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#### ABSTRACT

To eight pictures of adolescents in the School Scene Apperception Questionnaire, adolescents note their agreement to statements which were derived from free responses by more than 600 adolescents having some difficulty in school. To establish the reactions of school-adjusted adolescents to the pictures, three semantic differential factors -- constriction, potency, and activity -- were selected. Scores for both constriction and potency were expected to be higher for adolescent-adult situations than for adolescents alone, and scores for activity to show an interaction between sex of adolescent pictured and sex of respondent. Respondents were 50 boys and 50 girls 13 to 16 years old from predominantly urban schools in New York and New Jersey. Sixty-eight children were classified as white: none had salient adjustive difficulties. Adjective intercorrelations were factored and four pictured situations selected to test hypotheses. There were no differences in constriction scores for the two kinds of situations and no interaction effects in activity scores. There were significantly higher potency scores for adult-involving pictures. Further, boys were more active than girls, and adult-involving situations more than adclescents alone. These adolescents see adults as facilitators rather than as sources of constraint. (Author)



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To establish the reactions of school-adjusted adolescents to the pictures, three semantic differential factors--constriction, potency, and activity--were selected. Scores for both constriction and potency were expected to be higher for adolescent-adult situations than for adolescents alone, and scores for activity to show an interaction between sex of adolescent pictured and sex of respondent.

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There were no differences in constriction scores for the two kinds of situations and no interaction effects in activity scores. There were significantly higher potency scores for adult-involving pictures. Further, boys were more active than girls, and adult-involving situations more than adolescents alone. These adolescents, unlike those in earlier studies, see adults as facilitators rather than as sources of constraint.

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Perceiving is basic to believing, and thus to action. How the adolescent perceives himself in his school situation is quite likely to be a major component in his motivation, his attitude, and his behavior in school.

During the past five years, substantial work has been done, mostly with urban adolescent delinquents, in using pictures having some ambiguity as a means of eliciting responses from which attitudes and perceptions could be inferred (Yanofsky, 1968; Sprinthall & Mosher, 1969; Maslon, 1968, 1972). The pictures developed most recently by Maslon have been incorporated in a School Scene Apperception Questionnaire designed for use with less troubled children; for the SSAQ, responses are selected from an extensive list of statements prepared from the responses elicited in the earlier work. These responses, though not of immediate interest in the present discussion, will be more interpretable -bearing on such attitudinal dimensions as Positive, Hostile Compliant. Negative, and Task Rejecting -- if some baseline information on the relatively unstructured reaction to the pictures is at hand. Thus, a major objective of the present investigation is to establish the general "meaning" of the pictures to normal urban adolescents, the major target population for the SSAQ. The Semantic Differential tech-

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nique was chosen as a device to obtain information on "meaning."

It is well known that the usual semantic differential application results in three dimensions: evaluation, potency, and activity. There is a fourth, constriction, which can be obtained. The previous work done on the SSAQ pictures indicated that, in this context, the dimension of evaluation might be ass important, and constriction more important, than in the usual investigation. Accordingly, the choice was made to not use the standard adjective pairs for evaluation at all, and to include three adjective pairs aimed at the emergence of the constriction dimension. These three were the pairs: open-closed; slave-free; and trust-distrust. Following the lead of other investigators, the adjective pairs for potency were: strong-weak; small-big; easy-hard; those for activity were: accidental-planned; up-down; and busy-quiet. These pairs are stated as presented; pairs were grouped in three PAC triads. The data produced slightly different groupings which will be discussed later.

## Development of Hypotheses

Constriction. Examination and retrospection produced the impression from the previous work that urban adolescent delinquents saw the situations involving adults as more constricting than situations where the adolescent was pictured alone. This attitude, presumably objective, would be enhanced by the respondent's internalization of the testing situation itself, and its subsequent accrual to the pictured situation, by projection. Accordingly,

Hypothesis I: Factor scores for constriction will be higher for



pictures of adolescents with adults than for pictures of adolescents alone.

Potency. Similarly, earlier clinical experience suggested that adolescents would consider adult involvement as more potent than situations where the adolescent was alone. From a more objective view, adolescents may see adults as representative of the "system," often "unbeatable," and thus more potent; in addition, considering the projection and identification of the adolescent rater, the adult-involved situations could well represent other situations including the testing itself, in which the adolescent was relatively powerless to control even his own analyses. Accordingly,

<u>Hypothesis II</u>. Factor scores for potency will be higher for adult-involving situations than for student-alone depictions.

Activity. With regard to the dimension of activity, previous experience, supported by interpretation of the extensive literature on peer group attitudes, suggested that, from one point of view, girls would consider boys more active, consistent with the sexrole stereotype; conversely, because the situations were presented in the context of school, boys might well consider girls more active academically, inasmuch as the girls are presumably still too young to have adopted the fear of success mode reported to afflict many late adolescent and early adult women. Further, should chese adolescents harbor feelings of rebellion, they might well project them onto members of the opposite sex rather than onto a same-sex figure with which they might be identifying. Accordingly,



<u>Hypothesis III.</u> Factor scores on activity will show an interaction between sex of pictured adolescent and sex of respondent.

