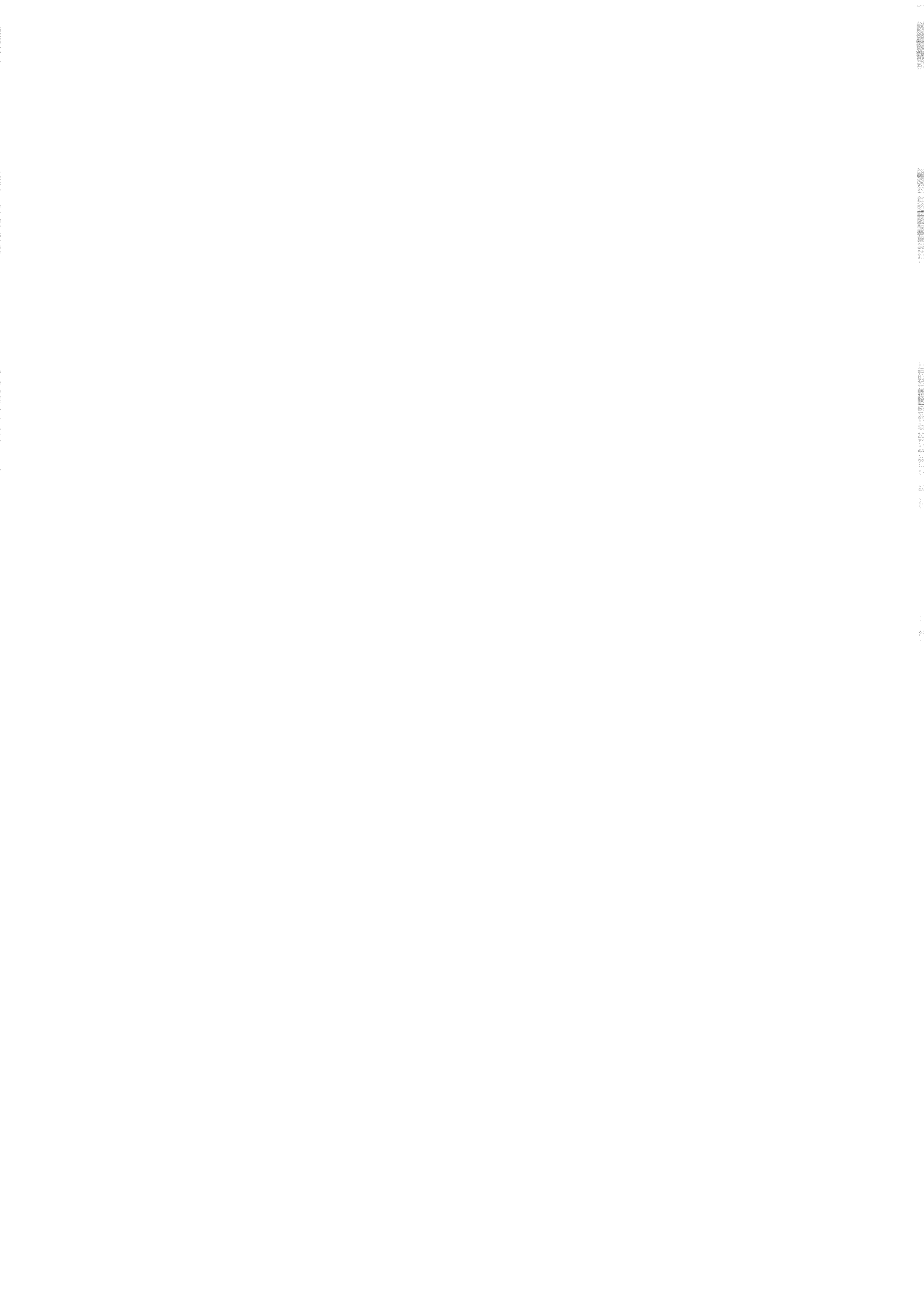


PART II

AGGRESSION AND NONAGGRESSION



1. PROBLEMS

The descriptive model of aggression presented in Part I as the starting point of the hypotheses on aggressive habits, was limited to a description of behaviour delivering noxious stimuli to another organism. The descriptive model thus excluded nonaggressive responses in thwarting stimulus situations. No attempt was made, either, to relate aggressive habits to personality traits other than social reactivity or general activity. The following questions remained unsolved: (1) whether it is also possible to find dimensions of individual habits in nonaggressive responses to thwarting situations, and (2) how different aggressive and nonaggressive responses are related to individual personality traits.

If the term aggressiveness is used to refer to the frequency of aggressive responses in individual behaviour, it can be assumed to have a normal distribution in a population. Accordingly, aggressive behaviour would be typical of some individuals only, while the others would be »normal» or nonaggressive. With regard to the description of interindividual differences in behaviour, the definition is very general. Thwarting stimulus situations are so frequent and have so high a stimulus value in social interaction that an individual can also be expected to adopt some other habits than only strongly aggressive or nonaggressive ones.

