% meeting criterion = 100.00		

## APPENDIX C

### Summary Tables

## ANALYSES OF VARIANCE

### Age

Source	df	SS	MS	F	p
Between	2	140.50	70.25	10.24	*
Within	340	2330.84	6.86		
Total	342	2471.34			

\*Significant beyond .01 level.

### Education

Source	df	SS	MS	F	p
Between	2	4.87	2.44	1.36	N.S.
Within	339	610.34	1.80		
Total	341	615.21			

### IQ

Source	df	SS	MS	F	p
Between	2	225.04	112.52		N.S.
Within	340	43707.52	128.55		
Total	342	43732.56			

### Aggression

Source	df	SS	MS	F	p
Between	2	21.33	10.67	3.09	**
Within	340	1173.44	3.45		
Total	342	1194.77			

\*\*Significant beyond .05 level.

Aggression anxiety

Source	df	SS	MS	F	p
Between	2	191.33	95.67	2.40	N.S.
Within	340	13525.80	39.74		
Total	342	13717.13			

Fantasy aggression

Source	df	SS	MS	F	p
Between	2	28637.20	14318.60	1.72	N.S.
Within	340	2834775.32	8337.57		
Total	342	2863412.52			

(Variance not homogeneous)

# INDIVIDUAL COMPARISONS

## Age

	<u>t</u>	Significance
V.P. vs. V.N-P.	2.45	Beyond .05
V.N-P. vs. N-V.	1.48	N.S.
V.P. vs. N-V.	7.93	Beyond .01

## Aggression

	<u>t</u>	Significance
V.P. vs. V.N-P.	2.09	Beyond .05
V. N-P. vs. N-V.	1.46	N.S.
V.P. vs. N-V.	1.49	N.S.

## APPENDIX D

### Conversion to "Corrected" Standard Scores



# CONVERSION FOR THE IPIT

Mean = 28.43

S.D. = 4.27

Raw Score	Deviation Score	Standard Score	Corrected Standard Score
15	-13.43	-3.15	85
16	-12.43	-2.91	109
17	-11.43	-2.68	132
18	-10.43	-2.44	156
19	- 9.43	-2.21	179
20	- 8.43	-1.97	203
21	- 7.43	-1.74	226
22	- 6.43	-1.51	249
23	- 5.43	-1.27	273
24	- 4.43	-1.04	296
25	- 3.43	-0.80	320
26	- 2.43	-0.57	343
27	- 1.43	-0.33	367
28	- 0.43	-0.10	390
29	+ 0.57	+0.13	413
30	+ 1.57	+0.37	437
31	+ 2.57	+0.60	460
32	+ 3.57	+0.84	484
33	+ 4.57	+1.07	507
34	+ 5.57	+1.30	530
35	+ 6.57	+1.54	554
36	+ 7.57	+1.77	577
37	+ 8.57	+2.01	601
38	+ 9.57	+2.24	624
39	+10.57	+2.48	648



# CONVERSION FOR THE OAT

Mean = 37.96

S.D. = 7.05

Raw Score	Deviation Score	Standard Score	Corrected Standard Score
16	-21.96	-3.11	89
20	-17.96	-2.55	145
21	-16.96	-2.41	159
22	-15.96	-2.26	174
23	-14.96	-2.12	188
24	-13.96	-1.98	202
25	-12.96	-1.84	216
26	-11.96	-1.70	230
27	-10.96	-1.55	245
28	- 9.96	-1.41	259
29	- 8.96	-1.27	273
30	- 7.96	-1.13	287
31	- 6.96	-0.99	301
32	- 5.96	-0.85	315
33	- 4.96	-0.70	330
34	- 3.96	-0.56	344
35	- 2.96	-0.42	358
36	- 1.96	-0.28	372
37	- 0.96	-0.14	386
38	+ 0.04	+0.01	401
39	+ 1.04	+0.15	415
40	+ 2.04	+0.29	429
41	+ 3.04	+0.43	443
42	+ 4.04	+0.57	457
43	+ 5.04	+0.71	471
44	+ 6.04	+0.86	486
45	+ 7.04	+0.99	499
46	+ 8.04	+1.14	514
47	+ 9.04	+1.28	528
48	+10.04	+1.42	542
49	+11.04	+1.57	557
50	+12.04	+1.71	571
51	+13.04	+1.85	585
52	+14.04	+1.99	599
53	+15.04	+2.13	613
54	+16.04	+2.28	628
55	+17.04	+2.42	642
56	+18.04	+2.56	656

