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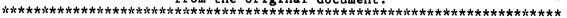
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#### **ABSTRACT**

This study explores the relationship between art object preferences and aesthetic attitudes of high school students. A corollary variable was socioeconomic status as determined by the National Opinion Research Center scale. A sample of 443 students, grades 8-12, in a Virginia high school, were studied. The 5-point Aesthetic Attitude Scale was used to measure degree of student agreement or disagreement to 20 questions asked about objects. (buildings, murals, statues, and parks) within the local environment. This instrument required students to recall individual objects from the subjects' local environment, mentioned by the scale, before making a response. A response of 5 indicated agreement with the statement given concerning the object, a 1 response indicated disagreement. The Art Object Preference Test required an immediate response to items few, if any, of the subjects had previously seen. Art objects (paintings, sculptures and ceramics), were selected as representative of highly realistic, highly distorted or highly modern categories. These were presented to the students in the form of 32 projected slides. The Art Object Preference Test measured preferences for art objects on a 5-point scale, with 5 representing like, and 1 indicating dislike. Both instruments measured an affective response. Findings indicate that: (1) socioeconomic identification does not affect preferences for art objects of high school students; (2) the more realistic the art object, the more students tended to prefer them; and (3) there is a significant relationship between student preferences for art objects and their preferences for common objects of daily experience, or environmental objects. This suggests that teachers can enhance their classroom experiences for students by employing environmental objects as aesthetic stimulus. (MM)

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# ENVIRONMENTAL OBJECTS AS AN AESTHETIC ATTITUDE DETERMINANT

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As we know, there is a tremendous interest in the environment. Environmental awareness programs are a significant component of many educational programs. For years, art teachers have employed field trips to a variety of environmental concerns as motivational efforts for producing art products by their students. Subject matter for drawing, painting, social studies, and a variety of art endeavors are the result.

Many art teachers are constantly searching for ways in which they can expand the art experiences of their students. A significant relationship between attitudes of students towards everyday objects within their environment and their preferences for art objects, would permit teachers to expand their art programs and in so doing, make them more relevant for all students. Thus this investigation seeks to determine whether or not there is a significant relationship between students' attitudes towards objects within their environment and their preferences for art objects. If a significant relationship is observed, then environmental objects can serve as an aesthetic attitude determinant. Furthermore, if a significant relationship is observed, then aesthetic education need not be limited to art objects, but can be expanded to include environmental objects.

Other variables were also looked at in this study and will be reported in the findings.

The assumption in this study is that every individual has the capacity to respond to an object; that is, the capacity to perceive or derive some meaning in viewing an art object or anything within his environment that will cause him either to like or dislike the object. This study involved two concepts: the concept of cognition and the concept of affect. Cognition has been defined by English and English as "... a generic term for any process whereby an organism becomes aware or obtains knowledge of an object. It includes perceiving, recognizing, conceiving, judging, and reasoning..." (10:92) Individual experiences predicated on any status such as socioeconomic, sex, or grade level in either of these areas might be expected to vary. It also might be expected that students who have been exposed to art experiences in the classroom would have had some experiences in making value judgments about their own art products as well as those of fellow students.



Affect is the "class name for feeling, emotion, mood, temperament; a particular instance of feeling or emotion; a single feeling-response to a particular object or idea; the general reaction toward something as liked or disliked." (10:15) The responses in this study included the specific aspect of emotion that becomes synonymous with affect, "a particular instance of feeling or emotion; a single feeling-response to a particular object or idea; the general reaction toward something as liked or disliked." The responses by the students may represent primarily cognition, affect, or a combination of the two.

The end product of the affective may be thought of as being verbal or non-verbal. Since the media of this study were non-verbal, then non-verbal responses were best measured through non-verbal media. In view of this distinction, the study was limited to non-verbal expressions of atitudes and preferences for art objects.

If a student's image of his environment is structured by all experiences including his high school education, it is logical to believe that high levels of directed study are important in the development and channeling of individual attitudes in daily life. Thus such experiences might be evident in a student's response to objects within his home town environment as an aesthetic stimulus. Furthermore, it is conceivable that variations in background might show measurable differences in aesthetic attitude and in art object preference.

