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# ÍNDICE

**Brief Reports**




### A NOTE TO LIBRARIANS

This number completes Volume 12. The new numbering of issues reflects more accurately our publication schedule of two issues per year. Please bear in mind that this number would therefore be equivalent to Nos. 3/4 in our previous numbering system.

La **Revista Interamericana de Psicología** es publicada por la Sociedad Interamericana de Psicología (S.I.P.) para facilitar el intercambio de información profesional y científica entre los psicólogos de las Américas y para promover el desarrollo de la psicología en el Hemisferio Occidental. La revista se publica cada seis meses con artículos de todas las áreas de la psicología. Los manuscritos que pueden ser publicados por lo general pertenecen a una de tres categorías: Artículos Originales (teóricos, empíricos, clínicos, educacionales, profesionales o revisiones de no mas de 20 páginas); Informes Breves (500 palabras); y Revisiones de Libros (por invitación). Aquellos artículos que sean relevantes a los temas y preocupaciones de la Psicología Interamericana o que reflejen cierta colaboración internacional, recibirán especial atención durante el proceso editorial. Los manuscritos pueden escribirse en Castellano, Inglés o Portugués. La suscripción anual es de US$20.00. Todas las órdenes de suscripción, cambios de dirección y otra correspondencia comercial debe enviarse al Gerente de la revista. Las últimas páginas incluyen información para los autores.

The **Interamerican Journal of Psychology**, the official journal of the Interamerican Society of Psychology (S.I.P.), is published to facilitate the exchange of scientific and professional information among psychologists throughout the Americas and to promote the development of psychology in the Western Hemisphere. The journal is published semi-annually and accepts manuscripts in all areas of psychology. Accepted manuscripts normally fall within three categories: Original Articles (theoretical, empirical, clinical, educational, professional, or reviews of no more than 20 pages); Brief Reports (500 words) and Book Reviews (by invitation). Articles which are relevant to the themes and concerns of Interamerican Psychology or which reflect a cross-national collaboration are encouraged. Manuscripts may be submitted in Spanish, Portuguese or English. Annual subscription is US$20.00. All subscription orders, address changes, and other commercial correspondence should be addressed to the Managing Editor. Information for authors is found on the last pages of this issue.

A **Revista Interamericana de Psicologia** é uma publicação da Sociedade Interamericana de Psicologia. A revista se devota à facilitar intercâmbio de informação científica e profissional entre psicólogos das Américas e à promoção do desenvolvimento da Psicologia no hemisfério ocidental. A revista é publicada bi-anualmente e trabalhos em todas as áreas de psicologia são publicados. Artigos eventualmente publicados geralmente caem em uma das três seguintes categorias: trabalhos originais (teórico, empírico, clínico, educacional, profissional ou revisões de menos de 20 páginas); relatórios curtos (500 palavras); e críticas de livros (por convite). Consideração especial se estende a artigos cujos temas se encuadram dentro do âmbito da psicologia interamericana ou que relatam trabalho resultante de colaboração transnacional. Manuscritos podem ser apresentados em espanhol, português ou inglês. A assinatura anual é de $20.00 (vinte dólares). Tôdas as comunicações comerciais, incluindo pedidos de assinatura, mudanças de endereço e anúncios, devem ser dirigidas ao Editor-Gerente. Informações para autores se encontram nas últimas páginas dêste número.

The Interamerican Society of Psychology is grateful to the following institutions for the help provided in publishing this journal:
College of Arts and Sciences, Florida International University
International Affairs Center, Florida International University
Spanish Speaking Mental Health Research Center (UCLA)
University of California, Los Angeles

## Nota Editorial

Al fín!! Este número 2 del volúmen 12 contiene el primer conjunto de artículos aceptados bajo mi dirección editorial de la *Revista*. Como los lectores consistentes de la *Revista* lo saben, hemos tenido una larga demora en la publicación de los manuscritos aceptados por el Editor anterior, Horacio Rimoldi, así como aquellos aceptados por mí. La demora fue causada por las pérdidas significativas que la Sociedad incurrió en nuestro Congreso de 1976. Afortunadamente esas pérdidas se han superado y hemos ahora retornado a la situación económica precaria en la que la SIP ha existido desde su fundación en 1951.

Pero tenemos mejores noticias. Practicamente hemos publicado todos los manuscritos aceptados con anterioridad y queremos ahora solicitar contribuciones de artículos adicionales. Como un bono especial, esos manuscritos que sean favorablemente revisados por los editores recibirán una publicación bastante rápida. Los números equivalentes a 1979 serán publicados tan pronto tengamos un número suficiente de artículos interesantes.

Tambien hemos añadido un nuevo aparte a nuestra política editorial. Frecuentemente sucede que proyectos de investigación de gran envergadura se llevan a cabo en América Latina y los colegas al norte del Rio Grande nunca se enteran de ellos porque han sido publicados en Castellano o en Portugués, or los Latinoamericanos nunca se enteran de ellos porque han sido publicados en Inglés. Para solucionar en parte éste problema, la *Revista* ocasionalmente publicará resúmenes de 500 palabras de estos libros o monografías de investigación en la sección de *Informes Breves*. Si el libro o la monografía se publicó en Portugués o Castellano, el resúmen aparecerá en Inglés y vice versa.

Para terminar deseo expresar mi continua gratitud hacia la Facultad de Artes y Ciencias de la Florida International University y al Centro de Asuntos Internacionales de esa universidad por proveerle a la *Revista* un "hogar" y su respaldo operacional. También deseo agradecer a Linda Jackson quien tan concienzudamente has servido a la *Revista* como su Secretaria por un año.

Gordon E. Finley
Editor

## Editorial Note

Well, at long last! This issue, Volume 12, Number 2, contains the first set of articles accepted under my Editorship. As consistent readers of the *Revista* know all too well, we have had a regretable delay in the publication of manuscripts accepted by the previous Editor, Horacio Rimoldi, as well as manuscripts accepted by myself. The delay was caused by substantial losses incurred at our 1976 Congress. The losses, fortunately, finally have been made up and we now have returned to the merely precarious footing on which the SIP has existed since its founding in 1951.

We have even more good news. We have virtually exhausted our backlog of accepted manuscripts and now wish to solicit additional articles. As an added bonus, those manuscripts which are viewed favorably by the reviewers will receive an uncharacteristically speedy publication. The 1979 issues will be printed as soon as we have a sufficient number of interesting articles.

We also have added an item to our Editorial Policy. Frequently it comes to pass that large-scale research projects are undertaken in Latin America and North Americans never learn of them because they are published in Spanish and Portuguese or Latin Americans never learn of them because they are published in English. To partially overcome this problem, the *Revista* occasionally will publish up to 500 word *Abstracts* of these research books or research monographs in the *Brief Reports* section. If the book or monograph was published in Portuguese or Spanish, the abstract will be in English and vice versa.

Finally, I would like to express my continuing gratitude to Florida International University's College of Arts and Sciences and International Affairs Center for providing the *Revista* with a home and operating support. I also am deeply grateful to Linda Jackson who served so conscientiously as secretary to the *Revista* during the past year.

Gordon E. Finley
Editor

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# THEORY AND MEASUREMENT OF ACCULTURATION

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*University of Miami*

*Este artículo describe un modelo psicosocial del proceso de aculturación que fué diseñado para explicar el desarrollo de las diferencias intergeneracionales en las familias de inmigrantes. De acuerdo con este modelo, se prepararon dos escalas de aculturación destinadas a medir la conducta y los valores de los sujetos. La escala de conducta demostró tener una alta confiabilidad y validez, resultando superior a la escala de valores como medida del proceso de aculturación. Este proceso, tanto en conducta como en valores, ocurre como función lineal del tiempo que la persona ha estado en contacto con la nueva cultura, la rapidez del cambio estando determinada en función de la edad y el sexo de los individuos. Estos datos prueban que las diferencias intergeneracionales en aculturación tienen lugar porque los miembros más jóvenas de la familia se aculturan más rápidamente que los mayores.*

*This paper outlines a psychosocial model of acculturation intended to account for the occurrence of intergenerational/acculturational differences in immigrant families. Two acculturation scales were developed measuring self-reported behaviors and value dimensions. The behavioral scale provided a highly reliable and valid measure of acculturation and proved superior to the value scale in almost every respect. Behavioral and value acculturation were found to be linear functions of the amount of time a person was exposed to the host culture. The rate at which the behavioral acculturation process took place was found to be a function of the age and sex of the individual. The findings suggest that intergenerational/acculturational differences develop because younger members of the family acculturate more rapidly than older family members.*

This article describes a psychosocial model of acculturation developed as part of a larger program focusing on the treatment of behavioral disorders within the Hispanic immigrant community in the Miami area. The article also reports on the development and validation of two acculturation scales constructed within the framework of the model. The research studies reported in the article provide empirical support for both the model and the acculturation scales. Although the evidence reported here is based on research on one particular community, the model and the scales appear sufficiently generalizable to be useful for field work with a wide variety of similar immigrant communities.

Acculturation is a complex process that can be defined both at the societal and at the individual level. This paper, however, is concerned only with the theory and measurement of individual acculturation. The process of individual acculturation involves an accommodation to a host culture on the part of a member of a migrant culture. This process involves the modification of the person's customs, habits, language usage, life style, and value orientations.

Previous research suggests that certain aspects of the acculturation process are related to the high rates of family disruption among migrant groups (Berry & Annis, 1974; Kelly, 1973; Scopetta & Alegre, in press). The acculturation model described here builds on this research and attempts to define the relationship between family disruption and the acculturation process. In addition, it also provides a theoretical framework which accounts for a major clinical finding of the treatment program. Clinical observations within the Cuban community indicate that family disruption occurs as a result of intergenerational differences in acculturation (Gonzalez-Reigosa & Del Castiloo, 1975; Scopetta & Alegre, 1975). When youngsters acculturate more rapidly than their parents, the usual intergenerational gap (Spiegel, 1957) becomes compounded with intergenerational/acculturational differences (Scopetta & Alegre, 1975). According to King, Scopetta, and Szapocznik (1975), this results in an exacerbated intergenerational/acculturational gap which constitutes an important aspect of family disruption among Cuban immigrants.

Based on these clinical observations, an iconic (visual) model of the process of acculturation was developed to explain the occurrence of intergenerational/acculturational differences. This model is presented in Figure 1. The model suggests three hypotheses concerning the process of acculturation. The first hypothesis of that individual acculturation is a linear process that progresses as a function of the length of time the person has been exposed to the host culture. Thus, the more time an individual has been exposed to the host culture the more complete the person's acculturation will be. The second hypothesis is that the rate of acculturation is a function of the individual's age. Specifically, the younger a person is at the time of his/her initial exposure to the host culture the more rapidly acculturation will proceed. The third hypothesis is that the rate of acculturation differs for males and females, with males acculturating more rapidly than females.

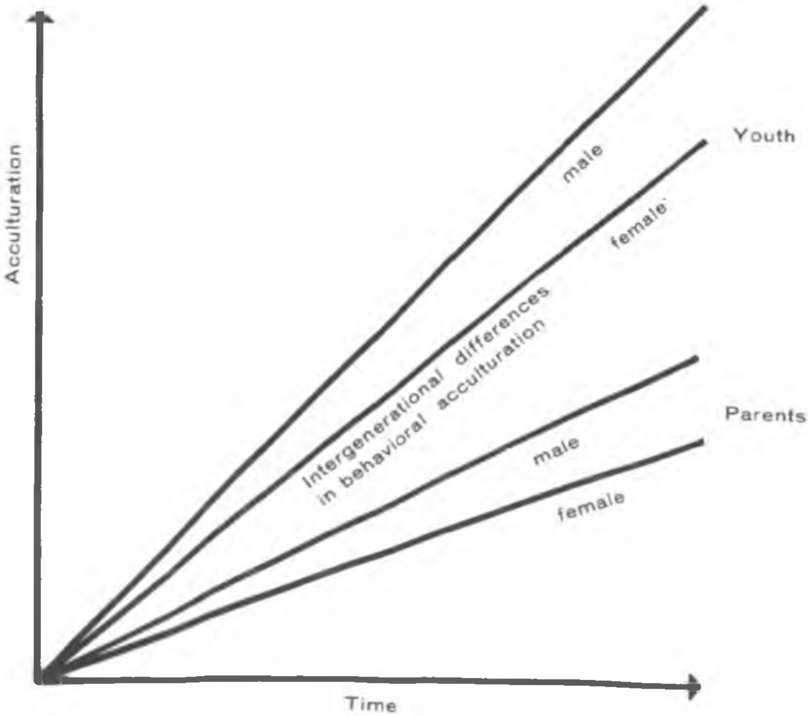


Figure 1. The development of intergenerational/acculturational differences as a function of time, age and sex.

A fourth hypothesis, based on previous research, is that there are at least two distinct dimensions of acculturation—a dimension of behavioral acculturation (Campisi, 1947; Carballo, 1970), and a dimension of value acculturation (Kluckhohn and Strodtbeck, 1961). The dimension of behavioral acculturation involves the gradual adoption by the individual of the more overt and observable aspects of the host culture, including the host culture's language, customs, habits, and life style. The value dimension is less overt and involves the gradual adoption by the individual of the host culture's basic value orientations.

In order to operationalize and apply this theoretical model of acculturation, measures of behavioral and value acculturation were developed. The remaining sections of the paper discuss the development of the acculturation scales and the validation of both the model and the scales.

## The Development of the Acculturation Scales

### *Subjects*

Two samples drawn from the Miami area were used in the development of the acculturation scales. *Sample 1* consisted of Cuban Americans selected to include a wide range of age and socioeconomic levels, as well as both sexes. Sample 1 contained a total of 265 individuals, including 105 males and 150 females (sex data were missing on ten persons). The age of the sample ranged from 14 to 85 with an average age of 35.6. An index of socioeconomic status was obtained using Hollingshead's (1957) seven point occupational scale. The distribution of occupational categories for the head of household included the following: professional, 6.9%; managerial-proprietor, 16.7%; administrative, 19.5%; clerical, 23.0%; skilled manual, 23.0%; semi-skilled manual, 10.3%; and unskilled manual, 0.6%. *Sample 2*, the cultural reference group, consisted of a total of 201 white individuals who reported the United States as their country of birth. Individuals in this sample were intended to be representative of the cultural group toward which the Cuban community was acculturating. This sample ranged in age from 14 to 74 with an average age of 20.1 years. An index of socioeconomic status was obtained using Hollingshead's (1957) seven point occupational scale. The distribution of occupational categories for the head of household included: professional, 13.1%; managerial-proprietor, 13.8%; administrative, 17.7%; clerical, 17.7%; skilled manual, 26.2%; semi-skilled manual, 10.0%; and unskilled manual, 1.5%.

Sample 1 was selected to be older than Sample 2 in order to exaggerate the differences in behaviors and values between these groups and facilitate the discriminant validity procedures described below. This judgment was based on the assumption that older Cubans would be likely to be least acculturated and would exaggerate differences between Cuban and Anglo American groups. This assumption received some support from Hypothesis 2. The wisdom of utilizing such a strategy is demonstrated empirically since the scales developed proved to be effective in measuring acculturation as defined by the theoretical model. It should be noted that Sample 2 was excluded from the analyses testing the hypotheses so that the biases in age between Samples 1 and 2 do not become an issue in the studies conducted to validate the model and the scales.

### *Item Construction*

The initial acculturation questionnaire consisted of two sections. The first, a self reported behavior section, contained a total of 33 items adapted from the set of items reported by Campisi (1947) and Carballo (1970). Research with other immigrant groups suggested that the items were useful in the measurement of acculturation. The items for the self-reported behaviors section were prepared in a five-point Likert format. This section of the initial acculturation questionnaire contained 10 items on language, 11 items on daily customs and habits, and 12 items on idealized life style.

The second section of the questionnaire consisted of 22 problem situations, prepared to be consistent with Kluckhohn and Strodtbeck's (1961) theory of value orientations. According to these writers there are five basic dimensions of human problems which must be solved by all cultures. These include: (1) relational sytle, (2) person-nature relationship, (3) beliefs about human nature, (4) a time orientation, and (5) an activity orientation. These writers also postulated three different variations along which each of the five basic dimensions of human problems can be solved. A given culture's choice of solutions to each of the basic dimensions of human problems constitutes its preferred value orientation.