## REFERENCES

1. Arieti, S., Interpretation of schizophrenia, New York: Robert Brunner, 1955, pp 43-52.
2. Bandura, A. and Walters, r., Adolescent aggression: a study of the influence of child training practices and family interrelationships, New York: Ronald Press, 1959.
3. Bernabeu, E.P., Underlying ego mechanisms in delinquency, Psychoanal. Quart., 1958, 27, 383-396.
4. Buss, A.H., Fischer, H., and Simmons, A.J., Aggression an hostility in psychiatric patients, J. Consult. Psychol., 1962, 26, 84-89.
5. Cameron, N. and Magaret, Ann, Behavior pathology, Houghton Mifflin, 1951, pp278-279.
6. Cohn, F.S., Fantasy aggression in children as studied by the doll play technique, Child Devel., 1962, 33, 325ff.
7. Dollard, J., Doob, L.W., Miller, N.E., Mowrer, O.H., and Sears, R.R., Frustration and aggression, New Haven: Yale Univ. Press, 1939.
8. Dollard, J., and Miller, N.E., Personality and psychotherapy, McGraw Hill, 1950.
9. Fenichel, Otto, The psychoanalytic theory of neurosis, New York: Norton & Co., 1945.
10. Freud, S., A general introduction to psychoanalysis, Twenty-fifth lecture: Anxiety, pp 400-418, Permabook, 1953.
11. Freud, S. Hysterical phantasies and their relation to bisexuality (1908) in Sigmund Freud, Collected Papers, Vol. II, New York: Basic Books, 1959.
12. Gordon, J.E. and Cohn, F.S., Effects of fantasy arousal of affiliation drive in doll play aggression, J. Abnor. Soc. Psychol., 1963, 66, 301-307.
13. Healy, W. and Bronner, Augusta, New lights on delinquency and its treatment, New Haven: Yale Univ. Press, 1936, pp 67-70.
14. Hurley, J.R., The Iowa Picture Interpretation Test: A multiple-choice variation of the TAT, J. Consult. Psychol., 1955, 373-376.

15. Jensen, A.R., Aggression in fantasy and overt behavior, Psychol. Monogr., 1957, 71, #445.
16. Johnston, R.A., A methodological analysis of several revised forms of the Iowa Picture Interpretation Test, J. Pers., 1957, 25, 283-294.
17. Kagan, J., The measurement of overt aggression from fantasy, J. Abnor. Soc. Psychol., 1956, 52, 390-393.
18. Laskey, D.I., The relationship between spontaneous fantasy, induced fantasy, and behavioral measures of hostility, Ph.D. Dis., Temple Unive., 1961, Dis. Abstr., 1962, 22 (12), 4408.
19. Lesser, G.S., The relationship between overt and fantasy aggression as a function of maternal response to aggression, J. Abnor. Psychol., 1957, 55, 218-221.
20. Lesser, G.S., Conflict analysis of fantasy aggression, J. Pers., 1958, 26, 29-41.
21. Lesser, G.S., Religion and the defensive response in children's fantasy, J. Proj. Tech., 1959, 23, 64-68.
22. Marquis, J.N., Fantasy measures of aggressive behavior, Ph.D. Dis., Univ. of Michigan, 1961, Dis. Abstr., 1961, 21 (12), 3854-3855.
23. May, R., Existence, New York: Basic Books, 1958, 50-55.
24. Sears, P.S., Doll play aggression in normal children; influence of sex, age, sibling status, and father's absence, Psychol. Monogr., 1951, 65, #323.
25. Sears, R.R., Maccoby, E.E., Levin, H., The socialization of aggression. In Maccoby, E.E., Newcomb, T.M., and Hartley, E.L., Readings in social psychology, Holt, Rinehart, & Winston, 1958, 350-359.
26. Sears, R.R., Relation of early socialization experiences to aggression in middle childhood, J. Abnorm. Psychol., 1961, 63, 466ff.
27. Stricker, G., The construction and partial validation of an objectively scoreable apperception test, J. Pers., 1962, 30, 51-62.
28. Zaks, M.S., Walters, R.H., First steps in the construction of a scale for the measurement of aggression, J. Psychol., 1959, 47, 199-208.

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