The concept of aesthetic attitude has been used by a large number of investigators, aestheticians, writers, and others with an equal diversity in the interpretation of its meaning. If it is assumed that all individuals possess some capacity for perception of art and beauty; to indicate a preference for like or dislike, then it seems pertinent to investigate types of qualitative differences based on selected variables. The employment of the term aesthetic attitude serves as vocabulary for categorizing individuals relative to their responses on an instrument designed to determine their affective predilection towards objects within their own environment. For the student, however, the term remained undefined, so that individual responses and judgments could be expressed without being limited to a right or wrong discrimination or a predetermined rule.

An art object is a sensory stimulus and therefore it can be said that it has the capacity to initiate the process of perception. It can also be said that any object within a student's external environment is also a sensory stimulus in so far as the student attends to it. If he derives meaning from the object, then according to Reiser, he has an aesthetic attitude towards the object. Whether or not aesthetic quality and subsequently meaning is derived from an aesthetic



experience, is determined by the subjectivity of an individual. To a great extent, aesthetic sensitivity depends on the ability of the individual to organize perceptual data. This experience depends upon prior experiences, as well as background and context associations of objects; that is to say, objects apprehended and thus experienced in different ways, will have different meanings for different individuals.

## Procedure For the Study

This study was designed to explore whether or not a relationship exists between art object preferences and aesthetic attitudes of high school students. Other corollary variables included in the study were: socioeconomic status, grade level, sex, museum visitation, and family's ownership of art work. The premise of this investigator is that schools have the responsibility of providing diversified types of education in keeping with students' needs and capacities. One facet of this responsibility is the enriching of curricula predicated on an awareness of different aesthetic background experiences of all students.

Since the study was concerned with high school students and other variables including socioeconomic status, it was necessary to select a high school whose student body had the necessary mix. A high school in Virginia served this purpose. I should note that no investigation was conducted to ascertain whether or not the socioeconomic distribution of the high school students of this school was a normal one. A review of literatiure revealed that in the general population, the upper socioeconomic group constitutes the smallest portion of the population. The largest group is composed of people situated in the lower socioeconomic strata. The middle socioeconomic group falls somewhere between the other two groups. The sample used in this study functioned in this manner. A sample of 443 students from the eighth grade through the twelfth grade was used in this study. These students were in each of six study hall groups for one school day. Table one shows a description of the sample employed in this investigation.

# **DEFINITION OF TERMS;**

Aesthetic Attitude for the purpose of this study, is defined as the affective predilection of a high school student toward objects within his physical environment. It includes the idea of sensitivity of the individual toward objects within his home town, and the assumption of his ability to react positively or negatively toward these objects.



Objects are defined as buildings, murals, statues, and parks that are a part of this city's environment, and visually accessible to all of the high school students through normal activity.

Art Objects, for this study, were limited to paintings, sculptures and ceramics.

Socioeconomic Identification refers to a combination of social and economic characteristics such as wealth, occupation, and education, that classify individuals as being members of a specific stratum of society. For this study, the various strata were determined by the scale developed by the National Opinion Research Center (N.O.R.C.).

**Realism** refers to one characterisitic of the portrayal of objects. The artist portrays the subject matter in a manner where the subject is easily identifiable. He does not impose any of his ideas on the subject, but rather makes an effort to portray the subject matter as faithfully as possible.

Distortion is another method of subject matter interpretation. The artist intentionally changes the subject from what he actually sees. The object may be stretched out, elongated or in some way changed from its original appearance. The subject matter, however, is still recognizable.

Abstraction refers to the method of subject matter interpretation where the object has been changed from its original appearance, to the extent, that it is no longer recognizable. Included in this definition are art objects identified as being subjective abstraction or non-objective abstraction.

Traditional Ceramic Objects refers to objects or designs which have been well established in the past as being representative of a particular period and has been passed on to modern times by succeeding generations. A numerical figure is obtained by totaling the students' responses for all ceramic objects judged as being traditional.

Similar scores were determined for the following:

Modern Ceramics, Realistic paintings, Distorted paintings, etc.