## Collection of Data

For this study, the respondents were 50 boys and 50 girls from the general population of public schools in New York and New Jersey, predominantly urban, aged 13 to 16 years. Sixty-eight children were classed does white; none had any salient academic or adjustive difficulties, according to school records and examiner report. The full SSAQ was administered by teachers and counselors familiar to the students; the administrators were concurrently graduate students at New York University. The semantic differential ratings were obtained by the same administrators one week later. Each of the eight photographs in the full SSAQ was rated on a 7-point scale for each of the nine adjective pairs.

# Analysis of Data

The total data base included 800 ratings for each adjective pair.

Considering these as pseudo-replicates, because there are obviously

not 800 degrees of freedom, the nine adjective pairs were intercorrelated

and that matrix factored by the principal factors method, iterating for

communalities in the best 3-factor solution.

The intercorrelations were smaller than expected, based on previous work with the semantic differential. This outcome may have resulted from inherent ambiguity in the pictures to be rated, or from major shifts in response style as the adolescents worked through the rather tedious task, or (hopefully not) from a general disinterest in nonrandom



responding. In any se, the pattern of intercorrelations was close to expected, so that the factor loadings are not too disquieting. Of course, the lower intercorrelations meant that the weights used in computing the factor scores would be less, and so the reliabilities, as they are based on both loadings and correlations. All computations were carried out using BMP 3M, and the facilities of the Academic Computing Center New York University.

Rotations of the three principal factors to the varimax criterion produced clusters which differed somewhat from the groupings of adjective pairs noted above. Constriction is represented mostly by closed-open, down-up, slave-free, hard-easy, and distrust-trust.

Potency is represented in its leaders by strong-west planned-accidental, big-small; activity is represented by busy-quiet, its other adjectives having their highest loadings elsewhere. The factor score program used incorporates all loadings of all adjective pairs into each factor score; the groupings above are to aid in interpretation. The pairs are stated to reflect the labelled end of the obtained factor.

Because of the use of pseudo-replicates to define the factor space, we wished to avoid the "constant sum" effect, familiar rom ipsative research, which would have been encountered had we used and the pictures in testing the hypotheses. Accordingly, we selected at random one girl alone, one boy alone, one girl with woman, and one boy with man, to use in the testing of hypotheses. Also, because we were concerned about changes in response styles, we decided to look at the frequency distributions of factor scores prior to analyzing them in the ANOVA mode. As a result, we noted that variations in responses were substantially



different from one picture to the next, and decided to continue the analysis using ordinal statistics and frequencies. These two decisions seem to us to be steps toward conservatism, and thus presumably to be preferred to other options. Our results, then, will be reported as medians rather than means, and as chi-square tests rather than F-ratios.

## Results

The locations in semantic space of the four pictures are summarized below.

# Insert Table l here

The sequence in which the pictures are listed is the sequence in which they were administered. Constriction factor scores have a larger standard deviation than do the other two factor scores.

The results of testing the formal hypotheses will be reported first, followed by comments on suggestive trends.

<u>Hypothesis I</u>: No significant difference in constriction scores for adult-involved and adolescent alone, although the latter are numerically higher.

Hypothesis II: Potency scores are significantly higher (p <.05) for adult-involved pictures.

Hypothesis III: Activity scores show no effect of interaction between sex of respondent and sex in picture.

Among the interesting trends are that students saw themselves alone as being more constricted than when they were involved with adults



(assuming projection, of course). This tendency runs directly counter to the hypothesis, and may suggest a major difference between normal and delinquent children. The reverse trend, however, is not strong enough to be statistically significant, even had it been hypothesized and thus properly testable.

With regard to potency, an analysis of responses from just girls showed not only that they gave the boy alone much higher ratings on potency than they gave the girl alone, but also they gave the girl-woman combination a higher rating for potency than the boy-man situation. It would seem that there is a sex-role reversal from age peer to authority figure.

The activity scores, which within the context of the stated hypotheses could be tested only for interaction, also showed strong main effects which would have been statistically significant, had they been specifically hypothesized. Boys were rated more active than girls, and adult-involving situations were rated more active than were adolescents alone.

## Summary and Speculations

Based on the analysis of the semantic differential scores, these normal adolescents seem to look to adults as facilitators rather than as sources of constraint; adult involvement implies more power (but perhaps available on the student's behalf), and certainly as involving more activity. The adolescents see themselves, particularly when girls look at girls, as inactive and powerless, and perhaps somewhat constrained.



It is especially interesting that the semantic differential gives a portrait of the school-related perceptions of normal urban adolescents which is almost the mirror image of the characteristics attributed to urban delinquent children by clinical workers in that field. There are, however, differences in both the nature of the respondents and the nature of the interpreters, as well as major differences between selecting adjectives for appropriateness and responding freely in the standard projective-test setting. In this domain, it is clear that the truism is true--more research is needed.



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Table 1

	Constriction	Potency	Activity
Boy and Man	17	.00	02
Girl alone	.20	26	44
Boy alone	.15	.05	.02
Girl and Woman	05	.19	.10