In preparing the value items, an attempt was made to reflect the nature of the human problems defined by Kluckhohn and Strodtbeck while setting the problems in a context relevant to the target population. Each of the problem situations was followed by three statements presenting three possible alternative solutions to the problem.

Below is presented an example of a relational value item:

What should a family do if it discovers that one of its members uses drugs?

1—The head of the family should take charge of the situation. If this does not resolve the problem then it's best for the drug user to go to a doctor or psychiatrist.

2—The members of the family should discuss the reason drugs are used and in this way together arrive at a solution.

3—The family should consider that the use of drugs is a personal issue, and that each individual should lead an independent life without the interference of others.

Which of these three alternatives do you think is *best*? ______ (Write the No.) Which do you think is *worst*? ______ (Write the No.)

Each of the solutions was treated as a separate item in the subsequent analyses. Since it had been clinically observed that the most serious acculturational/intergenerational differences for families in treatment occurred along the relational dimension, relational items were overemphasized. The final set of 22 items consisted of nine relational, four human-nature, four person-nature, three time, and two activity items.

The questionnaires were constructed in Spanish and translated into English. A series of procedures were undertaken to demonstrate the equivalence of the forms. These procedures are reported on a subsequent section under the heading of "Parallel language forms."

*Item Selection*

Two criteria were used to select the items for the final acculturation scales:

1. A high loading on a factorially derived scale.
2. Discriminant item validity.
   a. A significant item discrimination between Cubans (Sample 1) and the cultural reference group (sample 2)
   b. A significant item discrimination between high and low acculturated Cubans.

1. *Factor analyses.* Since the acculturation scales reported in this paper were developed to be used primarily with Cuban Americans, the item responses (both self reported behaviors and value items) obtained from Sample 1 were factor analyzed using an alpha solution and an oblique rotation (Harris-Kaiser, TYPE I). Four interpretable factors emerged[2] from the analysis accounting for 28.7% of the total variance. The first and by far the largest factor, which accounted for 48.1% of the total factor variance, was a dimension of self-reported behavioral acculturation. Thirty-two of the 33 self-reported behavior items loaded (.30 or more) on this factor, whereas all of the value items loaded below .30 on this factor. The second factor, which accounted for 13.5% of the total factor variance, was a value factor. This factor was a combination of relational and person-nature value orientations with a high value on lineality and subjugation to nature (Kluckhohn & Strodtbeck, 1961). Seven of the eleven alternative solutions loading on this factor were either lineal or subjugation to nature. The third factor, which accounted for 13.4% of the total factor variance, contained a heterogeneous group of solutions to the human problems, the common core of which seemed to stress cooperation, harmony, and neutrality. The last interpretable factor accounted for 12.9% of the total factor variance. It was clearly a relational factor since 12 of the 13 solutions loading on this factor were relational items. All of the items loading positively on this factor reflected a belief in individuality while the items loading negatively reflected a belief in lineality as an interpersonal relationship style.

2. *Discriminant item validity.* Two different analytic procedures were employed to assess discriminant item validity. First, as an index of discrimination between the Cuban and the cultural reference groups, the responses of the Cuban sample were compared, item by item, with the responses of the cultural reference group. The significance of item discrimination was determined using a two tailed *t*-test for the item responses of the Cuban sample and cultural reference group. Second, as

an index of acculturation discrimination, the responses of high acculturated Cubans were compared, item by item, with the response of low acculturated Cubans. The external criterion used for level of acculturation within the Cuban sample was defined *a priori* by the authors using subjective factors in evaluating the various settings used for data collection. These factors included primarily the community identification of each of these settings regarding their appropriateness for Cubans at different levels of acculturation. Thus, persons tested in settings which were generally considered appropriate for non-acculturated or low acculturated Cubans were classified as "low-acculturated," while persons tested in settings generally considered appropriate for persons at the higher levels of acculturation were classified as "high-acculturated." For example, students who were participating in special programs as a result of their inability to profit from regular classes conducted in English were classified as "low-acculturated." This scheme attempted to utilize something like a clinical judgment as an external criterion for acculturation. The significance of item discrimination was determined using a two tailed $t$-test for the item responses of the "high-acculturated" and "low-acculturated" Cubans. Only those items that fully met both discriminant validity criteria were selected for the final scales.

### *Behavioral Acculturation Scale*

The items for the behavioral acculturation scale were selected using the criteria described above in the item selection section. Table 1 contains the final 24 items included in the behavioral acculturation scale. Table 1 also presents the factor loadings on the behavioral factor for each of the items included in the final scale. The items on the behavioral acculturation scale consist primarily of self-reported behaviors. The person is asked to report, on a five point scale, the relative frequency with which he or she engages in each behavior. The anchors for the scales vary for each of the four clusters of items in this scale, but follow the same general format. The anchors for items 1 through 8 are: (1) Spanish all of the time, (2) Spanish most of the time, (3) Spanish and English equally, (4) English most of the time, and (5) English all of the time. The anchors for items 9 through 12 are: (1) Cuban all of the time, (2) Cuban most of the time, (3) Cuban at times and American other times, (4) American most of the time, (5) American all of the time. The anchors for items 13 through 15 are: (1) Completely Cuban, (2) Mostly Cuban, (3) Mixed: Sometimes Cuban and others American, (4) Mostly American, (5) Completely American. The anchors for items 16 through 24 are: (1) I would wish this to be completely Cuban, (2) I would wish this to be mostly Cuban, (3) I would wish this to be both Cuban and American, (4) I would wish this to be mostly American, (5) I would wish this to be

**Table 1**
**Behavioral Scale Items and Factor Loadings**

| Items | Loading |
|---|---|
| 1. Which language do you prefer to speak? | +.66 |
| 2. What language do you speak at home? | +.49 |
| 3. What language do you speak in school? | +.67 |
| 4. What language do you speak at work? | +.52 |
| 5. What language do you speak with friends? | +.74 |
| 6. In what language are the T.V. programs you watch? | +.71 |
| 7. In what language are the radio stations you listen to? | +.76 |
| 8. In what language are the books and magazines you read? | +.68 |
| 9. What sort of music do you listen to? | +.77 |
| 10. What sort of dances do you dance? | +.68 |
| 11. What sort of places do you go out to? | +.75 |
| 12. What sort of recreation do you engage in? | +.74 |
| 13. My way of celebrating birthdays is: | +.64 |
| 14. My way of relating to my fiancee is: | +.60 |
| 15. The gestures I use in talking are: | +.72 |
| Instructions: Sometimes life is not as we really want it. If you could have your way, how would you like the following aspects of your life to be like? | |
| 16. Food: | +.64 |
| 17. Language: | +.72 |
| 18. Music: | +.82 |
| 19. T.V. programs: | +.79 |
| 20. Books/Magazines: | +.80 |
| 21. Dances: | +.76 |
| 22. Radio programs: | +.84 |
| 23. Way of celebrating birthdays: | +.75 |
| 24. Way of celebrating weddings: | +.72 |

completely American. The items are scored using unit weights and the person's total score consists of the simple sum of his/her response weights to each of the 24 items. Therefore, total scores on the behavioral acculturation scale can range from 24 to 120, with a total score of 24 indicating minimum acculturation. In the present study, total scores were prorated to correct for missing item responses. Up to five items were deleted without substantially affecting the psychometric properties of the scale.

### *Value Acculturation Scale*

The items for the value acculturation scale were selected using the criteria described in the item selection section. Two of the three value factors were excluded from the final scales because of the small number of items that met fully the selection criteria. Only for the relational value factor were there sufficient items (ten) that met the selection criteria (a high factor loading, a significant discrimination both between Cubans and the cultural reference group, and between low and high acculturated Cubans) in order to make up a value scale. The six problem situations in which these ten items appear are presented in Table 2. On the left hand margin of Table 2 are also listed the factor loadings and the direction (plus or minus) for keying each item included in the final scale. As shown in Table 2, the item-solutions without factor loadings were retained for the final value acculturation scale in order to maintain the integrity of the original problem situations.

For each problem situation, the person is asked to choose the solution considered best and the solution considered worst. The weights for the keyed responses are as follows: a response of best for an item-solution is given a weight of 3, a response of worst for an item-solution is given a weight of 3, a response of worst for an item-solution is given a weight of 1, and if an item-solution is not endorsed as either best or worst, it is given a weight of 2. Responses of each item-solution can thus range from 1 to 3, with a score of three indicating that the person considered that solution the best, a score of two indicating that the person considered that solution neither best nor worst, and a score of 1 indicating that the person considered that solution the worst. The direction of keying was determined by the direction of the factor loading. Those item-solutions that loaded positively on the factor are keyed positively and those item-solutions that loaded negatively on the factor are keyed negatively.

Only those item-solutions for each problem situation that met all the criteria for selection are scored for the value acculturation scale. The items are scored using the assigned weights (1, 2, or 3). The person's total score is computed by adding the assigned weights of the positively keyed terms and subtracting the assigned weights from the negatively keyed terms[3]. In the present study, the total scores were transformed into standard scores with a mean of fifty and a standard deviation of ten. Total scores were prorated to correct for missing item responses. Up to two items were deleted without affecting the psychometric properties of the scale.

*Reliability*

*Internal consistency.* Additional subject samples were employed for these analyses. *Sample 3* consisted of 69 Cuban American high school students drawn from two different schools roughly matched for socioeconomic status. This sample included 22 males and 47 females. *Sample 4* consisted of 50 white American high school students drawn from the same two schools as in Sample 3. This sample included 18 males and 32 females. An estimate of the internal consistency was calculated for both scales for Samples 3 and 4 combined (total N = 119). The coefficient alpha for the behavioral acculturation scale was .97 and the coefficient alpha for the value acculturation scale was .77.

*Parallel language forms.* All of the items for both the behavioral and value scales, were translated into English. The technique of back translation (Brislin, 1970) was used to insure the equivalence of the items in both languages. Further, an estimate of parallel form reliability was obtained by simultaneously administering the scales in both English and Spanish to a *new* sample of 27 subjects. This sample included subjects who reported that they could read both, Spanish and English well. For the behavioral scale, the correlation between Spanish and English forms was .88, $p < .001$ whereas for the value scale, the correlation between the Spanish and English forms was .46 (N = 29), $p < .007$.

*Test-retest.* An estimate of retest reliability was obtained by administering both scales to a totally new sample of 30 subjects on two occasions. The second administration took place approximately four weeks after the first. The test-retest correlation for the behavioral acculturation scale was .96, $p < .001$, and for the value acculturation scale was .86, $p < .001$.

## Validation of the Model and the Scales: Testing the Hypotheses

This section presents evidence for the construct validity of both the theoretical model of acculturation and the acculturation scales. Construct validity concerns the relationships between a theory and the measures for operationalizing the constructs embedded within that theory. The logic of construct validation requires the simultaneous validation of a theory and the means for operationalizing its constructs (Cronbach and Meehl, 1967). Construct validation is a systematic process involving "the gradual accumulation of information from a variety of sources (Anastasi, 1968, p. 155)" concerning a theoretical construct and the theoretical framework from which it is derived. Studies pertaining to the construct validity of both the model and the scales are reported below and organized around the three hypotheses derived earlier from the model. While not conclusive, these studies provide evidence for the validity of the model along a behavioral dimension, and the results suggest that the behavioral acculturation scale is a useful, operational measure of the construct of acculturation as presented above.

### *Hypothesis 1*

Criterion related validity is one source of construct validational evidence. Criterion related validity concerns the relationship between a

**TABLE 2**
**Relational Value Scale: Problems, Solutions, and Factor Loadings**

| Factor Loading | Items |
|---|---|
| | 1. What should a family do if it discovers that one of its members uses drugs? |
| — | a. The head of the family should take charge of the situation. If this does not resolve the problem then it's best for the drug user to go to a doctor or psychiatrist. |
| — | b. The members of the family should discuss the reason drugs are used and in this way arrive together at a solution. |
| +.47 | c. The family should consider that the use of drugs is a personal issue, and that each individual should lead an independent life without the interference of others. |
| | 2. Three mothers talk about what they would do if they found out that their daughters were having sexual relations with their boyfriends. |
| —.51 | a. The first one said: I would forbid her to continue that relationship since it is against the principles her father and I have taught her. |
| +.55 | b. The second one said: I think she has a right to act freely without her parents' interference. |
| — | c. The third one said: I would speak with my daughter as if she were a friend. We would try discussing it to see if it is a mature and responsible relationship and together we would reach an agreement as to what is best for her. |
| | 3. Three young women were talking about how they would feel if their families knew that they were maintaining sexual relations with their boyfriends. |
| — | a. The first one would see herself as belonging to a group of people who find no reason to restrict sexual relations to marriage. |
| —.54 | b. The second one would feel guilty for having acted against the principles that her parents have taught her. |
| +.37 | c. The third would consider that she has a right to live as she pleases without having to account for her behavior to anyone. |
| | 4. *In reference to women* . . . three different points of view follow: |
| — | a. Man and women should be partners. She should work if she wants to, and at the same time share the duties of the household with her husband. |

**Table 2 (Cont'd)**

| Factor Loading | Items |
|---|---|
| —.37 | b. A woman should be a man's complement. Thus, while he goes out to work, she should take care of the housework and the children. |
| +.52 | c. Women should try to achieve their own goals, without allowing their husbands or traditional ideas to limit them. |
| | 5. Three different opinions are given as to how decisions should be reached in a family: |
| | a. Each member of the family should give his/her opinion and among all reach an agreement. |
| +.43 | b. Each member of the family should make his own decision without consulting other members of the family. |
| —.36 | c. The father should make the decision for the whole family. |
| | 6. Three people were talking about *abortion*. |
| — | a. The first one said: Human beings should submit to natural occurring phenomena, such as pregnancy, rather than interfering with nature by means of an abortion. |
| — | b. The second one said: One has to live in harmony with nature. Natural methods should be used to prevent pregnancy so that the harmony between man and nature is not altered as it is with abortion. |
| +.47 | c. The third one said: Human beings are entitled to control their lives and abortion is one method of doing this. |

measure and some external, non-test variable. A basic hypothesis of the theoretical model is that individual acculturation is a linear process that progresses as a function of the length of time the person has been exposed to the host culture[4]. Consequently, the model predicts that individual differences in measured acculturation covary with the number of years of exposure to the host culture so that the longer an individual has been exposed to the language, customs, habits, norms, and values, of a cultural reference group, the higher that person's acculturation score will be. It is therefore possible to estimate directly the validity of the acculturation model by examining Hypothesis 1 regarding the relationship between scores on the scales and the length of time an individual has been exposed to a cultural reference group.

The sample used in this study is described above under the "Reliability" section as Sample 3. This sample consisted of 69 Cuban American high school students. The use of a high school sample, a population which in its natural setting is relatively homogeneous in terms of age, serves to control for age as an influence on the acculturation process. For this study, the behavioral and value acculturation scales, along with a biographical information sheet were administered to the subjects in Sample 3. In order to test Hypotheses 1, scores on the acculturation scales were correlated with the years in the United States for subjects in Sample 3.

The results of the analyses are as follows: The correlation between the criterion variable and the behavioral acculturation scale was .61 ($p < .002$). Scores for both scales were also correlated with years in U.S. separately for males and females. The correlation between the criterion variable and behavioral acculturation scale scores for males (N = 22) was .49 ($p < .001$) and for females (N = 47) was .59 ($p < .001$). Finally, the correlation between the criterion variable and value acculturation scale scores for males was .31 ($p < .005$) and for females was .38 ($p < .005$).

There are three important points to note about the results of these analyses. First, for this acculturating Cuban group, behavioral acculturation appears to be a linear function of the amount of time an individual has been exposed to the host culture. Second, behavioral acculturation appears to be linearly related to exposure to the host culture for both males and females. Third, the results further suggest that the process of value acculturation is not as predictable as the process of behavioral acculturation. It is not clear whether this lack of predictability is inherent in the process of value acculturation, or if it occurs as a result of weaknesses in the value acculturation scale.