Stimulus-response behaviour has seldom been analysed many-dimensionally in empirical studies; the tendency has been to judge behaviour one-dimensionally and pay attention to the abundance/scarcity of a certain kind of response over various situations. In the study by Wittenborn (1956) both mother and child were given descriptions of situations, some of which were aggression instigating, and then asked what the child would like to do in these situations. The interviewer

checked the answers according to 6—8 alternative categories made up in advance. These intuitively chosen categories varying from one situation to another contained different aggressive responses as well as those concerning dependency, submissiveness, sympathy, etc. McClelland & Apicella (1945) classified the verbal responses of male college students to experimentally induced frustration, distinguishing the categories of withdrawal (instigation alteration, e.g. rejection), attack (instrumental act variation), limitation (frustration deprecation, e.g. rationalization and humour), and substitution (goal response alteration, e.g. socially approved responses).

Feshbach (1964) has stated speculatively that »the reduction of anger and aggressive drive can be accomplished through (a) injury to the frustrating source or some form of displaced aggression; (b) facilitation of mediating responses which are incompatible with anger and hostility; (c) modification of the initial eliciting stimulus condition either through removal of the stimulus or through a change in the meaning of the stimulus» (p. 266). Of these, alternative (b) corresponds mainly to McClelland & Apicella's category of substitution, (c) to those of withdrawal and limitation.

According to the discussion by Crowne & Marlowe (1964), non-aggressive behaviour is related to the strength of an individual's approval motive. The hypothesis that approval-dependent individuals defend themselves against arousal of hostility by means of avoidant defences (repression and reaction formation) which block cognitive awareness of an individual's emotional state, was supported by the experimental study by Conn & Crowne (1964). As a consequence of defensive processes the behaviour of approval-dependent individuals is conforming, submissive, and easily influenced. Of the relations of the approval motive to other personality traits the observation has been made (Crowne & Marlowe; p. 84) that high-need-for-approval persons are more responsible than lows to perceived situational demands and are more likely to respond affirmatively to social influence.

According to Lazarus (1966), however, defensiveness is only one alternative way of treating a thwarting stimulus situation nonaggressively; he distinguished the following coping-reaction patterns (pp. 313—318): (1) Direct actions containing (a) actions aimed at strengthening the individual's resources against harm, (b) attack patterns, and (c) avoidance patterns; (2) Defensive reappraisals; (3) Anxiety-reaction patterns.

The form of coping is determined by a cognitive process called »secondary appraisal» (p. 155). Category 1 a is more general than

1 b or 1 c, and, according to Lazarus, it lacks the generalizing properties of classes of action. Action is characterized by rational problem solving, and its form depends on situational variables. Attacking (aggressive) coping patterns follow secondary appraisal, which consists, for example, of weak situational constraints (norms and pressures against attack), or weak internalized values against attack. Repression follows the secondary appraisal that the harmful agent is overpowering, and weak pressures inhibiting avoidance responses. Defensive reappraisal involves thought processes of many kinds. Lazarus has supposed (p. 317) that it occurs when »the threat is very great and no direct form of coping is viable«. Defences (externalization of blame, finding of scapegoats, or displacement) can be considered »as identifying an agent of harm« when that cannot be located. In his speculation on defensive reappraisal Lazarus refers to pathological responses more clearly than Crowne & Marlowe. The last mentioned response category, anxiety, »is a threat reaction when no clear action tendency is generated« (p. 310). The basic impulse is avoidance, but it fails, since no agent of harm is located, or it is ambiguous.

In addition to aggression, the classifications referred to above involve also substitute reactions incompatible with anger and hostility, reactions which tend to modify the meaning of a situation, defensive reactions, avoidance and anxiety, etc. These forms of behaviour have been derived from approval motive or situational factors. No general predictions of the reactions in a thwarting situation can be made on the basis of these explanations.

In the present analysis of interindividual differences of behaviour in a thwarting stimulus situation two points have been emphasized. (1) Recent personality psychological investigations have shown that a large proportion of the common variance of social and emotional behaviour can be described in terms of two orthogonal dimensions. (2) Stimuli generally instigating aggression in social interaction are so frequent that the impression of an individual is affected by his coping behaviour in these situations. Since total behaviour can be described two-dimensionally, it is also likely that a considerable part of aggressive behaviour and of its alternatives is describable in terms of the corresponding dimensions.