## DEVELOPMENT OF THE SCALES FOR THE STUDY

A review of the literature reveals a positive relationship between some factors in a person's background and his situational behavior. In essence, known factors in a person's background can serve as explanatory factors for his response to certain situations. In an effort to ascertain certain relationships



between factors in a student's background and his attitude toward art objects, it was necessary to develop two instruments as well as a personal data sheet. It was necessary to develop these instruments because no other instruments were available to measure either aesthetic attitude as previously defined, or to determine art object preferences.

#### THE AESTHETIC ATTITUDE SCALE

The aesthetic attitude scale was designed to measure the affective predilection of a high school student towards objects within his environment. The rationale underlying the development of this scale is based on the definition of aesthetic attitude as defined by Rieser (77); that aesthetic attitude is that attitude in which "we discover meaning in the forms confronting us". Thus all students who attend a common high school, and through daily activity, are confronted with common environmental influences. Their attitude toward these common objects within their environment may be determined by a number of factors including home environment and socioeconomic identification. It was these common environmental influences or objects that were selected to develop a scale for measuring aesthetic attitude.

The first step in the development of the aesthetic attitude scale employed the input of three university professors. The investigator explained the objective of selecting objects that all high school students within the city limits should be familiar. Objects on which one or more of the professors disagreed were excluded. For example, one professor agreed that all students were probably aware of the existence of the state mental hospital within the city limits, but because of its location, and general inaccessibility to all students, he did not think it should be included as an environmental object. It was decided that objects within the downtown section of the city as well as the new shopping center would be more accessible to all of the high school students.

After selecting the environmental objects, a total of 99 statements was developed, using the objects as a stimulus to elicit a positive or negative response. According to the Thurston (41) method of scale construction, a large number of statements concerning the attitude to be measured should be developed and submitted to a large number of judges. The judges employed in this stage of the scale development included one professor of Art Education and eleven graduate students enrolled in a research methods course in the Department of Art Education, at The Pennsylvania State University. The majority of the students were doctoral students. Instructions to the judges were preceded by an introduction to the concept of scale development. The importance of scale reliability and validity were discussed relative to scale construction. Each judge was given a copy of the 99 statements developed by



the investigator to measure aesthetic attitude, as well as a numbered response sheet corresponding to each statement. The response sheet contained numbers, in descending order, from eleven to one for each statement. The judges were also issued a sheet of instructions defining the term aesthetic attitude as well as the procedure for indicating their responses relative to whether or not they thought a specific statement would elicit a response to measure aesthetic attitude as defined by the investigator. The judges were directed to circle number eleven if they believed a statement was a good statement, and were to circle number one if they believed a statement was not a good one. The remaining numbers allowed the judges some latitude in agreeing with a statement. Questions were asked by the judges to assure an understanding of what was expected from them.

Reliability coefficients were computed for the judges using the annalysis of variance procedure presented by Winer(46). It is seen in the pass out marked 2. It is: one minus mean squares within objects divided by mean squares between objects. The judges responses were analyzed and a statistical summary program was used to determine the means and standard deviations for each statement. A high means indicated a strong agreement among the judges that a statement would elicit the desired response. The mean judge agreement on an item of 8.0 or higher was the criterion used in selecting an item for the scale. There were 52 items with a mean judge score of 8.0 or higher. Because of the time limitation of the study, a decision was made to limit the scale to a total of twenty items. According to Shaw and Wright(41), an attitude scale may be constructed employing twenty items. The selection of these twenty items was predicated on different item reference. This method of item selectivity was used, rather than employing the twenty items with the highest mean score, to minimize object duplication. The assumption was made that a variety of environmental objects would provide a better estimate of the student's aesthetic attitude. The complete Aesthetic Attitude Scale is seen in the handout marked pages 169 and 170.

Computation of judge reliability on all judgments was accomplished by using the analysis of variance procedure presented by Winer and previously discussed. The reliability of the judges for all judgments is seen in table number3, on page 2 in the hand out.

The .80 coefficient of reliability among the judges insures, with some degree of accuracy, the reliability of the aesthetic attitude scale.