Since Hypothesis 1 emphasizes that the relationship between acculturation and time in the U.S. is essentially a linear one, it was also desirable to ascertain if there were substantial non-linear relationships between behavioral acculturation and time in the U.S. For this purpose, the eta value of that relationship was computed. An eta of .76 was obtained, indicating that 57.7% of the variance between these variables can be accounted for when both linear and non-linear components are considered. Since fully 40.2% (i.e. r = .61) of the variance is contributed by the linear component of the relationship, then it may be inferred that only 17.5% is contributed by the non-linear components, suggesting, as hypothesized, that the relationship between behavioral acculturation and time in the U.S. is essentially linear.

### *Hypothesis 2*

Group differences are a second source of construct validational evidence. "If our understanding of a construct leads us to expect two groups to differ on the test, the expectation may be tested directly (Cronbach & Meehl, 1967, p. 76)." The second basic hypothesis of the acculturation model is that the rate of acculturation is a function of the person's age, with young people acculturating more rapidly than older individuals. Thus, the model predicts the emergence of intergenerational differences in measured acculturation as the process of acculturation proceeds.

To test this expectation, both Cuban American groups (Samples 1 & 3) were combined into one large sample (N = 334) and classified according to psychosocial stages (Newman & Newman, 1975). This classification yielded five psychosocial stages with the following age ranges: Early adolescence (13–17), later adolescence (18–22), early adulthood (23–30), middle adulthood (31–50), and later adulthood (51 +). Eleven subjects were missing age data. Table 3 presents the means, standard deviations, and $F$ ratios for both acculturation scales scores and the number of years in the U.S. by psychosocial stage. Since the previous study demonstrated that individual differences in measured acculturation are highly related to years in the U.S.., an analysis was conducted to determine the equivalency of the groups along this dimension. As can be seen from Table 3, differences in the average number of years in the U.S. across psychosocial stages are nonsignificant.

There are two additional points to note about the results of the analyses. First, an examination of Table 3 indicates that intergenerational differences in measured behavioral acculturation are highly significant, $F(4,319) + 47.01$, $p < .001$ and in the direction predicted by the model. The highest mean score was obtained by the early adolescents followed, in descending order, by each of the psychosocial stages. Second, the results presented in Table 3 indicate that the process of value acculturation is more complex than that of behavioral acculturation. Apparently value acculturation scale scores are more related to psychosocial stage than age *per se*. Within the Cuban-American sample, the highest endorsement of individuality was obtained by individuals at the stage of early adulthood. While the meaning of this finding is not clear, the results seem to support, overall, the implications of developmental psychosocial theory. According to psychosocial theory, the major developmental tasks of this period include establishing a marriage, starting a family, developing a career, and establishing a life style—all of which suggest that individuals at this stage should exhibit an individualistic orientation (Newman & Newman, 1975). The problem with using the relational value in an acculturation scale derives partially from the lack of homogeneity in values within the host culture used in this study (Gerth & Mills, 1953).

*Hypothesis 3*

Another type of group difference relevant for the validation of both the theoretical model and the scales is sex differences. The third hypoth-

**Table 3**
**Means, Standard Deviations, and F Ratios for the Acculturation Scales, and for Years in U.S. by Psychosocial Stage**

| | | Behavioral Acculturation | | Value Acculturation | | Years in U.S. | |
|---|---|---|---|---|---|---|---|
| | N | X | SD | X | SD | X | SD |
| Early Adolescence (13–17) | 90 | 68.0 | 16.9 | 49.1 | 7.5 | 9.2 | 4.7 |
| Later Adolescence (18–22) | 91 | 66.2 | 19.8 | 52.2 | 10.7 | 8.4 | 4.7 |
| Early Adulthood (23–30) | 32 | 63.2 | 13.7 | 56.5 | 12.1 | 8.7 | 4.1 |
| Middle Adulthood (31–50) | 67 | 54.9 | 16.3 | 48.7 | 8.3 | 9.1 | 4.9 |
| Later Adulthood (50 + ) | 43 | 27.7 | 16.2 | 42.99 | 8.9 | 8.1 | 5.5 |
| F Ratio | | 47.10**** | | 8.32** | | 0.547 | |

**$p < .01$
****$p < .0001$

esis of the model is that the rate of acculturation differs for males and females with the former acculturating more rapidly than the latter. To test this hypothesis the total Cuban-American samples (Samples 1 & 3) was broken down into a male (N = 127) and a female (N = 198) sample. Mean behavioral and value acculturational scores, were respectively, for males (N = 127) 63.0 (SD = 21.6) and 51.4 (SD = 11.0), and for females (N = 198), 56.2 (SD = 21.3) and 49.2 (SD = 9.1).

Since Hypotheses 1 and 2 demonstrated that individual differences in measured acculturation are related to both years in U.S. and age, separate analyses were conducted to determine the equivalency of males and females along these dimensions. For this purpose, the sample was further broken down by number of years in U.S. and age. The average number of years in the U.S. for the male and female samples, respectively, were 9.1 (SD = 5.1) and 8.5 (SD = 4.6). The $t$ test for these differences was nonsignificant, $t$ (313) = 1.10, $p < .27$. The average age for the male and female sample, respectively, were 27.1 (SD = 15.3) and 31.0 (SD = 18.4), and this difference achieved significance, $t$ (321) = 1.97, $p < .05$.

Since there were significant age differences between males and females, the test of Hypothesis 3 controlled for the effect of age. In order to control for the effect of age on the acculturation scores of males and females, analyses of covariance were conducted on the effect of sex on behavioral and value acculturation, when the effects of age were partialed out. Holding age constant, the difference in mean scores for the behavioral scale is significant, and in the predicted direction, $F$ (2,320) = 3.71, $p < .05$. These findings indicate that males acculturate along the behavioral dimension more rapidly than females, and further that this difference is independent of age and length of exposure to the host culture. Holding age constant, the difference in mean scores for value acculturation fails to reach significance, $F$ (2,320) = 2.46, $p < .11$, suggesting that males and females do not differ significantly in their rates of acculturation along a relational value dimension.

## Discussion

This paper describes a psychosocial model of acculturation and examines four hypotheses derived from the model. The model is intended to account for the occurrence of intergenerational/acculturational differences and its concomitant family disruption. According to this theoretical model, individual acculturation is a linear function of the amount of time a person has been exposed to the host culture (Hypothesis 1) and the rate at which the acculturation process takes place is a function of the age (Hypothesis 2) and sex (Hypothesis 3) of the individual. Further, two aspects of the process of acculturation itself can be differentiated (Hypothesis 4): the process as it takes place along an overt behavioral dimension of functioning, and the process as it takes place with respect to internalized value orientations. Evidence was presented that supported all four hypotheses regarding behavioral acculturation, but that supported only Hypotheses 1 and 4 for value acculturation.

In order to investigate the characteristics of the model of acculturation, two factorially derived acculturation scales were constructed. The behavioral scale was psychometrically sound and definitely superior to the value scale. The value scale, on the other hand, was psychometrically weak particularly regarding the parallel language forms. The behavioral scale is short, quick to administer (administration time is five to ten minutes), and can be used with populations from a wide range of socio-economic and educational levels. A simple scoring procedure facilitates its use in research as well as clinical settings. Finally, the apparent generalizability of the behaviors tapped by the items suggest that the scale can be modified to make it applicable for use with other immigrant groups. This modification can be achieved by deleting not more than five culturally inappropriate items and changing the anchors of the remaining items to correspond to the respective host and immigrant cultures. Used by itself the behavioral scale is the best available measure of acculturation.

Acculturation as conceptualized by the model sheds light on the essence of the process which leads to the development of the clinically observed intergenerational/acculturational differences in immigrant families. Specifically intergenerational/acculturational differences develop over time because younger members of the family acculturate more rapidly than older family members.

Historically, immigrant groups in the United States have been characterized by high levels of behavioral disorders and family disruption. It has been frequently suggested that these disorders occur as a consequence of certain aspects of the acculturation process. Based on the acculturation model described in this paper, it is proposed that the essential aspect of the acculturation process that leads to family disruption is the development of intergenerational/acculturational differences. Therefore, it is suggested that the etiology of family disruption among immigrant groups is related to the nature of the acculturation process. Thus, the psychosocial model of acculturation presented in this paper seems to be of heuristic value in understanding the etiology of widespread family disruption in immigrant populations.

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## NOTES

1. This work was supported by a NIDA Grant #H81 DA 01 696. Requests for reprints should be sent to José Szapocznik, 2121 S. W. 27 Ave., Miami FL 33145 USA.

2. Factor loading of each of the items on each of the four factors and related statistical information are available from the authors on request.

3. A computer program for use with the Statistical Package for the Social Sciences is available from the senior author to score both the behavioral and value acculturation scales.

4. Whereas the general process of acculturation occur as a linear function of time, individual differences also occur. The acculturation scales are designed to measure individual differences in the level of acculturation.

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# DELINQUENCY, SOCIAL CLASS AND SHAME-GUILT IN MEXICO[1]

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*The relationship of shame-guilt to social class and delinquency in Mexico was examined. Male adolescents from three socioeconomic levels (urban-migrant, urban-lower, and urban-middle) and three legal statuses (arrested but released, arrested and awaiting further processing, and nondelinquent) responded to a 12-item shame-guilt inventory and to an open-ended question concerning how their own deviant behavior could most effectively be curtailed. The main findings were: a) no association between delinquency and shame-guilt scale scores; b) a difference between the released and processed delinquents on the open-ended responses rated for shame-guilt orientation; c) a relationship between middle-class status and a stronger guilt-to-shame orientation on both criteria; and d) a low overall preference for external-shame sanctions. Results are discussed in relation to a possible shift in moral ideology in Mexico.*

*Se examina la relación entre las variables vergüenza-conciencia, clase social y delincuencia en México. Adolescentes varones de tres niveles socioeconómicos urbanos (migrante, bajo y medio) y de tres condiciones legales ("detenidos pero puestos en libertad," "detenidos y en espera por la continuación del proceso legal" y "no-detenidos") respondieron a un inventario de vergüenza-conciencia de 12 preguntas y a una pregunta abierta sobre cómo su propia conducta delincuente pudiera ser reducida más eficazmente. Los resultados principales fueron: (a) falta de relación entre delincuencia y calificaciones escaladas de vergüenza-conciencia; (b) una diferencia entre los delincuentes puestos en libertad y los procesados en cuanto a sus respuestas abiertas tasadas por su orientación vergüenza-conciencia; (c) una relación entre la condición social media y una orientación más fuerte de conciencia-a-vergüenza en ambos criterios; y (d) una baja preferencia total hacia sanciones vergonzosas externas. Los resultados son discutidos en relación a un cambio de ideología moral en México.*

Delinquents in the United States have been reported to possess less internalized guilt than normal controls (Bandura & Walters, 1959; Burkett & White, 1974; McCord & McCord, 1956). Further, middle-class American subjects have been found to manifest guilt reactions more frequently than their lower-class counterparts (Koenig, Sulzer, Newland & Sturgeon, 1973; Kohlberg, 1964). The generalizability of these findings to Mexican culture was tested in the present investigation.

Mexican youths were selected for study on the assumption that the shame reaction is more frequent and thus more accessible to study in this culture. Literary and anthropological accounts (Peristiany, 1966) suggest that shame reactions to transgression have historically been more prevalent in Latin than in Anglo-Saxon societies. In contrast to other Western European cultures, honor in the Spanish heritage has not been viewed so much as an enduring virtue of a person as reputation in the eyes of certain beholders. Within the shame ethic, the transgression that is kept private does not impugn a person's honor. In one of Calderon's great plays, *Secret Offense, Secret Honor,* a husband who executes his vengeance in secret thereby preserves his honor. And in the words of Lope de Vega, ". . . the greates offense, to the extent it is not known, is not an offense."

Anthropological studies and cultural materials from the seventeenth century indicate that the shame reaction was more salient in the Spanish upper than in the Spanish lower class. However, as has occurred in other Western cultures, the lower class over time adopted the upper class mores. Evidence for a shift toward a shame morality among the lower class can be found in Pitt-River's (1954) analysis of contemporary Spanish Andalucian peasant society and in Oscar Lewis' (1951) descrip- tion sof contemporary Mexican peasant life. Also, we might expect that the introduction of Western industry in the Spanish middle class accelerated its acceptance of a guilt morality.

The present study, part of a larger investigation of the psychosocial correlates of social deviance among Mexican youth, was designed to determine the utility of a shame-guilt formulation for understanding delinquency among lower- and middle-class adolescents. Two specific hypotheses were tested: a) shame (relative to guilt) reactions will be more frequent among Mexican delinquents than among roughly matched nondelinquent controls; and b) shame (relative to guilt) reactions will be most frequent in urban-migrant youth and least frequent in urban middle-class youth, with the shame level of urban lower-class subjects falling in between.

## Method

### *Subjects and Procedures*

Subjects were 135 male adolescents from metropolitan Monterrey, Nuevo León, México. Age varied from 14 to 18 years, the latter being legal maximum for defining an infractor in Nuevo León as a juvenile.[3]

Two delinquent groups of 45 subjects each were drawn from the registers of the two police corps that arrested juveniles in Monterrey—the City Police (Protección Ciudadana) and the State Police (La Judicial). Youths in the first group had been arrested for property or assault offenses and officially assigned to the District Attorney (Ministerio Público) for further processing. The second group comprised similarly arrested individuals officially released by the police.

Subjects in both delinquent subsamples were designated as belonging to the urban-migrant, urban lower-, or urban middle-class. The urban-lower versus urban-middle distinction was based on four criteria: family income, educational level, area of residence, and family amenities (e.g., electricity, plumbing). To be classified as urban-lower or urban-middle class, a subject had to meet each criterion at an appropriate level. This procedure resulted in the loss of only a handful of prospective subjects since in Monterrey the criterion variables are highly intercorrelated. Urban-migrant status was distinguished from urban-lower status on the basis of residence in the neighborhood designated as migrant (*paracaidista*).

Names appeared on the arrest list in the order of arrival at the police station. Sampling began with the most recent entry and extended backwards until 15 subjects had been recruited in each of the six research cells comprised of delinquents. Control subjects were randomly drawn from each neighborhood in which the delinquents resided. For example, if ten per cent of the delinquent lower-urban group came from neighborhood X, the interviewer would sample a house in the neighborhood which corresponded in appearance to the socioeconomic requirement dictated by the design. Only families having an adolescent boy between 14 and 18 without a police record were included. The relatively large families in México made this a more feasible recruitment procedure than it would be in the United States.

### *Instrument*

A 12-item shame versus guilt inventory was embedded in a larger questionnaire individually and orally administered to subjects by native Mexican interviewers. Field interviewing was supervised by an Instructor of Psychology at the Instituto Tecnológico de Estudios Superiores de Monterrey.[4] Devised by the first author, the measure taps the degree of orientation toward shame rather than guilt reactions to transgression.[5]

Each scale item poses a moral dilemma to which the subject reacts by choosing either a "shame" or "guilt" resolution. A shame response is scored 1, a guilt response is scored 0. A subject's score could thus range from 0–12, in the shame direction. An *alpha* reliability of .57 indicated adequate internal consistency for a newly developed measure. A sample item is:

If you were a father and wished that your daughters would preserve their virginity until they were married, what would be the best practice?

a) Always look after them and exercise surveillance over the places they frequent (shame).

b) Teach them to take care of themselves (guilt).

Another index of shame-guilt orientation was available for delinquent subjects, who were asked "how they feel a young man can stop being delinquent." Open-ended responses were coded according to whether some emphasis was given to internal mechanisms reflective of guilt or exclusive emphasis was placed on external modifications of the environment. Two raters achieved 92% agreement on the 63 protocols for which data were available.

## Results

Shame scores were examined using an analysis of variance with two three-level factors, delinquency status (arrested and processed delinquents, arrested but released delinquents, and nondelinquents) and social class (urban-migrant, urban-lower, and urban-middle). A main effect of socioeconomic status was found ($F = 7.49$, $df = 2/107$, $p < .001$). According to the Scheffe procedure for *post hoc* comparisons, the mean shame score for both the migrant-lower ($M = 2.69$) and urban-lower ($M = 2.32$) class groups was significantly higher than that for the middle-class group ($M = 1.15$) at the .01 and .05 confidence levels, respectively. There was no main effect of legal standing and no interaction.