The employment of the factor analytical model for the purpose of reducing the great number of variables describing personality to fewer more general concepts has resulted in an abundance of personality factors (French, 1953; Cattell, 1957; Guilford, 1959; Hundleby et al., 1965; et al.). In order to examine the interdependences of these factors, (1) second order factor analyses have been carried out, (2)

only the first two or three principal factors have been examined, and (3) the method of circumplex order included in the radex theory (Guttman, 1954) has been employed. A circumplex is a system of variables which has a circular law of order. The neighbourhood of variables is determined by the amount of common variance between them. Through the kind of analyses mentioned above it has been proved by Eysenck (1960), Kassenbaum et al. (1959), Carrigan (1960), Peterson (1960, 1965), Schaefer (1961), Becker & Krug (1964), Black (1965), Walker (1967), et al. that a large proportion of the common variance of personality traits is describable in terms of two orthogonal dimensions.

The researchers have given divers names to the two main dimensions, which is partly due to the differences in the locations of the axes (rotations), partly to the differences in the examined variables and the interpretational frame of reference. Eysenck has called them Extraversion vs. Introversion, and Neuroticism vs. Stability. The names of the latter dimension vary particularly: it has been termed ego weakness/ego strength (Kassenbaum), general adjustment (Peterson), emotional stability (Becker & Krug), control (Walker), hostility/love (Schaefer), etc.

Previous studies have shown that common variance of both variables for personality inventories (common variance of items and scales; Konttinen, 1968) and of those for ratings of personality traits (Peterson, 1965; et al.) can be described two-dimensionally.

In two-dimensional comparisons the following qualities are often ranked in the same category: stable — good (Osgood et al., 1957; evaluation dimension) — nonemotional — adaptable, and similarly: neurotic — bad — emotional — hostile. These parallelisms are partly due to the fact that the observer's evaluations and the halo effect agreeing with them label and limit discriminations when the characteristics of another person are being judged (Takala, 1953; et al.), partly to the common variance of the traits, generated associatively from observations of behaviour. The cognitive association network was discussed in the investigation by P. Pitkänen (1967) as a possible interpretation of the fact that the results of the stimulus factor analyses (based on similarity estimations of stimuli) and those of the response factor analyses (e.g. ratings or personality inventories) corresponded with each other quite closely. Furthermore, Kuusinen (1969) found that the structure of personality ratings was unaffected by the differences in the rated objects (fellow-students, well-known persons and personality concepts, photographs, handwriting, irrelevant concepts). The correspondences found by P. Pitkänen and Kuu-

sinen covered more than two dimensions only. The two-dimensional descriptive model is apparently an uncomplicated and economical means of describing the perception of other persons.

The problems of the study were:

- A. The description of various aggressive and nonaggressive response habits in thwarting stimulus situations by means of the two-dimensional model.
- B. An analysis of the responses of the extreme groups chosen on the basis of (A) to symbolic aggression stimuli.

2. HYPOTHESES

2. 1. Behaviour in thwarting stimulus situations

2. 1. 1. *Main dimensions describing behaviour*

The basic assumptions for the definition of the main dimensions describing overt behaviour in thwarting stimulus situations are: (1) an individual's habitual responses to thwarting stimulus situations (as defined p. 32) are closely connected with his total personality, and (2) inhibition of impulses to aggression is possible in two ways: by suppressing the behavioural or extrinsic aspect, or by neutralizing the emotional or intrinsic aspect (cf. p. 31). The hypothesized *main dimensions* are presented in Figure 3: *the number of overt responses* in a stimulus situations and *the strength of control of behaviour*.

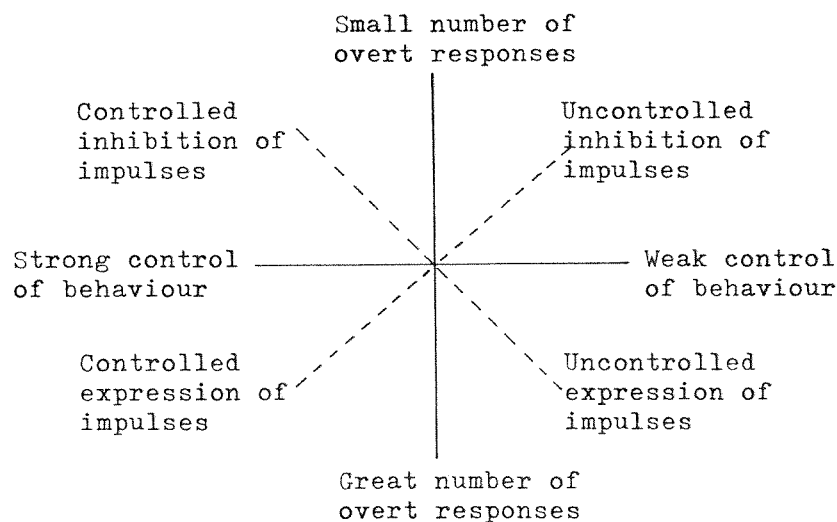


Figure 3. A two-dimensional descriptive model of behaviour in thwarting stimulus situations.

With regard to observations of behaviour, the dimension of the number of overt responses is used to indicate the frequency of the responses which tend to actively modify the initial stimulus condition and to eliminate the thwart. The dimension of the control of behaviour describes deliberateness vs. impulsiveness or social desirability vs. undesirability of responses.

