# Arousal in Relation to the Degree of Realism in Visual Stimuli

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The purpose of the present study was to examine the effects of degree of realism and type of content of visual stimuli upon levels of arousal.  One independent variable, type of content, had three values: pleasant, neutral, and unpleasant.  The other independent variable, degree of realism, had four values: color photograph, black-and-white photograph, photo-sketch, and free-hand sketch.  The two independent variables were combined in a 3 x 4 factorial design with repeated measures for one variable: degree of realism.  Separate analyses were done for each one of two dependent variables.  The two dependent variables were galvanic skin response (GSR) and pupillary response (PR).

The subjects were 30 male paid volunteers, with an average age of 22, who did not wear glasses and were not color blind as measured by the Ishihara test.  Subjects were presented a series of visual stimuli which varied according to degree of realism and type of content.  Each subject saw 12 experimental slides (three slides for each one of the four degrees of realism) and 12 control slides (grey slides).  Ten subjects saw the pleasant stimuli, ten subjects saw the neutral stimuli, and ten subjects saw the unpleasant stimuli.  The GSR and PR were recorded for each subject.

The results of the analysis of variance and a studentized range test for GSR showed that for unpleasant stimuli color photographs were significantly more arousing than black-and-white photographs, photo-sketches, and free-hand sketches.  There was not significant difference between black-and-white photographs, photo-sketches, and free-hand sketches.

The results of the analysis of variance and studentized range test for PR showed that with greater realism, pleasant stimuli resulted generally in higher PR.  However, free-hand sketches, the least realistic stimuli, resulted in significantly higher PR than did the next to least realistic stimuli, photo-sketches.

The results of the present study suggest that the additional time and cost required to produce pictorical material in color may sometimes be justified in communications that are designed to produce arousal in their audiences.

# "The Relationship Between Value Orientations and the Perception of Media Utilization in the Classroom by University Professors"

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## Purpose

The major purpose of the study was to determine if value orientation variables were related to the decision of using instructional media's in the classroom by university professors. The study tends to clarify, on the basis of value orientations, why some instructors adopt media into their classrooms, while others stop using it, or do not use it at all.

## Procedure

The broader question this study intended to answer was: to what degree do value orientations related to the adoption of instructional media in the classroom by university professors?

Using this question as a frame of reference, five hypotheses were developed:

1. Variation in time orientations are related to the university professors' perception of their instructional media utilization in the classroom.

2. Variations in man-nature orientations are related to the university professors' perceptions of their instructional media utilization in the classroom.

3. Variations in activity orientations are related to the university professors' perception of their instructional media utilization in the classroom.

4. Variations in relational orientations are related to the university professors' perception of their instructional media utilization in the classroom.

5. Variations in dominant value orientations are related to the university professors' perception of their instructional media utilization in the classroom.

The Medical Sciences Campus professors of the University of Puerto Rico were used as the population from which the sample was drawn. A total of 125 subjects were randomly selected, the rate of participation was 72 percent.

To test the hypothesis two instruments were administered to each of the professors. The Olivers' Q-Sort Value Orientation Instrument was used to measure the e value orientations of the professors. The use of Media Questionnaire was used to obtain descriptive data about the professors' perceptions of their frequency of media use in the classroom.

The scores obtained from both instruments were submitted to Pearson product-moment correlation to test the relationship between value orientations and the frequency of media use. A two-tailed test was performed to test the hypotheses at .05 level of significance.

Four negative value orientations correlation's were significantly related with the frequency of media use categories. These were the relationships between:

1. Being in becoming and the very common media category
2. Collateral direction and less common media category
3. Transitional dominant value orientation and less common media category.
4. Transitional dominant value orientation and very common media category.

Four value orientation correlation's were significantly related to the total frequency of media use score. The total frequency of media use was:

1. Negatively related with the being in becoming direction
2. Positively related with the doing direction
3. Positively related with the lineal direction
4. Negatively correlated with the transitional dominant value orientation.

The majority of the correlation's were not statistically significant. This could be explained by the fact that the majority of the media used by the professors did not require the major changes in teacher adoption behavior and teaching styles, since the professors used the instructional media as an aid or supplementary to the teaching process. It seems that media used in this way do not interfere with the value orientation of the professors. Further research should be conducted to test the relationship between value orientations and acceptors or rejecters of new educational media.

# La educación a distancia y las destrezas de pensamiento: un estudio de caso de las destrezas de pensamiento de los cursos de SEDUE del Sistema Universitario Ana G. Méndez

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Tanto en Puerto Rico como en el resto del mundo, la educación a distancia está en crecimiento. Esta metodología representa una alternativa real a muchos de los problemas que se le presentan a las instituciones que auspician esta innovación como lo son la productividad y la expansión de oportunidades educativas de forma eficiente y efectiva. Sin embargo, la educación a distancia es percibida, en ocasiones, como una metodología con limitaciones para poder desarrollar las destrezas de pensamiento de los estudiantes.

El Sistema Universitario Ana G. Méndez es actualmente el mayor exponente de la educación a distancia en Puerto Rico. Su estación de televisión educativa, el Canal 40, administra el programa ITS (Interactive Television Services) y la Universidad Metropolitana (UMET) administra SEDUE (Sistema de Educación Universitaria Externa) que ofrece cursos televisados pregrabados, y un nuevo programa de educación a distancia.

Esta investigación examina la capacidad de la educación a distancia para desarrollar destrezas de pensamiento variadas, según el modelo de Villarini (1991, 1996) y Beyer (1987, 1988), a través de tres cursos televisados que ofrece SEDUE. Estos se compararon con los equivalentes presenciales ofrecidos por la UMET. En el estudio se midieron las destrezas de pensamiento que ofrecen éstos según se deduce de: 1) los objetivos instruccionales; 2) las actividades asignadas a los estudiantes; 3) las preguntas de exámenes de los cursos. También, se comparó el alineamiento entre los objetivos instruccionales, las actividades asignadas y las preguntas de los exámenes de los dos programas. La investigación, mediante la metodología de estudio de caso, analizó datos cuantitativos y cualitativos que se recopilaron a través de entrevistas a los profesores y del análisis de sus documentos de trabajo: prontuarios, exámenes, entre otros.

Como resultado, quedó demostrado el hecho de que no existen diferencias significativas entre el diseño de los cursos televisados y el de los correspondientes cursos presenciales en cuanto al desarrollo de destrezas de pensamiento en los objetivos instruccionales, en las actividades asignadas y en los exámenes. Solamente en uno de los cursos se logró observar diferencias en las asignaciones. El estudio demostró también la falta de alineamiento entre

los objetivos instruccionales, las actividades asignadas y las preguntas de examen en ambos programas.

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# Children's Television Viewing Habits and their Conception of Social Reality in Puerto Rico

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The purpose of this study was to investigate the influence of television on children's social reality beliefs of violence and meanness in the world around them and its relationship to other independent variables.

The conception about social reality that viewing tends to cultivate in children was analyzed with reference to the following independent variables: 1) grade, 2) gender, 3) father and mother education, 4) income, 5) source of information, 6) number of TV sets at home, 7) amount of viewing, 8) frequency of watching a type of program and 9) mediation of significant others.

A survey of a sample of Puerto Rican children in the metropolitan area of Bayamón was conducted using a questionnaire method. Data was gathered from low and middle income public schools among fourth, sixth and eighth graders. The data analysis was conducted using 1) anova one-way and 2) anova two-way.

Significant differences related to violence and meanness conceptions were found as related to the variables of 1) gender, 2) grade, 3) mother education, 4) economical level, 5) amount of viewing and 6) program preference.

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