The first of two chi square analyses performed on the open-ended responses of the delinquents indicated that their shame orientation was significantly associated with socioeconomic status ($X^2 = 8.33$, $df = 2$, $p < .05$).

## Discussion

The failure to find that guilt sanctions are less salient among delinquents than nondelinquents is incompatible with the results of several United States studies (Bandura & Walters, 1969; Burkett & White, 1974;

McCord & McCord, 1956). Two plausible explanations can be advanced to account for this divergence. The first is that personality factors in general may contribute a small proportion of the variance in adolescent deviance. The findings of several investigations conducted in the United States are compatible with this conclusion. For example, Glueck and Glueck (1950) found serious psychopathology among only 7% of their delinquents. Reiss (1952) offered a comparable figure of slightly more than 20%.

The second interpretation is that shame as well as guilt provide control over deviance in Mexican youth. If indeed the cumulative weight of the two kinds of moral sanctions rather than their differential salience is operative, then the measure—which yielded a score denoting the relative strength of one over the other—would require revision to accommodate this new possibility.

A difference between the processed and released delinquent groups was found on rated answers to the question, "How do you feel a young man can stop being a delinquent?" Delinquents forwarded for further processing may have been more serious offenders and thus contained a greater proportion of individuals with weakened internal consciences. Preliminary analyses of severity-of-offense data in fact support the notion that more serious offenders were overrepresented in the processed group.

The finding of a more internalized cognitive orientation among middle-class than lower-class individuals is consonant with a wealth of available data gathered in different cultures using various assessment techniques. Results of cross-cultural studies of field dependence-independence (Witkin & Berry, 1975) and internal-external control (Lefcourt, 1976) support the notion that the relative differentiation of middle-class life is more conducive to the adoption of an internalized personal ideology than is the relatively monolithic structure of lower-class existence.

The low degree of adherence to shame sanctions within our sample was unexpected and is open to alternative explanations. The pressure to please middle-class interviewers who may have been perceived as representatives of the legal authorities could have affected the responses elicited. However, if comparative studies including Western samples were to uphold this finding, then the inclination of Western investigators to regard México as promulgating a "shame-morality"—with all the excess authoritarian meaning that designation implies—may indeed come to be seen as an inaccurate stereotype.

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## FOOTNOTES

1. This investigation was supported by a grant from the Ford Foundation (Grant No. 740–0588).

2. Requests for reprints should be sent to: Arnold Meadow, Department of Psychiatry, University of California at Davis, School of Medicine, 2315 Stockton Boulevard, Sacramento, California 95817

3. In some Mexican states, the legal limit is 16 years of age.

4. We wish to thank Licenciada Myriam Chapa Garza for exceptional execution of a demanding task.

5. The complete inventory and information on its scale properties are available from the first author.

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# MANIFEST DREAM CONTENT OF UNDOCUMENTED MEXICAN IMMIGRANTS

Gloria Solís Brink & T. L. Brink

*Dreams give direct insights into the personality of the dreamer. Previous studies have examined Mexican dreams. Mexican dreamers express a phenomenal world in which they see themselves as helpless victims of forces beyond their control. The dreams of 57 undocumented immigrants from Mexico, presently living in the Chicago area, were examined and placed into five categories: nostalgia, family, American adjustment, fear of capture, and harvest of abundance. The dreams of these immigrants indicate that these dreamers (when compared with their counterparts in México) are more active and effective in coping with life's problems. A Frommian perspective is loosely adhered to.*

*Los sueños pueden dar indicaciones de la personalidad del soñador. Estudios previos han examinado sueños de los mexicanos. Soñadores mexicanos expresan su mundo fenomenológico en que ellos sienten que son víctimas de fuerzas externas. Los sujetos fueron 57 inmigrantes indocumentados de México, viviendo en Chicago. Sus sueños fueron examinados y categorizados por cinco temas: nostalgia, familia, ajuste, miedo de captura, y cosecha de abundancia. Los sueños indicaron que los soñadores en comparación con soñadores en México, son mas áctivos y eficaces en enfrentarse con los problemas de la vida. Los autores usan la perspectiva de Fromm al analizos los datos.*

Most schools of personality theory, psychoanalytic and humanistic, find the dream to be a valuable tool of investigation. The possibility of using dreams in cross-cultural studies has received widespread attention (von Grunebaum & Caillois, 1966; Grey & Kalsched, 1971). The authors' purpose is to investigate the manifest dream content of undocumented immigrants from México and to compare it with the established patterns and themes of dreams experienced by Mexicans in México. These differences in dream content can, in turn, lead to speculation about certain differences in personality type.

## Mexican Dream Themes and Personality Types

Fromm and Maccoby (1970) attempted to determine the social character of Mexicans living in a small village. The observations on dreams were quite brief, but were consistent with the general conclusions that peasants were selfish and pessimistic. One common theme that Fromm and Maccoby found was that of attack dreams in which the victim was unable to defend himself. Another theme was the motif of being worn down by burdens and also the prevalence of dirt, filth, and the dangers of infection from parasites. Sometimes the dreamers attempted to escape these conditions by flying, but usually this too was futile, with dreamers falling back into the mud. There are many dreams in which money or valuables are found. However, the dreamers usually interpret these dreams superstitiously, and fear they foretell bad fortune.

Fromm (1947) developed a character typology. The integrated, holistic state of mind which is rooted in being and doing is the *productive* personality. However, each culture's imperfect social orders tend to socialize its members in lower, non-productive personality types. The lowest is the *receptive* type where the goal is to obtain without having to give. The *exploitative* type is similar to the receptive, except that the individual is more active in meeting his needs, using force and cunning to exploit others. The *hoarding* type has the anal-retentive traits of storing up wealth, rigidity, orderliness, punctuality, frugality, and cleanliness. The *marketing* type is driven by the desire to get wealth by capitalistic manipulation, and is a product of the anomie and other-directedness of modern mass society. Fromm & Maccoby (1970) concluded that the villagers they studied could be classified into the lower three types, with the hoarding peasants best adapted to the demands of life and most likely to experience productive and loving relationships.

Millan (1966) studied over 4,000 dreams in Mexico and found that 60 per cent could be categorized according to one of four themes. First, the dreamer believes that he is unlucky and cannot attain the good life or find happiness. Second, despite every effort on the part of the dreamer, the failure or success is short-lived. Third, the dreamer's needs and desires are realized by magical means and the goals are attained effortlessly. Fourth, the dreamer's family has a dominant part in his life. Millan concluded that 80 per cent of the dreamers were receptive and/or exploitative.

## Procedure

Chicago has a half-million Hispanics, some of them are undocumented immigrants. Both of the authors taught English-as-a-Second-Language at parishes in Hispanic neighborhoods. This provided the necessary rapport for the students to confide some of their dreams and other experiences.

Ninety-eight dreams from 57 subjects were collected in interviews with one of the authors. Women, who made up slightly less than 60 per cent of the students, constituted 81 per cent of the dreamers and accounted for 87% of the dreams. This pattern of high female dreams recall has been noted elsewhere (Taub, 1971; Roll, Hinton, and Glazer, 1974). The collected dreams wre then coded and compared for similar themes or patterns, much in the way that Millan had done.

## Results

Between 70 and 80 per cent of the dreams collected can be classified in one or more of five categories: nostalgia, family, adjustment to the U.S., fear of being caught, and harvesting abundance. The remaining dreams do not form any distinct categories wherein obvious similarities can be detected in more than two dreams.

Nostalgia themes refer to a fascination with things distinctively Mexican or fondly recollected from the dreamer's past. At least 22 dreams contain some nostalgic aspects, and in 7 they predominate. One young woman who had come from northern México had a dream that her employer gave her an ashtray with a picture of a flowering cactus. Another subject reported a dream in which she experienced a recollection of girlhood chores and old family friends. Yet another was reminded of her strong attachment to Mexican culture by a very exciting dream of Pedro Infante singing to her.

Family dreams refer to consanguineous family members. These appeared in 38 dreams and predominated in 8. All of the latter dreams were recorded from female subjects. A frequent theme was fear of losing contact with the family back in México. There were several dreams about returning home and being unable to find the family or of losing letters in the mail.

Most adjustment to the U.S. dreams dealt with the everyday problems of learning how to survive in a big U.S. city: confusion over elevators, buses, trains, where to buy things, etc. These themes appeard in 28 dreams, but predominated in only 5.

Fear of capture refers to any dream in which the dreamer feels endangered or is chased by other persons or creatures. These themes were found in 17 dreams and predominated in 15. In a third of these cases, the dreamer is being pursued by "gangsters" who drive elegant cars, wear broad-brimmed hats, and use machine guns. Such dreams bespeak the long-lasting connection between Chicago and organized crime. More infrequently, the dreamers' attackers are young Blacks armed with knives.

The undocumented immigrants live in constant fear of being discovered and deported. In almost half of the fear of capture dreams, the dreamer is being pursued by the authorities. However, in no case did the dreamer have such great fears that effective coping was impossible. These dreamers never found themselves unable to move. They usually got away by running, jumping, flying, fighting, or lying. In fact, several dreams depicted a beligerent or flaunting attitude toward the authorities on the part of the dreamer.

Harvest dreams are those in which the dreamer attempts to gather money, valuables, or products which have been found. This theme occurred in 27 dreams and predominated in 20. While this is also a common dream in México, two key changes occurred in the dreams recorded by this study. First, in each of the 20 dreams in which money was found, it was U.S. money. Second, none of the dreamers surveyed expressed any superstitious fears about this type of dream. Many times the dreamers had to engage in a struggle to secure that which had been found. In only one case did the dreamer shrink from this task.

## Discussion and Conclusion

Comparing the dreams of Mexican immigrants to those of Mexicans who have remained in the homeland, a number of similarities or parallels can be seen. The peasants in the village dream about living in the dirt and the dangers of infection from parasites. Chicago's immigrants dream about the problems of living in a northern metropolis. Both groups dream about family, and seem somewhat preoccupied with familial duties. The biggest difference seems to be in the way undocumented immigrants respond to such situations as being chased or finding valuables. While the typical Mexican response is one of fearful passivity or futile efforts, the immigrants' response is direct, active, and usually effective. The authors suspect that this different in manifest dream content reflects (and perhaps also reinforces) a difference in personality, and suggest that the immigrants can be largely characterized as hoarding, marketing, or productive types. The receptive type was not to be found in this survey. It remains to be answered whether this is due to immigration being a selective process or a transformative one.

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# PASIVIDAD Y FALTA DE INVOLUCRACIÓN EN ESTUDIANTES

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*In a sample of 307 college students, characterized as academically and politically active or passive the differences in the level of involvement and relationships with the environment were analyzed. A question is posed whether activity—or passivity—are general tendencies in man's general behavior, or if they are restricted to certain areas. The results show a lesser participation and less intense relationship with the environment among passive students. Active students had a high involvement in every aspect of university life, showing a general tendency towards activity. Passives valued highly some external environmental stimuli which may indicate a stronger external control of their behavior.*

*Se analizan las diferencias en el grado de involucración de 307 estudiantes universitarios activos y pasivos en asuntos académicos y políticos, así como algunos tipos de relaciones con su medio. Se cuestiona si la actividad—o la pasividad—constituyen tendencias generales del individuo o si se restringen a ciertas áreas de su vida. Se utilizó una Escala de Actividad y Pasividad elaborada para estos fines y un cuestionario complementario. Se encontró en la mayoría de los casos, menor participación y relaciones menos intensas con el medio entre los estudiantes pasivos. La involucración de los activos no se restringió a un área, observándose una participación general en los diferentes aspectos de la vida universitaria. Existió una mayor valoración entre los pasivos ante algunos estímulos externos del medio lo que señala un mayor control externo de su conducta.*

El estudio de la actividad y la pasividad de los individuos produce un conocimiento importante sobre el comportamiento humano a nivel psicológico y social. Los estudiantes constituyen el potencial intelectual de una sociedad, cuyo desarrollo depende de la participación política y la creatividad científica y artística de sus hombres, estimulándose de manera importante durante la vida estudiantil.

La actividad constituye un rasqo de personalidad, caracterizado por un fuerte control interno de caracteres instintivos, de deseos y necesidades (Rapaport, 1962). Este se establece a través de las interacciones del individuo con el medio, particularmente el familiar, que al responder al niño en forma consistente y satisfactoria, le instaura un sentimiento de confianza básica en sí mismo y en su medio (Erickson, 1959, 1968). De esta forma el niño percibe un mundo seguro y gratificante, considerándose a si mismo un factor causal o importante de los eventos en que participa (Rotter, 1966), con la iniciativa para realizar actividades en forma independiente, y contando con una actitud de apertura al mundo (Schachtel, 1962), es decir, de involucración en él. El pasivo presenta un Yo débil que le impide tener un buen control interno, y una desconfianza básica que lo hace mantener una relación lejana con el medio. Muestra una actitud de espera por una satisfacción y protección a las necesidades propias (Fromm, 1971; Schachtel, 1962) y creencias en la influencia del destino y del medio en general para determinar su conducta (Rotter, 1966). En este caso no existe una involucración, el pasivo se resguarda en un medio en la medida que lo protege; su relación con el mundo no es automotivada, sino determinada por estímulos externos que le proporcionan un significado a su vida.

La mayoría de los estudios sobre esta dimensión, en estudiantes universitarios, han versado sobre la actividad política, especialmente entre los estudiantes estadounidenses. Se observó mayor control interno entre los activistas (Gore & Rotter, 1963; Abramovitz, 1973a) y mayores inclinaciones intelectuales (Heist, 1966; Trent & Craise, 1967; Watts & Whittaker, 1968; Abramovitz, 1973b). Se pudo observar una característica general de actividad en los estudiantes políticamente activos (Geller & Howard, 1972). Un estudio sobre estudiantes puertorriqueños encontró que los más activos académicamente estaban más socializados al ambiente universitario, en su aspecto académico, político y social (Vázquez, 1973).

Nuestra investigación ha partido del interés por conocer al estudiante universitario mexicano mediante instrumentos elaborados específicamente para ello y entender los aspectos que inciden en la pasividad. El presente trabajo se circunscribe a las siguientes preguntas:
a) ¿Existen diferencias en el grado de involucración en asuntos académicos y políticos, entre los activos y pasivos? b) ¿Son sus relaciones con el medio diferentes en intensidad? c) ¿Son la pasividad o la actividad tendencias generales del individuo o se restringen a ciertas áreas de su vida? Postulamos que los estudiantes pasivos, en las diferentes áreas, presentarían menor involucración y relaciones menos intensas que los activos. El estudiante activo en un área, participaría también en otras áreas, y el pasivo en un área lo sería también en las otras.

## Método

Se trabajó con una muestra polietápica al azar de 307 estudiantes de ambos sexos, pertenecientes a la facultad de Psicología de la Universidad Nacional Autónoma de México, con edades comprendidas entre los 18 y los 24 años. Correspondían al 2°., 6°. y 8°. semestres, los que consideramos respectivamente como niveles inicial, medio y terminal de la carrera.

Se elaboró una Escala de Actividad y Pasividad (E.A.P.) con base en el método de Thurstone de Intervalos Aparentemente Iguales para la Construcción de Escalas de actitudes (Edwards, 1957). Contamos con la colaboración de 34 jueces, 21 de ellos profesionales de diferentes disciplinas (Antropología, Sociología, Psicología Social y Educativa) dedicados todos al estudio de problemas estudiantiles, y 13 estudiantes del último semestre de Psicología, destacados por su actividad académica y/o política. La E.A.P. constó de cinco subescalas que sondeaban las siguientes áreas: familiar, individual-social, de trabajo, académica y política, contando cada una con 11 a 14 afirmaciones que representaban diferentes grados de actividad y pasividad, definidos en conductas concretas de interés, participación, toma de decisiones, iniciativa y conductas dirigidas a una meta. Las afirmaciones representaban conductas reales, vividas o muy conocidas por los estudiantes, y no situaciones ideales. El estudiante debía elegir tres afirmaciones de cada área que mejor lo describieran. Un cuestionario complementario sondeó aspectos socioeconómicos, intereses y tipo de actividades realizadas por los estudiantes.