With regard to the underlying mental processes, the dimensions are assumed to relate to the following.

The primary effect of a thwarting stimulus on an organism is activating, which is revealed both as emotional and behavioural reactions. The alternative response tendencies are approach and avoidance (Miller, 1959; et al.). Through conditioning an individual may learn either one of them as a response prevailing in a stimulus situation. In connection with aggression the concept of approach is used to indicate an attempt to eliminate a thwarting stimulus by delivering noxious stimuli to another individual. If followed by reinforcement, such a response as well as the underlying emotional activation (anger) is conditioned to a thwarting stimulus situation and develops into a habit which manifests itself even under slight thwart. On the other hand, if approach is prevented by counter-aggression, the fear and anxiety caused by it are conditioned to thwarting stimulus situations in general. An individual finds such a stimulus harmful, but he cannot react against it, and, if anxiety is intense, he cannot even escape. The underlying emotional state may vary as combinations of anger and anxiety, depending on the relative strength of the approach and avoidance tendencies. Behaviour dominated by anger and fear can be considered primitive, since corresponding responses are frequent also in animals, particularly among lower species. The response can also be called drive-reaction, which refers to the S-R behaviour theories (Hull, 1943; et al.).

The habit types mentioned above do not cover all the variations characteristic of the responses of human beings to thwarting stimulus situations. In man the development of habits is complicated by cognitive processes, as a consequence of which certain emotional responses (e.g. anger or anxiety) are not necessarily conditioned to thwarting stimulus situations in a generalized form. An individual may be able to appraise the stimulus situations he encounters and to decide between alternatives; i.e., the emotional aspect can be neutralized by cognitive control. In spite of the neutralization of the intrinsic aspect the extrinsic aspect may be strong, which is revealed by responses designed to eliminate the thwart without aggression. It is assumed that this kind of behaviour is motivated by an attempt to behave in a

socially acceptable manner. The behavioural aspect is not strong when cognitive control is connected with appraisal of the situation, as a consequence of which an individual also avoids awareness of his emotional state, i.e. of anger and anxiety. Increasing attention has been paid in recent years to the importance of cognitive processes as determinants of emotional behaviour and the conditionability of emotional responses (Schachter & Singer, 1962; Peters, 1963; Kaufman, 1965; Lazarus, 1966; Berkowitz et al., 1969). Constitutional differences in arousal of activation (Duffy, 1962; Eysenck, 1967) obviously increase the acquisition of different forms of behaviour.

In Problem A of the present investigation the main emphasis was given to the question: what kind of interindividual differences are revealed in responses to thwarting stimuli in ratings of overt behaviour? It was assumed that the main patterns of behaviour occurring in thwarting situations consist of the combinations of the main dimensions defined above. Altogether *four individual patterns of behaviour* can be derived, of which the opposites (and also the most contrary to each other) are *uncontrolled expression of impulses/controlled inhibition of impulses*, and *controlled expression of impulses/uncontrolled inhibition of impulses* (Figure 3).

In an individual's behaviour there occur both variations due to transient external and internal stimuli, and changes in form due to factors acting upon social learning. Nevertheless, the assumption is made that interindividual differences in behaviour toward thwarting stimuli may be described in terms of the four patterns of behaviour defined above.

2. 1. 2. *Aggressive and nonaggressive patterns of behaviour*

In order to make the definition of the two main dimensions presented in the preceding chapter more complete, more specific assumptions are made below on each of the four individual patterns of behaviour.

Uncontrolled expression of impulses. The goal of action in a thwarting situation is to eliminate the thwart immediately. This is done by delivering noxious stimuli to another organism, for which reason the response is defined as aggressive.

The descriptive model of aggression presented in Part I was three-dimensional, which was proved by the projections of the variables on the basis of their loadings on the first three principal factors. The rotated factors revealed that interindividual differences in aggression

differentiated along three dimensions: (1) defensive aggression without offensive aggression, (2) offensive and intense defensive aggression, and (3) indirect aggression. In the second order factor configuration direct defensive aggression and indirect aggression were shown to be most independent, while the variance of offensive aggression was divided on to both of these second order factors.

Global rating of aggressiveness was determined most strongly by the form (2) of aggression, which also correlated most highly with uncontrolled general activity. In previous studies (cf. pp. 23—25) direct aggression has correlated mainly with extravert personality traits and indirect aggression with general maladjustment.

When the dimensions of aggression were incorporated in the two-dimensional descriptive model of behaviour, the assumption was made that offensive and intense defensive aggression (dimension 2) represents the combination of a great number of overt responses and weak control of behaviour. With a great number of overt responses and stronger control of behaviour an individual's aggression is assumed to be limited mainly to direct defensive behaviour. Direct defensive aggression is assumed to represent an intermediary type in the dimension uncontrolled/controlled expression of aggression. In indirect aggression observable (overt) behaviour is not so obvious. Indirect aggression is assumed to represent weak control of behaviour and an intermediary type in the dimension uncontrolled expression/uncontrolled inhibition of impulses.