By employing an item selectivity of high statement means, twenty statements were selected to form the aesthetic attitude scale. Following each statement was a five point scale. The students were instructed to circle the number five



to indicate their agreement with the statement, and the number one to indicate their disagreement. The remaining numbers provided some latitude for the students in responding to each statement. The scores were then totaled and the mean scores determined for each group.

### THE ART OBJECT PREFERENCE TEST

This test was developed by employing paintings, sculptures and ceramics. These objects were categorized as being either realistic, distorted or abstract for paintings and sculptures, and traditional or modern for the ceramics.

Sixty three art objects were submitted to five independent judges, who categorized the objects as defined by the investigator, into the foregoing categories. Coefficients of reliability were computed for the judges. The sixty-three objects were then rearranged into the specific categories as determined by the five judges. They were then presented to a second group of judges. These judges consisted of fourteen graduate students in Art Education and one Professor of Art Education at The Pennsylvania State University. These judges were employed to determine the appropriateness of each object to its respective category; ie., whether or not an object was highly realistic, highly distorted or highly modern. These judges indicated on a five point scale from high to low, whether or not an object was representative of its group. The judges circled number five to indicate an object being highly representative of its group. The lower the number circled, the less representative the object was of its group.

Coefficients of relibility were computed for the judges for each category. There was a high degree of accord among the five judges. A coefficient of reliability of .98 was observed for this judging session. Coefficients of reliability for the fifteen judges were: 95, .94, and .94 respectively for the categories of realism, distortion and modernism. A coefficient of .11 was observed for the category of abstraction. Because of the low agreement among the judges, this category was eliminated from the study.

The objects in each group were then arranged from high to low based on the mean judge score for each item. The final art object test consisted of 32 art objects. The painting judged to be most realistic was JUST DESSERT by Hardnett. The least realistic painting was BOTTLE OF SUZE by Picasso. These items are seen on pages 6, 7, and 8 in the passout.

The students indicated their preference for the art objects on a five point scale, by circling the number five for strongly like and the number one for dislike.



If they liked an object, but not strongly, they so indicated by one of the remaining numbers.

#### THE PERSONAL DATA SHEET

It was necessary to develop a personal data sheet to acquire background information for determining socioeconomic status according to the N.O.R.C. scale, as well as acquiring other data that was essential to this study. This personal data sheet was page four of the total instrument, which consisted of the art object response sheet, the aesthetic attitude scale, and the personal data sheet.

#### ADMINISTERING THE INSTRUMENT

The art objects were presented to the students in the form of 2x2 slides, projected on a 500 watt remote control slide projector. This projector allowed the slides to be changed without obstructing the view of any of the students. The entire test, from the distribution of the instruments to the taking up of the instruments, took approximately 35 minutes for each group.

#### TEST OF HYPOTHESIS

The hypothesis was tested using the analysis of variance statistic. This statistic is designed to handle a factorial analysis of variance with unequal numbers of observations in subclasses. This method of analyzing data of multiple classifications with unequal subclass numbers is based on the assumption that the population from which it was drawn has proportional or equal sub-class numbers. (102)

The art object preference test represents a different kind of measurement than does the aesthetic attitude scale. Both instruments measure an affective response. However, the aesthetic attitude scale requires the student to recall individual objects in the scale before making a response. The art object preference test requires the student to make an immediate response to items that few if any of them have previously seen.

Statistical analysis was undertaken to determine if any significant relationship existed between measures of aesthetic attitude and measures of art object preferences. The data were composed of total aesthetic attitude scores and total art object preference scores. Further scores were derived from the total art object preference test to form thirteen dependent variables. Null hypothesis was assumed in testing the hypothesis.



There will be no significant relationship among scores of aesthetic attitude and scores of art object preferences among high school students.