Se utilizó un diseño de dos grupos al azar para cada área estudiada. Manejamos como variables independientes la actividad o pasividad académica, política y general. Se definió la actividad o la pasividad en las diferentes áreas, en función de las calificaciones de los sujetos en las subescalas de la E.A.P., señalando como activos a los sujetos con valores superiores a la media de los valores escalares de la subescala correspondiente, y pasivos a los estudiantes cuyos valores fueron iguales o inferiores a dicha media. El grado de actividad y pasividad general fue determinado por el promedio de las calificaciones en las cinco subescalas, distinguiendo al activo del pasivo en la misma forma con base en el promedio de las medias de las subescalas.

Manejamos las siguientes variables: a) nivel de involucración, medido a través de la frecuencia, marcada por los estudiantes, con la que realizan diversas actividades académicas y políticas; b) relaciones con los profesores, medidas a partir de la frecuencia con la que los estudiantes señalaron presentarlas; c) evaluación de algunos aspectos de la vida escolar (profesores y calificaciones) basada en la importancia que asignaron a dichos factores.

## Resultados

Utilizamos la prueba de $x^2$ para el análisis de los datos. Existió una mayor proporción de estudiantes activos en todas las áreas. En la mayoría de los casos se observó una participación menor de los pasivos.

Los estudiantes pasivos académica y políticament, así como pasivos en general, mostraron menor interés en los problemas sociopolíticos que los activos ($p < .01$). Se encontraron diferencias significativas en la frecuencia con la que los estudiantes señalaron leer sobre problemas sociales, políticos o económicos, siendo más alta entre los activos en las tres áreas (véase Tabla 1).

Los pasivos en las diferentes áreas mostraron una asistencia sumamente baja a reuniones políticas. Los activos políticamente y activos en general, asistían más a este tipo de reuniones ($p < .001$), aunque fue una baja proporción la que presentó esta actividad con mucha frecuencia. Un porcentaje ligeramente más alto de activos académicos que su contraparte pasiva, asistía más a reuniones políticas, aunque esta diferencia no alcanzó significancia estadística.

En la repartición de volantes y desplegados participó un porcentaje mayor de estudiantes activos políticamente y en general que los pasivos en estas áreas ($p < .05$). Es interesante notar que un porcentaje bastante alto de activos políticos indicó no realizar nunca esta actividad, lo que hablaría de diferentes tipos de actividad política.

Un alto porcentaje de estudiantes activos académicamente y activos en general asistía a actividades culturales con mayor frecuencia que los estudiantes pasivos ($p < .05$). En el área política las diferencias tuvieron una dirección semejante pero sin haber alcanzado significancia estabística (Véase Tabla 2).

Existió menor participación académica en los estudiantes pasivos, tanto académica como políticamente y en general ($p < .001$), observándose relaciones académicas más intensas entre los estudiantes activos y los profesores.

Por otro lado, los activos académicos y activos en general mostraron tener altas relaciones sociales con los profesores ($p < .001$), notándose cierta tendencia similar en los activos políticos, aunque sin alcanzar significancia estadística.

Los pasivos académicos señalaron dedicar menor tiempo a los estudios que su contraparte activa ($p < .01$). Este resultado comprensible, apoya la validez de la E.A.P., en cuanto a la clasificación

**TABLA 1**
**Diferencias entre Pasivos y Activos en Actividades Políticas.**

| Grupo | Frecuencias Alta | Media | Baja | Nula |
|---|---|---|---|---|
| | **Leer sobre problemas socioeconómicos** | | | |
| Académicos | | | | |
| Pasivos | 7.5% | 55.9% | 29.0% | 7.5% |
| Activos** | 22.5% | 54.5% | 17.8% | 5.2% |
| Políticos | | | | |
| Pasivos | 8.8% | 54.1% | 29.6% | 7.5% |
| Activos** | 27.9% | 58.8% | 12.2% | 4.1% |
| General | | | | |
| Pasivos | 4.5% | 52.3% | 31.8% | 11.4% |
| Activos** | 20.5% | 55.1% | 19.4% | 4.9% |
| | **Asistir a reuniones politicas** | | | |
| Académicos | | | | |
| Pasivos | 2.2% | 9.7% | 21.5% | 66.7% |
| Activos | 2.8% | 17.8% | 28.6% | 50.7% |
| Políticos | | | | |
| Pasivos | 1.9% | 5.7% | 21.4% | 71.1% |
| Activos** | 3.4% | 25.9% | 32.0% | 38.8% |
| General | | | | |
| Pasivos | 0.0% | 4.5% | 13.6% | 81.8% |
| Activos** | 3.8% | 17.5% | 28.5% | 51.0% |
| | **Repartir volantes** | | | |
| Académicos | | | | |
| Pasivos | 2.2% | 3.2% | 20.4% | 74.2% |
| Activos | 1.4% | 7.5% | 20.2% | 70.9% |
| Políticos | | | | |
| Pasivos | 1.3% | 1.3% | 13.8% | 83.6% |
| Activos** | 2.0% | 11.6% | 27.2% | 59.2% |
| General | | | | |
| Pasivos | 0.0% | 2.3% | 9.1% | 88.6% |
| Activos* | 1.9% | 7.2% | 22.1% | 68.8% |

Nota—Tamañno de las muestras.

| | | Pasivos | Activos |
|---|---|---|---|
| Académicos | N = | 93 | 214 |
| Políticos | N = | 160 | 147 |
| General | N = | 44 | 63 |

* $p < .05$
** $p < .01$

**TABLA 2**
**Diferencias entre Pasivos y Activos en Actividades Académicas**

| Grupo | Frecuencias Alta | Media | Baja |
|---|---|---|---|
| | **Asistir a Actividades Culturales** | | |
| Académicos | | | |
| Pasivos | 10.8% | 59.1% | 30.1% |
| Activos | 18.8% | 61.5% | 19.7% |
| Políticos | | | |
| Pasivos | 13.2% | 59.7% | 27.0% |
| Activos | 19.7% | 61.9% | 18.4% |
| General | | | |
| Pasivos | 2.3% | 56.8% | 40.9% |
| Activos* | 18.6% | 61.6% | 19.8% |
| | **Discutir con Profesores Temas Académicos** | | |
| Académicos | | | |
| Pasivos | 5.4% | 40.9% | 53.8% |
| Activos* | 16.4% | 60.1% | 23.5% |
| Políticos | | | |
| Pasivos | 10.1% | 47.2% | 42.8% |
| Activos* | 16.3% | 61.9% | 21.8% |
| General | | | |
| Pasivos | 2.3% | 31.8% | 65.9% |
| Activos* | 14.8% | 58.2% | 27.0% |
| | **Conversar con Profesores** | | |
| Académicos | | | |
| Pasivos | 11.8% | 51.6% | 36.6% |
| Activos* | 23.9% | 61.5% | 14.6% |
| Políticos | | | |
| Pasivos | 18.9% | 57.2% | 23.9% |
| Activos | 21.8% | 59.9% | 18.4% |
| General | | | |
| Pasivos | 6.8% | 50.0% | 43.2% |
| Activos | 22.8% | 59.7% | 17.5% |

Nota. Tamañno de las muestras.

| | | Pasivos | Activos |
|---|---|---|---|
| Académicos | N = | 93 | 214 |
| Políticos | N = | 160 | 147 |
| General | N = | 44 | 63 |

*$p < .001$

de activos y pasivos en el área académica. También pudo observarse que los pasivos políticos tendían a ser ligeramente menos estudiosos que los activos políticos, aunque sin distinguirse en forma significativa. Este resultado sin embargo, se opone a la idea respecto a una baja dedicación académica entre los activos políticos, cuya participación en la política no parecería ir en detrimento de su preparación académica.

Al evaluar algunos aspectos de su vida universitaria los pasivos académica y políticamente atribuyeron mayor valor a las calificaciones que su contraparte activa ($p < .03$). Aunque en los casos restantes no se obtuvieron diferencias estadísticamente significativas, se observó un efecto relativamente similar en la evaluación sobre la importancia que representaban los profesores.

## Discusión

En el presente estudio se confirmó la hipótesis respecto a una menor involucración en los estudiantes pasivos, con relaciones menos intensas ante el medio. Pensamos que esto puede deberse a una desconfianza básica de sí mismos y del mundo, que los hace temerosos de un mayor contacto con el medio (Cf. Erikson, 1968).

La actividad se manifestó como una tendencia general, participando los activos académicos en cuestiones políticas y los activos políticos en actividades académicas; es decir, la actividad en un área no excluyó la actividad en las otras. Esto confirma la segunda hipótesis postulada, amplía nuestros resultados anteriores (Fortes, 1975) y apoya los de Geller y Howard (1972).

Observamos una involucración de los estudiantes activos en los diferentes aspectos de la vida universitaria, aunque centrándose más en su área de actividad. Aunque los activos académicamente se distinguían de su contraparte pasiva en su interés por informarse sobre la problemática social y política, no participaban en forma distintiva en actividades que implicaran una mayor dedicación, como la asistencia a reuniones políticas, ni tampoco realizaban actividades concretas como el repartir volantes políticos. Sin embargo, en asuntos académicos su involucración fue muy alta. Un efecto similar se pudo observar entre los estudiantes activos políticamente y su participación en aspectos académicos. Esta última relación permite descartar la creencia común de que la actividad política y la académica se oponen, y apoyar los resultados de Heist (1966), Trent y Craise (1967), y Watts y Whitaker (1968), quienes observaron que los estudiantes activos políticamente se destacaban en su rendimiento escolar.

Por otra parte, pudimos observar una baja participación en actividades políticas concretas, entre los activos políticos, lo que podría señalar la existencia de diferentes tipos de actividad política, una intelectual y otra pragmática (Lomnitz, 1977), destacándose la necesidad de distinguirlos en el estudio de la actividad y la pasividad política.

Los estudiantes pasivos académica y políticamente atribuyeron un mayor valor a las calificaciones; consideramos estos datos como indicativos de una necesidad en el pasivo, por prenderse de estímulos externos que den un significado a su vida, lo que suponemos es debido a un control interno deficiente, como señala Rotter (1966) y a una desconfianza en sí mismo (Cf. Erikson, 1968). Aunque la evaluación sobre la importancia de los profesores no fue significativamente diferente entre activos y pasivos, se observó una tendencia entre estos últimos a atribuirles un mayor valor, lo que contrastó con las relaciones menos intensas que establecían con los profesores. Estos datos pueden indicar que los pasivos perciben a los profesores como objetos capaces de proporcionar una satisfacción (buenas calificaciones) y no como sujetos con quienes se pueden relacionar, mientras que los activos los perciben en forma contraria. Esto apoyaría también las ideas respecto al control interno deficiente y la desconfianza básica que presentan los pasivos. Estas suposiciones, empero, no pueden ser confirmadas en este trabajo.

En el presente estudio se encontró una mayor cantidad de estudiantes activos, salvo en el área política, la cual contó también con una participación muy alta. Este resultado tan satisfactorio, requiere de una revisión más delicada. Pensamos necesario realizar una distinción más fina entre los diferentes grados de actividad y pasividad, para lo cual recomendamos una clasificación de más de dos grupos. Pretendemos realizar una revisión y ampliación de la E.A.P. para proporcionar mayor información al clasificar no sólo diferentes grados de actividad y pasividad, sino también diferentes manifestaciones dentro de las áreas o tipos analizados.

Finalmente, los resultados obtenidos se restringen a estudiantes de Psicoloía que, como carrera humanística, cuenta con características propias que pueden diferir de los estudiantes que asisten a una carrera técnica. Se destaca por lo tanto la necesidad de realizar este estudio en diversas carreras, de manera de conocer al estudiante global y poder generalizar ampliamente los resultados.

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# THE EFFECTS OF BELIEF SIMILARITY AND ETHNICITY ON LIKING AND ATTRIBUTIONS FOR PERFORMANCE[1]

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*En esta investigación se estudiaron los siguentes factores: similitud con la person observada (Anglo o Chicano), y éxito o fracaso en una tarea. Se estudiaron los efectos de estos factores en la atracción por parte de sujetos Anglos hacia la persona observada y en el tipo de explicación del exito o el fracaso en la tarea. Se encontró que los sujetos muestran major simpatía hacia miembros de su propio grupo étnico que hacia miembros del otro grupo y que la simpatia fué mayor hacia las personas con actitudes semejantes a las del sujeto. Cuando se le preguntó al sujeto acerca de su opinión sobre el éxito o fracaso de la persona observada, se encontró que los sujetos tendieron a culpar al Chicano y a disculpar al Anglo del fracaso. En aquellos casos en que ambos grupos tuvieron éxito en la tarea no hubo diferencias en las explicaciones dadas por los sujetos. Se propone que este tipo de prejuicio puede ser importante en la formación de estereotipos étnicos.*

*Belief similarity, ethnicity and performance outcome (success or failure) were varied to determine their effects on liking and attributions. For liking it was found that similarity and outcome interacted such that dissimilar others were liked less than similar others only when they failed. It was also found that a member of the ethnic ingroup was liked more than an outgroup member. There was an ethnicity by outcome interaction on two of the attribution variables. The ethnic outgroup members were seen as less skilled and less competent than ingroup members when they failed, but not when they succeeded. The contribution of this ethnocentric attributional bias to stereotyping was discussed.*

Studies of the effects of race vs. belief similarity indicate that both variables affect attraction to others. The results of these studies generally show that as the potential contact situation becomes more intimate, race becomes more important as a determinant of liking (e.g., Triandis & Davis, 1965). For non-intimate contact situations belief similarity has often been found to be a more important determinant of liking than race (e.g., Rokeach, Smith & Evans, 1960; Hendrick, Bixenstein & Hawkins, 1971). Another body of research has found that liking for the other person is also affected by the person's performance on a task (e.g., Spence & Helmreich, 1972). One purpose of the present study was to determine whether performance on an achievement task interacts with race or belief similarity to affect liking.

A second purpose of this study was to determine the effects of ethnicity, belief similarity and competence on attributions for performance outcomes. A number of studies have shown that observers attribute an actor's success more internally than an actor's failure (e.g., Bar-tal & Frieze, 1976; Stephan & Woolridge, 1977). In these studies the actors and observers were usually from the same ethnic group. Two studies in which the effects of ethnicity on attributions have been examined indicate that this variable interacts with competence. Mann and Taylor (1974) found that French Canadians attributed the success of a French Canadian more to internal factors than the success of an English Canadian, while the opposite pattern was obtained when the behavior was unsuccessful. Stephan (1977) found that the positive behaviors of Anglos and Chicanos were generally attributed more to internal traits by ingroup than by outgroup members, while the opposite was true for negative behaviors. These studies suggest that ingroup members display an ethnocentric bias in making attributions. It is likely that this bias is mediated by liking, since liking has a similar effect on attributions for positive and negative behaviors (Regan, Straus & Fazio, 1974). Thus, because ingroup members are liked more than outgroup members they tend to be given more credit for success and to be blamed less for failure than outgroup members.

The effects of belief similarity on attributions for performance do not appear to have been investigated, although one recent study found that an identical performance on a verbal learning task was evaluated more favorably if the actor was similar to the observer than if he/she was dissimilar (Smith, Meadow & Sisk, 1970). It is possible that belief similarity has the same effect on attributions as ethnic similarity; that is, similar others are given more credit for positive behavior and blamed less for negative behavior than are dissimilar others. In the present experiment ethnicity, belief similarity and competence were varied factorially and their effects of liking and attributions were examined.

## Method

The subjects were 101 Anglo male undergraduates who participated in the study to partially fulfill an introductory psychology requirement at a University in the Southwest of the United States of America. Five subjects were eliminated from the analyses, two due to suspicion and three due to their failure to understand the post-experimental questionnaire.