Background factors in the acquirement of aggressive habits have been analysed in Part I.

Controlled expression of impulses. Activation aroused by aggression stimuli is kept under cognitive control and displayed in neutral forms. An individual's behaviour is motivated by a desire to behave in a socially acceptable manner, in accordance with prevailing norms. Therefore he considers alternative ways of coping with thwarting situations. The behavioural aspect manifests itself as efforts towards the peaceful settlement of controversies and attempts to influence the other person's behaviour. He may react also by refraining consciously from expressing aggression (e.g. by remaining silent deliberately). Aggressive behaviour occurs only in situations in which aggression is not strongly compatible with socially acceptable behaviour. As regards the amount of aggression, this pattern of behaviour represents the middle quartiles of the total distribution, yet it can still be labelled nonaggressive.

Controlled expression of impulses may require a certain level of cognitive capacity, and therefore this behaviour is gradually increased

as a child grows up. The development of response habits towards either aggressive or socially acceptable is, however, due to reinforcement, early conditioning, and identification models.

Uncontrolled inhibition of impulses. In thwarting stimulus situations an individual's responses are characterized by avoidance behaviour. He has no response habits enabling him to eliminate the thwart nonaggressively. Activation aroused by the stimulus is bound to emotions, fear of the thwarting stimulus, and anxiety about an inability to defend. He tries to eliminate the thwart by conciliatory gestures such as crying or withdrawal, and to control the anger instigated by the stimulus by negative labelling which manifests itself as verbal descriptions of emotions (I feel angry, annoyed), intentions to revenge, and generalized hostile attitudes. If aggression is aroused, e.g. because of continuous accumulation, it is assumed to have an indirect manifestation. As regards the total amount of overt aggression, this pattern of behaviour is assumed to represent the middle quartiles of the total distribution.

Uncontrolled inhibition of impulses is assumed to have, for example, the following causes: because of his own resources (physical weakness, lack of aggressive habits, etc.) or of the influence of his social environment an individual may be uncertain about his opportunities for being active, or his parents may encourage or even force him to produce simple avoidance responses without trying to approve of his spontaneous attempts to compromise.

Controlled inhibition of impulses. Avoidance behaviour differs from uncontrolled inhibition of impulses in that an individual tends to block awareness of his emotional state by cognitive appraisal of the situation. The appraisal process may even distort reality, in which case it can be called defensive. Action is motivated by the need for approval, a consequence of strong dependency on authority figures. Aggressive behaviour would threaten this relationship, and therefore an individual tends to submit and adjust. In order to succeed in adjustment and to be able to avoid anxiety aroused by the recognized impulse to aggression, he makes efficient use of the cognitive processes.

As a consequence of his deliberateness an individual has few conflicts with others, and his aggressive habits remain weak. Consequently, the development is contrary to that in the behaviour defined as aggressive: in uncontrolled expression of impulses aggressive behaviour creates new conflicts and tends to reinforce new aggression. Controlled inhibition of impulses is assumed to be learned as a result

of the same childhood experiences which develop dependency, and of nonaggressive identification models.

A comparison between the individual patterns of behaviour abstracted above and the previous classifications presented in Chapter 1 reveals that none of them is completely comparable with the classification given here, although correspondences can be found in separate categories. Uncontrolled expression of impulses (aggression) is included in the attack categories (Lazarus, McClelland, Apicella), and the corresponding category framed by Feshbach covers also indirect aggression. The concept of need for approval (Crowne & Marlowe) can be considered parallel to strong control of behaviour: approval-dependent behaviour includes both controlled expression and controlled inhibition of impulses, as a separation has not been made between these patterns of behaviour. Lazarus, however, has made one (categories of rational problem solving and defensive reappraisals). The nearest equivalent for uncontrolled inhibition of impulses which covers anxiety reactions can be found in the classification by Lazarus, although his classification is more concerned with the properties of stimulus situations than with the habitual reaction patterns.

The assumptions on the descriptive model of aggressive and nonaggressive behaviour are summarized as follows:

Hypothesis A. The habits of aggression and nonaggression adopted for coping with thwarting situations are diagrammatically describable in terms of the two orthogonal dimensions called number of overt responses and control of behaviour, as shown in Figure 4.