The table on page 9 reveals coefficients of correlation for scores on the art object preference test with scores on the aesthetic attitude scale by socioeconomic groups. This table shows that a significant relationship does exist between scores on the aesthetic attitude scale and scores on the art object preference test. The null hypothesis of no significant relationship is rejected. A correlation of .509 is observed for the upper socioeconomic group. This correctation is significant at the .001 level. The correlation between the two scales for the middle socioeconomic group is observed to be .266. This is significant at the .01 level. The .001 is also reached for the lower socioeconomic group. This correlation is observed to be .309. It appears that a greater amount of the variance is accounted for by the upper socioeconomic group. This is observed to be 25% of the total variance. Only about 9% of the variance is accounted for by the other two groups. Even though the correlations are statistically significant, a large amount of the variance is still unaccounted for in this study. Factors other than socioeconomic account for most of the differences in the measures. It is theorized that these factors are contained in the variant value structures adhered to by individuals within the various groups. The significant correlations also suggest that both instruments reflect an aspect of aesthetic attitude. The aesthetic attitude scale reflects an affective predilection towards objects within a student's physical environment. The art object preference scale reflects an aesthetic attitude towards art objects. Both instruments function independently, however. Used together, they suggest a broader dimension of aesthetic attitude measurement. It may be possible that one scale could be used as a predictor of performance on the other scale.

Preferences are subjective in nature, whether for objects within an environment or for art objects. Both scales measure affective responses and tend to reflect these subjective preferences that are structured somewhat by all experiences.

Of importance is the observation of a trend in certain factors appearing to influence a high school students' preference for art objects, irrespective of group membership. Figures on pages 11 through 14 shows that as the amount of distortion increases in paintings, the less the students tend to prefer them. Also as the amount of realism increases in paintings, the more the students tend to prefer them. It appears that the chances of making an impact on students concerning art objects and their presentation, will be greatly increased if those works are presented in which students reveal some interest. To be



exposed to works of art that already concerns students may not only broaden that concern, but may increase sensitivity to aesthetic qualities as well.

The data further suggests that art objects need not be the sole focus of the art course. Since there is a significant relationship between a student's preference for objects within his environment and his preference for art objects. environmental objects can be employed as a predictor of a student's aesthetic attitude. It can be assumed, today, that most students are familiar with shopping centers, fast food places, educational institutions, outdoor sculpture and other items that are a part of their daily environment. By calling attention to the design elements in these items, and their relationship to works of art. students may develop the ability to make value judgements about their environment. These skills in making value judgments are essential since these students will become the future consumers of Art. And of course, the attainment of these skills is the responsibility of today's art educators. Art objects, whether presented to students in the form of slide reproductions, museum visits or the student's own creative products, are an important component of the art program. The daata of this investigation suggests that socioeconomic identification does not affect preferences for art objects of high school students. This observation should be an aid in the development of teaching strategies. A teacher may see the need to modify his beliefs about children in this area. Such a modification might lead to a concomitant recognition of the necessity to treat the individuality of children concerning the presentation of art objects, irespective of socioeconomic identification.

As stated earlier, the data suggests a trend in certain factors influencing student's preferences for art objects. These factors are the mode of realism in art objects. The more realistic the art objects, the more the students tended to prefer them. This finding replicates the findings of several investigators including Hardiman and Zernich of the University of Illinois. The Art teacher may wish to utilize these factors in the development of teaching strategies. The chance of making an impact on students in the presentation of art objects will be greatly increased if those works are presented in which the students manifest some interest. To be exposed to works of art that already concerns students may not only broaden that concern, but may increase sensitivity to aesthetic qualities as well.

Also as stated earlier, the data suggests that art objects need not be the sole focus of the art experiences. A significant correlation was observed for all socioeconomic groups between aesthetic attitude scorfes and art object preference scores. Thus the common objects of daily experience can serve as a focus of aesthetic analysis.



Too often the art appreciation experiences are structured around art objects that are foreign to the students. Perhaps it is time to enhance the traditional approach to the art appreciation experience, especially with the interest in environmental concerns. This investigation indicates that there is a significant re; ationship between students preferences for art objects and their preferences for environmental objects. This suggests that teachers can enhance their classroom experiences for students by employing environmental objects as an aesthetic stimulus. This information is very important for programs with limited resources. Since students are already aware of their environment, it would be more effective to begin with what they know and assist them in becoming more perceptive; and in so doing, developing their aesthetic sensitivity. Obviously, if educators are to develop an aesthetic commitment among high school students, they must develop a discriminating psublic. Such a public is one which possesses the means to evaluate judiciously. What better way than by beginning with the student's own environment and what better time than during the impressionable high school years, can a teacher encourage this aesthetic commitment.