An experimenter greeted the subjects and requested the subject's name and social security number. The subject was then told that the experiment was concerned with studying how people process and store observational information. After telling the subject that he would be observing a videotape of another subject, the experimenter explained that he would match the subject to the person the subject would be observing in such a way that they were highly similar or dissimilar in personality, attitudes and values. The matching was to be based on a variety of pretest screening instruments used in introductory psychology. After returning with a computer printout indicating whether the subject was similar or dissimilar to the person he would be observing the subject was shown a videotape of another person (an Anglo or a Chicano) working 30 verbal analogy problems. The experimenter said that most college students solved about 15 of the 30 problems; then he started the 25-minute tape. The person on the tape either succeeded (22 correct answers) or failed (7 correct answers). Upon conclusion of the tape, the experimenter returned with the post-experimental questionnaire.

On the post-experimental questionnaire the subjects were asked to indicate the degree to which the internal factors, skill and effort, and the external factors, task difficulty and luck (Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1971), contributed to the actor's performance. Each attribution dimension employed a 15-point scale running from hindered greatly (−7) to helped greatly (+7). The subjects were also asked how competent they thought the actor was on a 7-point Semantic Differential scale. Finally, they were asked two questions concerning how much they liked the actor. The liking questions employed 7-point scales. After completing the questionnaire, each subject was debriefed.

## Results

*Manipulation checks.* In order to examine the effects of the success/failure manipulation the observers were asked to indicate on a 7-point scale how well they thought the actors had done. The results provided strong support for the effects of the manipulation; the performance main

**TABLE 1**
**Liking and Attributions**

| | Similar | | | | Dissimilar | | | |
|---|---|---|---|---|---|---|---|---|
| | Anglo Actor | | Chicano Actor | | Anglo Actor | | Chicano Actor | |
| | Success | Failure | Success | Failure | Success | Failure | Success | Failure |
| Liking | 6.64 | 6.63 | 6.17 | 6.28 | 6.29 | 5.90 | 6.29 | 5.50 |
| Competence | 5.00 | 4.25 | 5.00 | 2.85 | 4.31 | 3.33 | 4.08 | 2.50 |
| Skill | 4.25 | −2.83 | 4.25 | −3.38 | 4.15 | −.17 | 3.75 | −3.42 |
| Effort | 4.58 | 1.42 | 4.17 | 2.08 | 3.46 | 1.25 | 3.75 | .58 |
| Task-Diff. | −2.42 | −5.75 | −4.08 | −5.85 | −2.92 | −5.50 | −2.92 | −6.00 |
| Luck | 3.00 | .92 | 2.92 | 1.31 | 3.08 | 2.25 | 2.58 | .42 |

effect was highly significant, $F(1, 90) = 171.8$, $p < .001$. The similarity manipulation was checked by asking the subjects to indicate on the post-experimental questionnaire whether they had been told that the person they had observed was similar or dissimilar to them. Every subject responded in accordance with the intended manipulation.

*Liking.* To measure liking, the responses to questions asking how much the subject liked the actor and how much he would enjoy working with the actor were combined (Table 1). For this composite index there was a performance by similarity interaction, $F(1, 90) = 4.05$, $p < .05$. Dissimilar actors were liked less than similar actors only when they failed. There was also a similarity main effect, $F(1,90) = 7.67$, $< .01$, in which similar actors were liked more than dissimilar actors. The ethnic group effect was marginally significant, $F(1,90) = 3.73$, $p < .06$; the Anglo actor was liked more than the Chicano actor. The performance main effect was also marginally significant, $F(1,90) = 2.91$, $p < .10$; successful actors were liked more than unsuccessful actors.

The pattern of the main effects for the liking composite was repeated for the subjects' evaluations of the actor's competence (Table 1). Similar actors were perceived as most competent, $F(1, 90) = 8.92$, $p < .01$, Anglos were perceived as most competent, $F(1,90) = 6.55$, $p < .05$, and successful actors were seen as most competent, $F(1,90) = 32.25$, $p < .01$. In addition, there was an ethnic group by outcome interaction which showed that Chicano actors were perceived as less competent than Anglos primarily when they failed, $F(1,90) = 4.38$, $p < .05$.

A performance main effect was obtained for each of the attribution measures. Successful peformances were perceived to have been caused by the actors' skill, $F(1,90) = 196.20$, $p < .01$, effort, $F(1,90) = 22.46$, $< .01$, and good luck, $F(1,90) = 7.73$, $p < .01$, while failing actors were perceived to have been hindered by task difficulty, $F(1,90) = 41.82$, $p < .01$. In addition, there was a significant ethnic group main effect for skill, $F(1,90) = 5.05$, $p < .05$. The Anglo actor was perceived to be more skilled than the Chicano actor. For skill there was also a marginally significant performance by ethnic group interaction, $F(1,90) = 3.30$, $p < .08$. This interaction was similar to the interaction for competence. The Chicano actor was perceived as less skilled than the Anglo actor primarily when he failed. Finally, there was a similarity by performance interaction on the skill dimension, $F(1,90) = 2.98$, $p < .09$, which was due to the fact that the failure of the dissimilar Anglo was attributed less to skill than the failure of other actors. None of the other effects from the attribution analyses were significant.

## Discussion

The results for liking suggest an important limitation to the similarity effect which has been so widely obtained (e.g., Byrne, 1971). In the present study it was found that dissimilar others were liked less than similar others only when they performed poorly. It appears that competence can compensate for the negative effects of dissimilarity on liking. This finding may have implications for situations in which dissimilar people engage in achievement tasks. Incompetent dissimilar others may become social isolates because they will be disliked. On the other hand, the fact that competent dissimilar others are liked as much as competent similar others suggests that in groups which contain dissimilar people successful experiences will encourage an increase in group cohesiveness due to the high level of interpersonal attraction (cf. Bakeman & Helmreich, 1975).

Subjects in the present experiment were ethnocentric. Actors from one's own ethnic group were liked better and perceived to be more skilled than those from a lower status ethnic outgroup. The subjects' apparent ethnocentrism had a significant impact on stable internal attributions for performance, but only when the actor failed. When the actor succeeded ethnicity did not affect attributions of competence or skill. In contrast, a failing actor from a lower status ethnic outgroup was regarded as less competent and less skilled than an ingroup actor who failed.

It is interesting to speculate how this tendency to make more negative attributions to outgroup members than to ingroup members may affect the stereotyping process. Stereotypes of ethnic outgroups consist of predominantly negative trait attributions. While it is usually suggested that stereotypes are learned through a variety of socialization processes such as modeling and reinforcement, it is possible that they can also result from biased perceptions of contemporary behavior. If the negative performance of ingroup actors does not adversely affect attributions, while the same behavior on the part of an outgroup member does, then the consequence will be that a negative trait label will have been generated as a description of the outgroup member, but not of the ingroup member. If this type of biased attribution is generalized to other outgroup members, the entire ethnic group may receive the negative trait label. This biased attribution process could be responsible for the creation of stereotypes even in the absence of the usual socialization experiences regarded as necessary to the learning of stereotypes.

The results of the present experiment differ somewhat from those obtained by Stephan (1977). In that experiment it was found that differences in attribution occurred more frequently for positive behaviors than for negative behavior; i.e., the positive behaviors of ingroup members were attributed more to dispositional factors than were the positive behaviors of outgroup members. However, the Anglo students in the Stephan (1977) study (in contrast to the Chicano students) did not differ in the use of dispositional attributions to explain either the positive or negative behaviors of Anglos and Chicanos. There are a number of differences between these studies, including the age of the subjects and the nature of the task for which attributions were made. Both studies reveal the operation of biases in the attribution process; the present study suggests that these biases may facilitate the formation of negative outgroup stereotypes, while the previous study suggested that there are attributional biases which may facilitate the formation of ethnocentric images of the ingroup. It remains for future research to examine the relationship of these biases to developmental changes and the nature of the tasks for which the attributions are made.

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## NOTE

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# THE PSYCHOTHERAPIST AND PSYCHOLOGICAL TESTING

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*In recent years the use of psychological tests has been minimized: (1) by those who make diagnoses as they go along and who believe that method supersedes the need for an initial diagnosis, (2) because tests are considered to be too mechanistic a way of dealing with people, (3) because information from tests may interfere with a person-to-person relationship, and (4) because test findings are often inaccurate and test reports often poorly written. Answers to these objections are offered, along with suggestions for useful issues to be covered in test analyses and reports.*

*En años recientes, el uso de tests psicológicos ha disminuido (1) por parte de aquellos que llegan a un diagnóstico "sobre la marcha" y creen que el método sobrepasa la necesidad de un diagnóstico inicial, (2) porque los tests se consideran como una forma muy mecanizada de interactuar con los individuos, (3) porque la información provista por los tests puede interferir en la relación persona-a-persona, y (4) porque los resultados de los tests son por lo general inexactos y los informes mal escritos. En este trabajo se presentan respuestas a estas objeciones junto con sugerencias de importantes temas que deben ser incluidos en el análisis de tests.*

Disillusionment in the 60's with the heady claims for psychological testing made in the 50's seems slowly to be giving way in the 70's to a reappraisal of the proper roles of psychological testing, and diagnosis in general, particularly its use for psychotherapists (Shectman and Shevrin, 1973; Appelbaum, 1976; Pruyser, 1976a, 1976b; Shectman, 1976). Some psychotherapists claim not to need psychological testing or diagnosis at all because they give the same therapy to all of their patients. This was true of, mostly, early psychoanalysts who pretty much accepted at face value the patient's request for psychoanalysis or considered the presentation of a symptom as such a request. They believed psychoanalysis was not only good for everybody, but all else was of little use. Since the basic model of psychoanalysis sounded sufficiently prescriptive as to dictate what was to be done, there was no point to screening the patient or learning about him prior to the treatment. Some learning theorists take a similar point of view. Their classic position is that relatively few principles are applicable more or less similarly with all patients. Some humanistic therapists believe that all that needs to be done is to allow patients' natural goodness to take over, which can be done through invariable methods. Not only are the patients, or clients, not screened, but they may not even be patients, or clients, just people who have selected themselves to a meeting, workshop, or weekend.

Doing the same things with all people usually leads to a degree of therapeutic error. Different people do require different things. This is often recognized intuitively by practitioners who find themselves modifying their techniques as they go along. The basic model of psychoanalysis, the paradigmatic behavior modification approach, and the stereotypical humanistic practices are probably more talked about and written about than they are practiced.

Some therapists recognize the need for diagnosis and the tailoring of their procedures to fit these diagnoses, but like to do this as they go along in the therapy rather than being equipped with such knowledge beforehand. To some extent I agree with that. If people change in the course of treatment, then you constantly have to "diagnose." But diagnosing as part of therapeutic reflectiveness, from moment to moment and for particular purposes, hardly contradicts doing so with reference to an original diagnostic formulation. Indeed, such an overall context, a kind of cognitive map, is helpful to many workers in their day-to-day "diagnosis" or understanding.

Many people say that diagnostic information by way of psychological tests includes a good deal of error because it is second-hand. The argument goes that if you want to understand a person you need to know that person's experience, that all we have to work with are the subjective thoughts and images of the person, and knowing these is the only way to know him. Diagnoses based on tests are filtered through other people, theoretical contexts, machineries, and tend therefore to miss the living, breathing person. Again, this is to some extent true, and certainly it is true with those testers who couch their inferences in abstract, theoretical terms. It is not, however, necessarily true. The trick in diagnosis, just as it is in therapy, is to integrate experience with ideas, insights with feelings.

Some people believe that information from others has to interfere with the clinical process, with the intuitive art of psychotherapy, which can only come about through the uncontaminated interaction between patient and therapist. For some people it probably does interfere, but that depends on the skill in this regard of the psychotherapist, on how he handles information. Psychotherapists vary as to how much and what kinds of information they can absorb without letting it interfere with their process of drawing inferences. Indeed, the psychotherapist is subject to "extraneous" information all the time, from his own personality, from daily events. He always has some kind of cognitive map or understanding, some hypotheses or assumptions. The therapeutic task is to use one's self as a means of identifying these influences rather than having one's clinical judgment distorted by them against one's will or out of one's awareness.

Some therapists say they would like to use testing, but are disappointed when they try to do so. Among their objections are that the tests are too speculative or too oracular, that the test reports are too mechanistic or too romantic. Finally, they acknowledge that the test findings may be on the right track, but the reports in which they are couched are unreadable (Appelbaum, 1970, 1972). Psychologists would do well to recognize the aptness of some of these objections, and seek to meet them substantively rather than only politically or argumentatively.

Sometimes overlooked issues having to do with suitability for psychotherapy, which implicitly offer hints about the strategy of psychotherapy, include: 1) The patient's personality and behavior from the adaptive point of view, what the patient gets from maintaining his difficulties. This is an answer to the objection that testing has only to do with pathology, an objection which only holds true if that is all a particular tester is inclined to see, or if that is the way he chooses to intepret what he sees. 2) What are the range of choices that the patient sees for himself, his underlying assumptions and premises about himself and others, the nature of his reality. 3) What predictions can be made as to what may happen in treatment under various conditions ("If such-and-such occurs, then we might expect so-and-so to happen"). In the Psychotherapy Research Project of The Menninger Foundation (Appelbaum, 1977), we were able to demonstrate that the tests were highly accurate in predicting some eventualities of the psychotherapy, as well as in offering an accurate global diagnostic impression and in making treatment recommendations based on this assessment. 4) The suitability of the patient for one or another kind of psychotherapy or psychotherapist, beyond simply offering comments about intelligence and conscious motivation. This would involve tracing out the relationships between variables or elements in the personality, as these impinge and influence psychotherapeutic decisions and processes.

As testers become more efficient, as they meet psychotherapists' obligations by aiding these psychotherapists, many of the objects to testing will melt away to be replaced by a wish for help from the psychologist. The best kind of proof of the usefulness of psychological testing for psychotherapists is to be useful. Indeed, it is, ultimately, the only proof.

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# ESCALA VERBAL WISC: ANÁLISE FATORIAL DE UMA AMOSTRA BRASILEIRA

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*A análise fatorial (Método dos fatores principais) da Escala Verbal WISC para crianças brasileiras pertencentes a três grupos de idade é apresentada. Os resultados são comparados com as equivalentes das amostragens portuguesa e americana e as saturaões relativas dos subtestes são examinadas para cada grupo de idade.*

*Results of the WISC verbal scale for three age groups of Brasilian children were factor analyzed using the method of principal factors. The results are compared with those of other samples and the relative saturations of the subtests examined in the three age groups.*

O presente estudo visou basicamente comparar a estrutura fatorial da adaptaão Brasileira da escala verbal WISC (Paine e Garcia, 1974) com a estrutura fatorial da escala verbal de outras amostras através da matriz de correlaões e analisar as variaões das saturaões relativas à escala verbal adaptada nos três grupos de idade, 7, 10 e 13 anos.

Resultados anteriores de estudos fatoriais realizados com a escala WISC (Cohen, 1959; Gault, 1954; Maxwell, 1959; Baumeister e Bartlett, 1962) permitem várias generalizaões com respeito à escala verbal. A variância pode, em grande proporção, ser explicada com base em dois fatores, geral (g) e verbal. A contribuição relativa desses fatores varia com o objeto da pesquisa (i.e., neuróticos, retardados). No entanto, em todos os casos, o fator geral é bastante representativo, sendo responsável por cerca de 50% da variáncia total e 2/3 da variáncia comum. O fator verbal aparece como 2°. em importáncia.

Gault (1954) e Maxwell (1959) afirmam que a estrutura fatorial não varia sistematicamente em função da idade. Embora conflitantes, os estudos de Cohen (1959) e Osborne (1965) in formam mudanças sistemáticas na estrutura fatorial. Os estudos de Osborne mostram diferenciação intelectual relativa à idade entre os indivíduos analisados refletindo-se a bem conhecida teoria de Garret (1946) de Desenvolvimento de Inteligência: "A inteligência abstrata e simbólica varia em sua organização com o aumento de idade de níveis unificades e habilidade geral a grupos fracamente organizados de habilidades ou fatores" (pag. 373). Por outro lado Cohen indica que com o aumento de idade a generalidade e a comunalidade do funcionamento intelectual aumentam.