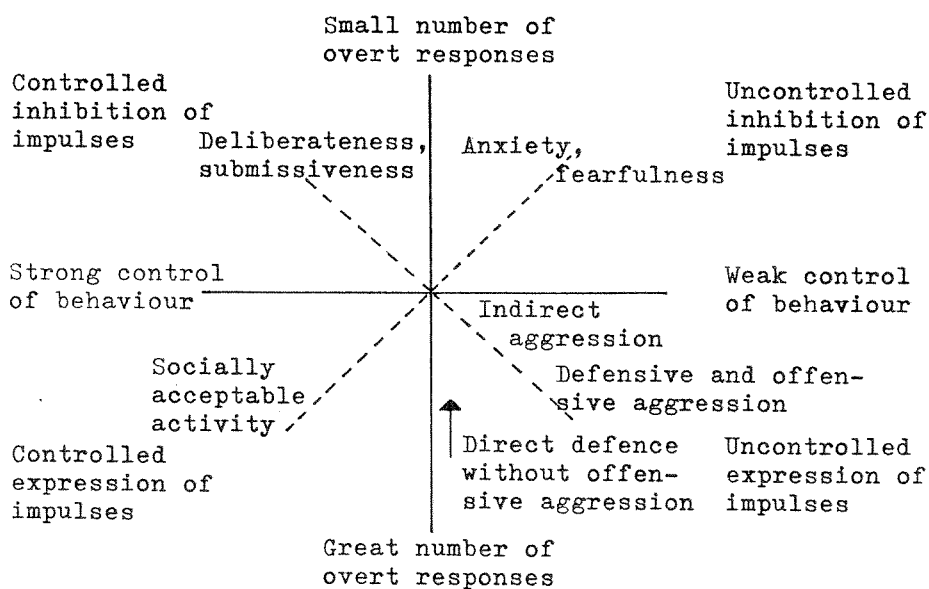


Figure 4. Hypothesis A. The individual patterns of behaviour in thwarting stimulus situations described in terms of the number of overt responses and control of behaviour.

2. 2. Individual patterns of behaviour as responses to symbolic aggression stimuli

The second problem of the present investigation deals with the differences in the verbal responses to verbally described thwarting stimulus situations between the four individual patterns of behaviour. *Symbolic aggression stimuli* consist of verbal descriptions of situations involving both categories of thwart presented in the theoretical frame of reference in Part I. The classification made was that the thwart which elicits primary defensive aggression is directed either toward an individual's goal-oriented activities or toward his actual well-being. The former implied various kinds of frustrations, the latter mainly attacks upon another person. An examination was made not only of the (defensive) responses to this kind of stimulus but also of the differences between the types of behaviour¹ according to whether they themselves tend to produce noxious stimuli to other individuals, i.e., of the differences in self-rated offensive aggression.

In addition to the average differences in responses the effects of external control on the responses of each of the types of behaviour were also analyzed. The term strength of *external control*, as distinct from internal control affecting the more general response style of each individual pattern of behaviour, was used to mean the amount of thwart in a stimulus situation which depends, in defensive aggression, on the power of the instigator and the properties of the noxious stimuli, and, in offensive aggression, on the power of the victim.

As shown in Part I, the effects of situational variables, and those of the targets of aggression in particular, on the structure of aggression were that in indirect aggression more differentiation took place in interindividual differences with strong than with weak situational control. The result suggested that the behaviour of an individual had been modified by stimulus factors regardless of his average response habits.

Various problems emerge in the prediction of an individual's aggressive behaviour by verbal tests. Generally the correlations between the scores in test aggression and the ratings in overt aggression have been very low. The assumption has been made (Edwards, 1957; et al.) that the responses in personality inventories (direct techniques) are affected by the social desirability set. As the correlation between

¹ Groups of subjects who react in a consistent manner in thwarting situations by using individual patterns of behaviour, e.g. representatives of extreme groups, are called 'types of behaviour' or simply 'types'.

aggressive test responses and overt aggression has not, however, been negative, it is open to question which individual patterns of behaviour are represented by persons with high scores in aggression and those with a strong social desirability set.

The relationships between projective response data and overt aggression have been no less complicated. In numerous studies intervening or explanatory variables have been sought in different sources such as fear of punishment (Mussen & Naylor, 1954; Schaefer & Norman, 1967; et al.), tendency to put on a good or bad face (Lindzey & Goldwyn, 1954; Mitchell, 1967), mother's attitudes toward expressions of aggression (Lesser, 1957), interaction between aggressive and aggression inhibiting tendencies (Olweus, 1969; Shipman & Marquette, 1963; Megargee, 1966), hostile self-concept (Lindzey & Tejessey, 1956; Murstein, 1965; Kaplan, 1967), unambiguous/ambiguous nature of stimulus material (Kagan, 1956; Haskell, 1961; Epstein, 1966; Coleman, 1967; James & Mosher, 1967) and various interactions of guilt, inhibition, hostile self-concepts, and stimulus relevance for hostility (Saltz & Epstein, 1963; Megargee, 1967; James & Mosher, 1967).