## Método

A técnica de fatorização utilizada é o "Método dos Fatores Principais," uma variante da Análise das Componentes Principais, com aproximações de comunalidade na diagonal da matriz de ocrrelação. As estimativas iniciais adotadas reportamse aos coeficientes de determinação das variáveis envolvidas na análise.

A matriz de correlação foi computada a partir dos escores obtidos em 6 subtestes verbais (informação, compreensão, aritmética, similaridades, memória de dígitos, vocabulário) por crianças matriculadas em Instituições de Ensino da Guanabara. A versão e padronização de escala verbal WISC utilizada é a apresentada por Paine e Garcia (1974). Foram selecionadas ciranças de 3 grupos de idade com a seguinte estrutura amostral:

71 crianças de 7 anos
93 crianças de 10 anos
78 crianças de 13 anos

Em todos os grupos, 78% das crianças frequentaram escolas públicas e 22% escolas particulares, percentagens estas representativas das proporções da crianças matriculadas em escolas públicas e privadas no Estado da Guanabara segundo informações obtidas na Secretaria de Educação e Cultura de Guanabara em 1972. Como estatísticas sobre a composição sócio-econômica da população estudantil bem como informações sobre o número de alunos (tamanho da população) não eram disponíveis na época da pesquisa o Centro Brasileiro de Estudos Demográficos recomendou-nos a elaboração de uma amostragem aleatória com a utilização da lista dos educandários públicos e particulares do Estado. Após a seleção das escolas, as crianças foram escolhidas aleatoriamente em cada escola, no dia do teste. Todas as crianças testadas apresentavem variações de 90 dias para mais ou para menos relativamente à sua data de nascimento.

## Resultados

A Tabela 1 apresenta as matrizes de correlação obtidas com a aplicação dos subtestes da escala verbal WISC para a amostra Brasileira

**TABELA I**
**Matriz de Correlação de Subtestes**
**da Escala Verbal WISC**
**na Amostra Brasileira***

**Amostra de 71 crianças de 7 anos de Idade (1973)**

| Subtestes | | | | | | |
|---|---|---|---|---|---|---|
| Informação | 1.00 | | | | | |
| Compreensão | 50 | 1.00 | | | | |
| Aritmética | 72 | 39 | 1.00 | | | |
| Similaridades | 29 | 30 | 37 | 1.00 | | |
| Memórias de Digitos | 42 | 36 | 46 | 33 | 1.00 | |
| Vocabulário | 63 | 40 | 58 | 42 | 44 | 1.00 |

**Amostras de 93 Crianças de 10 Anos de Idade (1973)**

| Subtestes | | | | | | |
|---|---|---|---|---|---|---|
| Informação | 1.00 | | | | | |
| Compreensão | 40 | 1.00 | | | | |
| Aritmética | 69 | 45 | 1.00 | | | |
| Similaridades | 31 | 37 | 42 | 1.00 | | |
| Memória de Digitos | 50 | 37 | 57 | 31 | 1.00 | |
| Vocabulário | 63 | 59 | 64 | 48 | 55 | 1.00 |

**Amostras de 76 Crianças de 13 Anos de Idade (1973)**

| Subtestes | | | | | | |
|---|---|---|---|---|---|---|
| Informação | 1.00 | | | | | |
| Compreensão | 35 | 1.00 | | | | |
| Aritmética | 58 | 35 | 1.00 | | | |
| Similaridades | 59 | 31 | 58 | 1.00 | | |
| Memória de Digitos | 52 | 29 | 55 | 57 | 1.00 | |
| Vocabulário | 68 | 40 | 46 | 46 | 38 | 1.00 |

* O autor terá or prazer de remeter aos interessados as matrizes de correlação para as amostras portuguesas e americanas.

## TABELA II
## SATURAÇÃO PARA 3 GRUPOS DE IDADE

| Idade<br>Subtestes | Grupo | 7 Anos | 10 Anos | 13 Anos |
|---|---|---|---|---|
| Informação | | 81 | 75 | 81 |
| Compreensão | | 56 | 61 | 47 |
| Aritmética | | 79 | 81 | 73 |
| Similaridades | | 48 | 52 | 73 |
| Memória de Digitos | | 57 | 65 | 67 |
| Vocabulário | | 74 | 83 | 70 |

(Paine e Garcia, 1974). Essas matrizes de correlação são mais semelhantes ás matrizes de correlação da amostra original Norte-Americana do que à matriz obtida para a amostra Portuguesa (Marques, 1970).

A análise fatorial indicou somente um fator em todos os níveis de idade. Este fator é responsável por mais de 80% da comunalidade inicial. Assim, a escala verbal WISC tal como utilizada na populaçõa Brasileira representa um grupo unificado de subtestes medindo somente uma habilidade. Como todos os subtestes são de caráter estritamente verbal, foi denominado o fator revelado em nossa análise de fator de habilidade verbal. Outras análises fatoriais encontraram mais de um fator, por exemplo o estudo de Osborne (1967) que exigiu seis fatores para representar 75% da variancia na escala verbal.

A tabela 2 apresenta as saturações para todos os seis subtestes verbais para os 3 níveis de idade. Ao nível de 7 anos os subtestes caem em 3 grupos distintos; um altamente saturado composto de informação, aritmética e vocabulário, e um grupo de menor saturação composto de compreensão, similaridades e memória de dígitos. No entanto ao nível de 13 anos estas distinções não são aparentes com as saturações homogêneas com excessão de uma baixa saturação em compreensão.

Ao compararmos as saturações nos 3 níveis de idade nota-se que nossos resultados aproximam-se dos de Cohen, uma vez que a habilidade verbal de nossa amostra torna-se menos diferenciada e mais unificada com o aumento de idade.

A saturação relativamente baixa do subteste de Compreensão ao nível de 13 anos indica que uma outra habilidade, não estritamente verbal, é necessária a esses subtestes cujos itens demandam que o indivíduo pense logicamente e não que meramente reproduza conhecimento adquirido anteriormente.

Os subtestes de informação, aritmética e vocabulário apresentam a maior saturação em todos os níveis de idade, sendo então os melhores indicadores da habilidade verbal. Em consequência quando a exiguidade de tempo não permite aplicação da escala verbal completa, esses três subtestes poderiam ser usados como um índice da inteligência verbal.

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# ALGUNOS ASPECTOS DEL ANÁLISIS DE LA MEDICIÓN DEL TIEMPO DE REACCIÓN Y SU APLICACIÓN AL ESTUDIO DEL MÉTODO DE LOCI[1]

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*Se replicó el trabajo de Lea (1975) que trata sobre el estudio del método de Loci, partiendo de la medición y análisis del Tiempo de Reacción (T.R.). Se confirmó la hipótesis de que en ésta tarea intervienen tres procesos cuyas características son serialidad, aditividad e independencia. Además se presentan algunos aspectos del análisis del T.R. con respecto a la interpretación de los resultados basados en modelos predictivos, así como se discute la forma de solicitar la respuesta que influye fuertemente en los datos logrados.*

*This study is a replication of Lea's (1975) study on Loci's Method which is based on the measurement and analysis of Reaction Time. The data showed that three processes characterized by additivity, independence and sequentiality influence the task. The paper also presents some aspects of the analysis of reaction times regarding the interpretation of the data with predictive models. Finally an analysis is made of the ways in which an answer is requested which in turn influences the data.*

El análisis del Tiempo de Reacción (T.R.), como principal indicador para inferir procesos y etapas no observables en el ser humano, ha sido frecuente en los últimos años en la investigación sobre Psicología Cognitiva. Varios autores han presentado una revisión histórica, desde los orígenes hasta la actualidad, del desarrollo que ha tenido esta metodología (Woodworth, 1938; Taylor, 1976).

Donders (citado por Koster, 1969) en 1868, basado en el análisis del T.R., propuso un primer método para estudiar procesos internos; su método fue denominado de "Substracción." A pesar del fracaso en esa época, el método de análisis del T.R. para estudiar procesos mentales, ha sido renovado en los últimos años (Posner y Mitchell, 1967).

Una versión moderna del método de análisis del T.R. ha surgido del estudio de los procesos de búsqueda (scanning) visual, así como de las tareas de recuperación de listas memorizadas (Sternberg, 1966; Atkinson y Col., 1969). Sternberg (1969 b) propuso una nueva manera de analizar los componentes del T.R. que supera en gran medida lo señalado inicialmente por Donders. Su método de "Factor Aditivo" profundiza más en el análisis que se puede hacer del T.R. ya que nos permite el descubrimiento de etapas, la identificación de sus propiedades y la prueba, por separado, de la aditividad e independencia estocástica de la duración de las etapas en cuestión. La principal característica de éste, es la de buscar efectos no interactuantes de diversos factores experimentales sobre el promedio y varianza del T.R.

Taylor (1976), con su método de "Factores Interactuantes," derivado del de Sternberg, realiza un análisis con más consideraciones para estudiar fenómenos que implican tanto etapas seriales, como aquellas con duraciones interdependientes. Su método, para revelar patrones de interacciones significantes entre factores, se basa en experimentos factoriales; así también, menciona que las interacciones como eventos informativos son más importantes que las características para obtenerlas. Igualmente, enfatiza una distinción entre las conclusiones que pueden hacerse solamente de un análisis de los datos y aquellas que provienen de las inferencias hechas por medio del uso de modelos predictivos.

El propósito de este escrito es presentar un trabajo experimental que confirma un hallazgo, producto del análisis del T.R., en una tarea derivada del método de Loci. Este trabajo corrobora la propuesta hecha por Lea (1975) con respecto a la identificación de tres procesos independientes, seriales y aditivos que ocurren en este tipo de tareas, que involucran manejo de representaciones internas o imágenes. Los tres procesos son definidos de la siguiente manera: a) Encontrar (Find), cuando el sujeto ve u oye un lugar inicial, se lo representa inmediatamente antes de empezar la búsqueda; b) Mover (Move), cuando el sujeto, manteniendo la huella del número de lugares buscados, se traslada internamente de un lugar a otro, y c) Recuperar (Retrieve), se efectúa cuando la asociación lugar-estímulo es decodificada para recuperarse el nombre del estímulo.

## Método

### *Sujetos*

Participaron 12 estudiantes de la Facultad de Psicología de la Universidad Nacional Autónoma de México (UNAM), 6 mujeres y 6 hombres con quienes se trabajó individualmente. Fueron voluntarios y, por su colaboración, se les otorgó un punto en la calificación final de una materia. Hicieron su ejecución con la mano derecha que fue la dominante en todos.

*Aparatos y Material*

Se utilizó un taquistoscopio de tres canales Scientific Prototype modelo N–1000, un contador de tiempo digital modelo SHJ, con aproximación de milésimas de segundo, una grabadora Panasonic de cassettes, dos pares de audífonos LTD modelo SDH-8v y una llave de telégrafos. Como material se usaron 108 tarjetas de 16.5 cms. de largo por 12.7 cms. de ancho, en cuyo centro se ubicó el estímulo; un mapa de la UNAM, y fotografías de 12 lugares de la misma.

*Diseño.* Se manipularon 4 factores experimentales: los dos primeros fueron factores intersujetos: sexo, con dos niveles (Masculino, femenino) y dirección, también con dos niveles (positiva, negativa); mientras que los otros factores fueron intrasujetos: tipo de respuesta, que constó de tres niveles o situaciones (lugar, estímulo, estímulo y lugar) que se balancearon, y el cuarto factor N lugares a buscar, con tres niveles o condiciones (1,2,3) que fueron seleccionados al azar.

Los participantes fueron divididos en dos grupos, uno para responder en dirección positiva y otro en dirección negativa; en cada grupo el número de mujeres y hombres fue igual. En total, cada participante recibió 108 ensayos divididos en tres bloques de 36 ensayos correspondientes a cada situación; hubo descanso después de cada bloque, y la duración total de la sesión experimental fue aproximadamente de 45 minutos.

Cada participante pasó por una fase de entrenamiento de cuatro sesiones, con excepción de algunos a quienes se les dieron 2 ó 6 sesiones; posteriormente se les dio una sesión experimental.

La fase de entrenamiento consistió en mostrar al participante, en un mapa de la UNAM, 12 lugares cuyo nombre, localización y aspecto físico debió aprender. Todos los lugares forman parte del circuito interior escolar. Las primeras instrucciones que recibió el participante fueron: recorrer el circuito en las direcciones positiva negativa, reportar en orden los nombres de dichos lugares en ambas direcciones y reconocer la fotografía de cada uno de ellos. Enseguida se dieron al participante las siguientes indicaciones:

"Se te va a presentar una serie de tarjetas con el nombre de un lugar de la UNAM. Tu respuesta será decir el nombre del lugar que sigue inmediatamente en la dirección que se te indique. Al mismo tiempo de decir el nombre debes oprimir la tecla que está colocada abajo del aparato del lado derecho."

Antes de cada ensayo el participante escuchó un tono[2] que le avisó de la presentación del estímulo. La secuencia de cada uno de los ensayos fue: tono de aviso, estímulo de prueba, respuesta verbal-motora y registro del T.R. desde la presentación del estímulo de prueba hasta la respuesta. El tiempo entre ensayos fue aproximadamente de 5 segs., la duración de cada sesión fue de 10 min. Se presentaron 36 ensayos por sesión y al final se le informó al participante de sus respuestas y del tiempo promedio de todas ellas.

En estas sesiones se corrigió la anticipación o demora de la respuesta motora por medio de retroalimentación y se fijó el tiempo del período anterior, que fue de 250 mseg. Cuando los participantes alcanzaron un criterio establecido de un error o menos, en una sesión, y su T.R. fluctuó entre 1.5 y 2 seg., se les pasó a la sesión experimental.

En esta sesión se le pidió al participante que memorizara una lista de 12 estímulos, asociados a 12 lugares de la UNAM, utilizando el mnemónico de Loci. Después se le presentó una tarjeta con el nombre de un lugar y un número, el cual sirvió como punto de partida para dar su respuesta. Los criterios de respuesta fueron tres: (a) decir el nombre del lugar; (b) decir el nombre de la palabra asociada con ese lugar, y (c) decir tanto la palabra como el nombre del lugar. Al mismo tiempo de dar la respuesta verbal, el participante debió oprimir una tecla para parar el reloj. Los criterios y la dirección se indicaron por medio de tarjetas.