In the above mentioned investigations the subjects' overt behaviour has not been classified on any basis other than the amount of aggression or a corresponding characteristic. Consequently, no conclusions can be drawn from the results concerning the distribution of aggressive responses among different individual patterns of behaviour. The absence of the presentation of this problem has been one of the characteristics of investigations in the psychology of personality. (1) Research problems have usually dealt with interindividual differences in undesirable personality traits, e.g. anxiety, neuroticism, aggressiveness, i.e., in weak control of behaviour (Figure 4), and even the sample of subjects has been drawn, compared with the mean of the dimension 'control of behaviour', from abnormal individuals (characterized by weak control of behaviour). Socially desirable response sets have been considered sources of error in measurement difficult to eliminate, rather than indicators of interindividual differences in behaviour. (2) The control variables in experimental studies and, correspondingly, the background variables in differential psychological investigations, have more seldom been real psychological personality variables than traditional sociological or organism variables such as socio-economical status, sex, age, or intelligence, whose relations to the behaviour under investigation may be very distant and complex. The personality variables possibly intervening in the correspondence between overt aggression and test aggression (inhibition of aggres-

sion, guilt, anxiety) have usually been derived from the same dependent or test variables as the variables for aggression under investigation. Such an explanation has been made, for example, by Olweus (1969) in the study of his analytic theoretical formulations of the relationships between overt aggression and projective test aggression. (3) The validity criterion often used for various aggression tests, showing low concurrent validity, has been overt aggression, which, when rated, is determined primarily by the habit strength of offensive aggression. It can be hypothesized that different techniques reveal different kinds of aggressive tendencies and other responses to symbolic aggression stimuli, depending on the individual patterns of behaviour.

The assumption has been studied exploratively by the writer (1968). The subjects were university students of psychology. Two orthogonal dimensions corresponding to those in the descriptive model (Figure 4) were obtained by factor analysis from the battery of such reference variables as number of overt responses and control of behaviour, observed from the subjects' behaviour in small groups, variables of personality inventories (The Eysenck Personality Inventory, The Taylor Manifest Anxiety Scale, The Marlowe-Crowne Social Desirability Scale, etc.), and the Id, Ego, and Superego variables of the Arrow-Dot test. Aggressiveness was operationalized by observation, personality inventories (The Buss-Durkee Inventory, The Siegel Manifest Hostility), projective tests (Rorschach, TAT, Rosenzweig), and self-ratings including a new test type called the SLEI test (cf. p. 143).

The variables for aggressiveness had many different locations in the two-dimensional frame of reference. The variable of observed aggression was located, as expected, in the quarter of the dimensions 'weak control of behaviour' and 'great number of overt responses', and it represented uncontrolled expression of impulses. The most indirect test variable, the Rorschach scale for aggression constructed by Murstein, correlated most highly with observed aggression, whereas the scores for aggression inventories were independent of the dimension 'number of overt responses' but correlated with 'weak control of behaviour'. Other variables correlating with weak control of behaviour were extrapunitivity (vs. impunitivity) in the Rosenzweig Picture Frustration Study, and self-rated aggression in the SLEI test. These relationships were interpretable through generalized hostile attitudes developed from inhibition of aggression in thwarting situations. One proportion of the variance of the personality inventories and the TAT scale for aggression constructed by Hafner and Kaplan was explained by the third dimension independent of the main dimensions. The third dimension was interpreted as suppression/recognition of non-acceptable impulses. Of the observed variables uncontrolled expression of aggression correlated with suppression, and socially acceptable behaviour with recognition. The relationships between test variables and overt aggression were thus rather complex.

Within the present investigation only one test type was chosen in order to obtain as direct information as possible about the subjects' self-rated behaviour in thwarting situations. The main emphasis was given to the question of whether the verbal responses of the different

types of behaviour correspond to predictions based on their overt behaviour.

The procedure was as follows.

- An extreme group was chosen for each individual pattern of behaviour, the behaviour of which differed as clearly as possible from the average.
- The test contained direct, concrete questions about the subjects' behaviour in different thwarting situations.
- To minimize the possibility of impertinent (e.g. bantering) answers the tests were administered as individual tests like interviews. In order to decrease the inhibition of aggression attempts were made to create an atmosphere in which the subject could produce all kinds of responses.

The basic idea was the assumption that in their verbal responses the subjects reveal their characteristic treatment of different situations, which correspond to their overt behaviour. More complicated hypotheses would also be possible, e.g. because of differences in the subjective meanings of test stimuli: although the aggressive stimulus presented to each subject is the same, its subjective meaning may differ, depending on the frequency of the real experiences of an individual in corresponding situations. The experiences have considerable influence on the relationship between the strength of the aggressive and aggression inhibitory tendencies arising in the stimulus situation. For the sake of simplicity and because the selection of the subject groups is determined ultimately by the result concerning Problem A, direct relationships are, however, hypothesized. Provided that more complicated relationships occur, the results are interpreted on the basis of the theoretical starting points and the intervening variables derived from them.

Hypothesis B. 1. The differences between the types of behaviour in the total magnitude of their aggressive verbal responses correspond to those in the amount of overt aggressive behaviour, both for defensive and offensive aggression.

Hypothesis B. 2. (a) Indirect aggression is characteristic of individuals who represent the dimension 'weak control of behaviour' but not that called 'great number of overt responses'. (b) Direct defensive aggression is characteristic of individuals who represent the dimension 'great number of overt responses'. (c) The intensity of aggressive responses (with the physical, verbal, or mimic mode) is assumed to be determined by the strength of the control of behaviour.

Hypothesis B. 3. The magnitude of the aggressive responses of all the types of behaviour is small with strong external control,¹ but the

¹ The strength of external control has been defined above as varying with the amount of thwart in a stimulus situation.

magnitude is increased monotonically when the thwart is weakened. The increase is, however, slightest in the most nonaggressive group and greatest in the most aggressive group, which leads to a simultaneous increase in the differences between the subject groups. The weaker the aggressive habits, the smaller the variations in responses due to stimulus situations. The premises of this hypothesis are: (1) The strength of aggression inhibitory habits depends inversely on the strength of aggressive habits. (2) There is a positive covariation between the strength of aggression inhibitory habits and the degree of stimulus generalization.

Hypothesis B. 4. As regards nonaggressive responses, there are differences between the types of behaviour due to the strength and quality of their aggression inhibitory habits. In analyses and categorizations of projective test responses aggression inhibitory tendencies have usually been thought to vary one-dimensionally. The assumption is made here in connection with Hypothesis A that aggression inhibitory tendencies may be described in terms of two dimensions (Figure 5) which can be called *suppression* of the extrinsic aspect of aggression (of the overt response) and *neutralization* of the intrinsic aspect of aggression (of the emotional reaction).

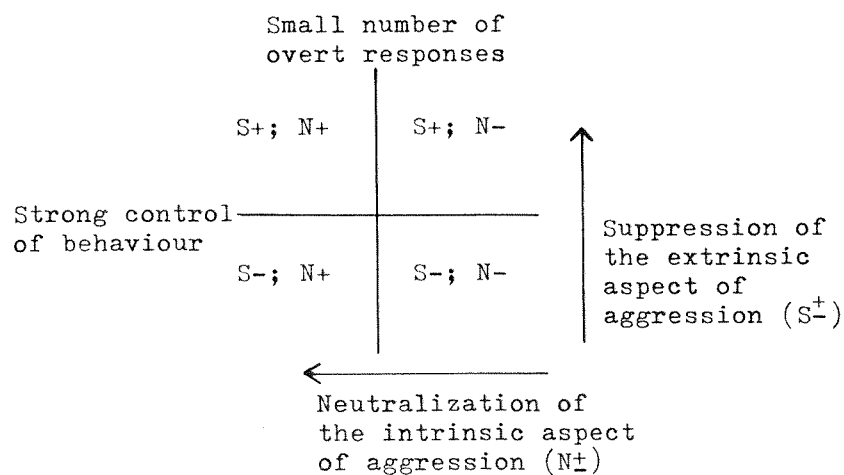


Figure 5. The quality of the aggression inhibitory tendencies of the individual patterns of behaviour (cf. Fig. 4).

The type of uncontrolled expression of impulses (aggressive) lacks both of the inhibitory tendencies, wherefore the number of non-aggressive responses is assumed to be the smallest.

The type of controlled expression of impulses is characterized by the tendency to neutralize the intrinsic aspect of aggression, as a con-

sequence of which the impulses to act are expected to manifest themselves in a socially acceptable way, as compromises and efforts towards peaceful settlement of controversies.

The type of uncontrolled inhibition of impulses tends to suppress the extrinsic aspect of aggression. The remaining emotional arousal is assumed to reveal itself in verbal responses, as descriptions of negative affects. In this type fear associated with aggression stimuli is assumed to arouse more escape responses than in the other types.

The type of controlled inhibition of impulses is characterized by both of the inhibitory tendencies, as a consequence of which an individual takes an indifferent stand in a thwarting situation or appraises the situation without negative affects or active responses.

In addition, these types are also assumed to prefer corresponding responses when they are asked to choose the one of the four alternatives based on the above hypotheses that most closely corresponds to their own behaviour.

Hypothesis B. 5. As a direct consequence of Hypothesis B. 3 it is assumed that when external control is strengthened, the total number of nonaggressive responses increases monotonically for all of the types of behaviour. The increase is, however, greatest in the most aggressive groups and slightest in the most nonaggressive groups.

The variation in the amount of each nonaggressive reaction due to that in external control is assumed to be slightest in the group of which the reaction in question is most typical. The premise of the hypothesis, derived from the S-R behaviour theory (Hull, 1943), is that there is a positive covariation between the habit strength and the degree of stimulus generalization.