## Resultados

Por medio de dos programas de regresión múltiple se analizaron los datos se las respuestas correctas de todos los participantes. Los programas utilizados fueron procesados en la computadora Burroughs 6700 del Centro de Servicios de Cómputo de la UNAM, el primer programa fue tomado de Ward y Jennings (1973), y el otro del paquete de programas del mismo Centro. Al primero se le adaptó el modelo de Fennings y Newman (1974). Los efectos principales entre los factores experimentales presentaron diferencia significativa en el factor tipo de respuesta, $F(2,1129) = 72.76$, $P < .001$ y también en el factor lugares a buscar, $F(2,1129) = 174.80$, $P < .001$. En el factor dirección no hubo diferencia significativa, $F(1,1129) = .1494$, $P > .05$, ni tampoco en el factor sexo, $F(1,1129) = .8931$, $P > .05$. El porcentaje de error fue en total de 11.2%, siendo 2.9% para N = 1, 2.4% para N = 2 y 5.8% para N = 3. Con el segundo programa se obtuvieron las funciones de los tres tipos de respuesta, resultando que todas ellas incrementaron linealmente. Para

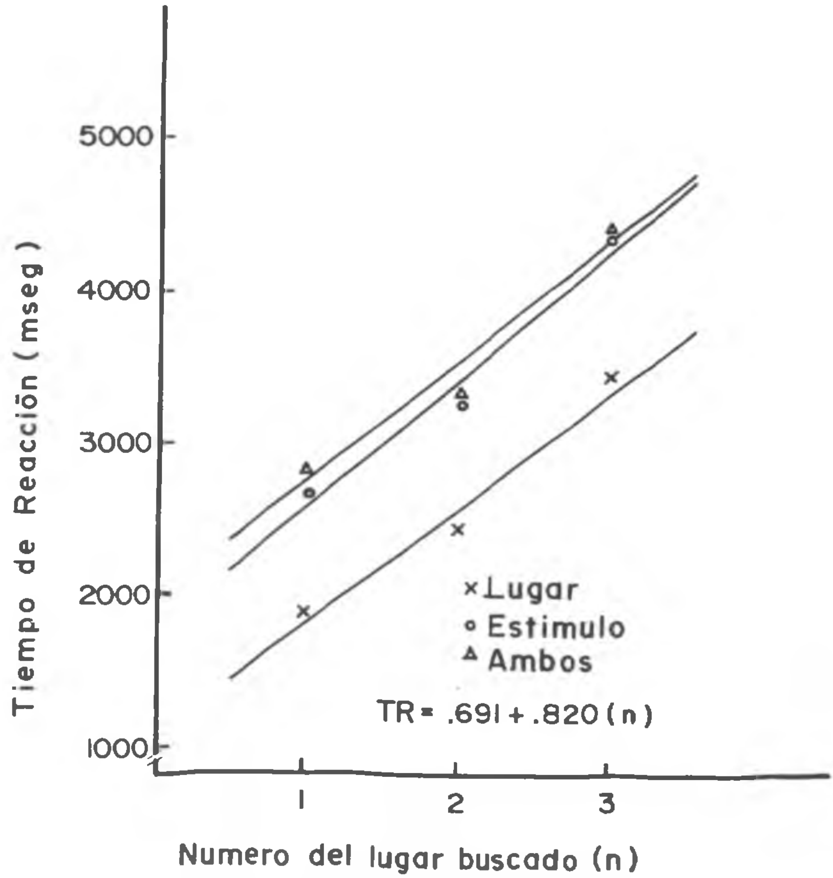


Figura 1. Se muestran las tres funciones pertenecientes a los tres tratamientos. En la ecuación, el primer valor representa la media de las intersecciones entre las funciones obtenidas y el segundo valor es el promedio de las pendientes relacionadas con el número de lugares buscados.

la situación I, la ecuación lineal fue Y = 1.021 + .781 (N); para la situación II, Y = 1.712 + 859 (N), y para la situación III, Y = 1.925 + .808 (N).

Como se muestra en la figura 1, las tres funciones son paralelas, esto fue constatado por una prueba entre pendientes cuyo effecto no fue significativo, $F(2{,}1143) = .1267$, $P < .05$. Este es un dato fundamental para confirmar la hipótesis de que los procesos son independientes, aditivos y seriales.

Un punto importante que se observa en los resultados obtenidos, es

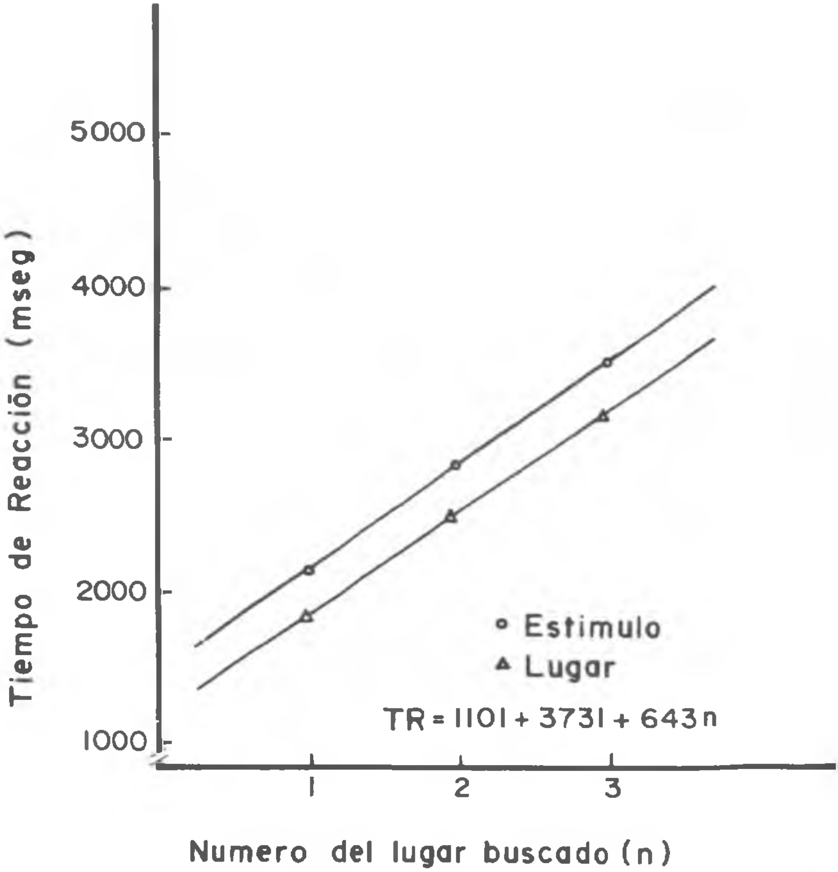


Figura 2. Experimento 1: Tiempos de reacción observados (puntos) y predichos (líneas) como una función del número de pasos en la búsqueda (n) para las condiciones de estímulo y lugar. La ecuación se ajustó por el modelo de mínimos cuadrados. (Tomado de Lea, 1975).

el concerniente al valor de los parámetros de las ecuaciones que, convertidos a una ecuación similar a la de Lea, son más altos. Si se comparan los valores de los parámetros de la ecuación de la figura 1 con los de la figura 2, se notará que éstos son superiores; esta elevación del T.R. posiblemente se debe al modo de presentación de los estímulos, lo cual puede ser descartado por los datos que se obtuvieron en un estudio no publicado (Mirón, 1975) en donde no se presentaron diferencias entre las modalidades de presentación (auditiva y visual); otra posibilidad, de mayor peso, es la referente al número de ensayos dados a los participantes, que en el caso de Lea fueron 252 y en éste fueron 108.

### Discusión

Los resultados obtenidos favorecen la postulación de tres procesos participantes en este tipo de tarea. La demostración de la ocurrencia de más de un proceso es una prueba en contra de la explicación asociativa, que sostiene que cuando una parte de la asociación se da, la otra ocurre inmediatamente sin que acontezca algo más.

Podría surgir una interrogante en términos de que el incremento lineal en las funciones obedece a la forma de solicitar la respuesta, por ejemplo, cuando un sujeto ve la tarjeta Rectoría + 3, el signo y el número lo dirigen a ejecutar una búsqueda ordenada; por lo tanto, debe esperarse un retardo mayor cuando se presenta + 3 que cuando es + 2 ó + 1, esto es, los resultados son consecuencia de las características demandantes del experimentador (Orne, 1962).

No estando conforme con esta justificación, se modificó la forma de solicitar la respuesta y se realizó el estudio con un participante. El cambio fue: en vez de presentarse en la tarjeta por ejemplo, Rectoría + 1, + 2 ó + 3, se presentó, en el primer caso, Rectoría-Biblioteca (dirección positiva); en el segundo, Rectoría-Filosofía, y en el tercero, Rectoría Derecho.

Analizando lo que el participante debe realizar, se esperaba que el resultado no fuese una función lineal ascendente, pues si un participante tiene presente el lugar de partida así como el lugar de llegada, entonces no necesita realizar la búsqueda interna de los lugares para dar su respuesta, concretándose, en tal caso, a actuar como en una tarea de pares asociados.

Relacionando esto con el modelo de tres procesos, el resultado apoya su postulación, puesto que al faltar la búsqueda interna, no se produce el proceso iterativo de Mover.

Después de aplicarse el análisis de regresión múltiple, se demonstró que, en efecto, no hay diferencia de T.R. entre las condiciones, habiéndose obtenido una función plana, $Y = 1.843 + .061\ (N)$, como se aprecia el valor de la pendiente es mínimo.

Este resultado, manifiesta que sí hay una repercusión del modo como se solicita la respuesta o, en forma general, de las demandas de la tarea, y sirve para criticar la interpretación tradicional hecha con respecto a las funciones obtenidas del T.R. con base en modelos predictivos, lo cual reviste un interés especial.

Por otra parte, es notable cómo mnemónicos practicados desde hace mucho tiempo en la memorización de información (Yates, 1966), producen resultados impresionantes (Ross y Lawrence, 1968). De los datos que porporcione la investigación de los mnemónicos, podremos crear métodos de estudio o estrategias de codificación para aplicarse a situaciones de aprendizaje, como es el caso de Atkinson (1975) en la adquisición de un segundo idioma.

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## NOTA

1. El trabajo presentado aquí es una parte de la Tésis de Licenciatura presentada por el autor en la Universidad National Autónoma de México. El autor agradece la valiosa ayuda del Dr. Luis Castro y la de Mariana Enríquez y Alberto Navarrete.

2. El intervalo entre la señal para prepararse y el estímulo es llamado período anterior. Como una regla general, una señal para prepararse es más efectiva si es constante y precede al estímulo de 250 a 500 milisegundos (Calfee, 1975).

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# THE HIERARCHY OF NEEDS THEORY: AN EVALUATION IN CHILE

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*This study presents an empirical evaluation of the need hierarchy concept (physiology, safety, social, esteem, self-actualization) of Abraham Maslow. The research is part of a project that aims to evaluate in Latin America concepts of administration developed outside the region, and to develop culturally specific theories of organizational behavior. The present study tests Maslow's theory, utilizing an original forced choice questionnaire in interviews with 1447 persons. The results show that human needs, with the exception of the esteem need, emerge in importance as predicted by the theory. The study suggests dignity is a more relevant concept than esteem and that dignity, rather than a need, is a cultural given. In this sense, dignity or the esteem-type does not serve as a motivator and the hierarchy is best seen as a progression of four needs. Finally, it is observed that more studies are needed which distinguish the interactions of theory, method, and culture in the field of administration.*

*Este estudio presenta una evaluación empírica del concepto de la jerarquía de necesidades (fisiológica, seguridad, social, estima, auto-actualización) de Abraham Maslow. La investigación es parte de un proyecto que tiene la intención de evaluar en América Latina los conceptos de administración desarrollados fuera de la región y desarrollar teorías culturales específicas del comportamiento organizacional. El presente estudio prueba la teoría de Maslow, utilizando un cuestionario original de electiones forzadas aplicado a 1447 personas. Los resultados muestran que las necesidades humanas, salvo la necesidad de estima, emergen en el órden de importancia predicho por la teoría. El estudio sugiere que dignidad es un concepto más relevante que estima y que dignidad, más que una necesidad, es un hecho cultural. En este sentido, dignidad o la necesidad de tipo de estima no sirve como un motivador y la jerarquía es vista mejor como una progresion de cuatro necesidades. Finalmente, se observa que se necesita más estudios que distingan las interacciones de la teoría, de la metodología, y de la cultura en el campo de administración.*

Of the many issues relevant to managers, the concept of motivation stands out as particularly important. In all organizations, managers seek to improve or maintain their employees' level of work effort and productivity. In management theory, motivation has been viewed from a variety of perspectives and human need theory was one of the earliest and is one of the most enduring ways of understanding motivation. Perhaps the most widely known and utilized concept of motivation is the hierarchical need theory of Abraham Maslow (1943). In spite of its popularity, empirical attempts to evaluate the hierarchical notion (Alderfer, 1969; Hall and Nougaim, 1968; Lawler and Suttle, 1973) have not supported the theory, although these studies have been plagued by methodological and conceptual problems.

Also, Maslow (1970) implied that the theory is universal, stating that "classification is in part an attempt to account for this unity behind the apparent diversity from culture to culture." Yet, only factor analytic and descriptive studies have been conducted outside of the U.S. (Clark and McCabe, 1972; Haire, Ghiselli, and Porter, 1966; Huizinga, 1970; Slocum, 1971). In this paper we shall provide an initial test of the Maslow need hierarchy theory in Chile. We shall briefly describe the theory, present the development of an instrument designed to measure the theory, and present and discuss results from a test utilizing a cross section of Chilean society.

Maslow's motivation theory states that there are five basic human needs. These are: (1) physiological, the problems of survival including food, shelter, and clothing; (2) safety, which involves physical well being, stability, prediction of the future, and order in one's life; (3) belongingness, which is the desire for social membership, family, and close friendships; (4) esteem, which includes both social esteem of prestige, recognition, and status and self-esteem involving autonomy and independence; (5) self-actualization, that implies fulfilling one's destiny, developing to the fullest one's abilities and interests.

This theory states that the needs form a hierarchy in the order presented above and that one need emerges only after the previous need is substantially fulfilled. Motivation thus has a dynamic or changing basis and may be different between people. Also it is not necessary that everyone experience all the needs. For example, not all people arrive at the stage of self-actualization. Finally, a satisfied need is not a motivator since unfulfilled needs alone can motivate behavior.

Maslow's theory was brought directly into administrative theory by Douglas MacGregor in his classic volume, *The Human Side of Enterprise* (1960). This has led to wide acceptance for Maslow's ideas, but empirical studies have generally failed to show support for the theory (Wahba and Bridwell, 1976). However, as observed by Schneider and Alderfer (1973), virtually all these studies have taken place inside organizations and the theory has not been tested with regard to many other aspects of life. Also, it has been suggested (Wahba and Bridwell, 1976) that a possible test of the theory might be made by relating dominant needs within groups of individuals experiencing differing degrees of "deprivation." Thus, greater degrees of deprivation would be associated with increasing dominance of "lower" needs.

In this study, many aspects of the individual's life are considered relevant to the expression of needs. Specifically, preferences in the selection of food, clothing, and housing are used to identify need states. Similarly, the preference given by persons for the family, for work, and aspirations for children are used to indicate needs. Finally, in this study, the level of socio-economic status is taken as a measure of "deprivation." It is assumed persons at different economic levels have different employment, educational, cultural, and social opportunities. It is argued that fewer opportunities are generally experienced as greater deprivation. Taking socio-economic status as the degree of "deprivation," we shall compare the order of need importance across six levels of socio-economic position. This cross-sectional study by socio-economic group includes a wide range of total of life conditions, from a high level of affluence and comfort to extreme poverty in which living conditions border on the impossible. This deprivation/domination proposition (Wahba and Bridwell, 1976) predicts that increasing degrees of deprivation (lower socio-economic position) will be accompanied by increasing importance of lower needs on the hierarchy.

## Method

*Instrument development.* In line with the view that the individual's total life space is applicable to the person's needs, a questionnaire was used to assess preferences concerning nutrition, clothing, friendship, family, children, housing, and work as expressions of personal needs. In addition to considering the total life situation of each individual, an effort was made to pose questions dealing with specific behaviors or preferences. In other words, concrete choices were sought in the instrument from which need states could be inferred.

The questionnaire utilized a two-item forced choice format. Representative items from this questionnaire which identify choices pertaining to the five needs and which are illustrative of the different areas of choice are the following:

—In the choice of your food, which of the following factors is more important to you:
  - the nutritive value (safety)
  - that which satisfies your hunger (physiological)

—You would have preferred that your parents:
  - had given you the means to develop your capacities (self-actualization)
  - had given you great care and understanding (love)

—If you were to choose a company for work, supposing that both companies paid the same salary, which would you prefer:
the company that enjoys great prestige (esteem)
the little-known company, but where your friends work (love)

A rating of the relative importance of each need was computed by adding one's election of items tied to a particular need against items representing each of the other needs. For example, a sum of the elections of the physiology items over items representing the other four Maslow needs indicates the relative strength or dominance of the physiology need.

Two way comparisons of all five needs calls for ten questions. The final questionnaire contained two questions concerning each two-need comparison for a total of twenty questions. A respondent's score for a particular need, then, could vary from a low of zero (in which case the person failed to select any item representing this particular need in any of the eight two-way elections where this need was represented) to a high of eight (in which the respondent elected the item representing this need in each of the comparisons).

The questionnaire items were subjected to a series of three face validity evaluations. Initial items were presented to a panel of four independent judges. Each judge was given a written description of the needs drawn from Maslow's 1943 article and was asked to classify the forty questionnaire items into the five need categories. The initial evaluation of items yielded an interjudge agreement of less than 50 percent due to the generality and ambiguity of many items. In order to improve the questionnaire's face validity, questions and items were revised and deleted, and additional questions were written. This procedure was repeated with three questionnaires and three separate panels. The final panel of three judges were in exact agreement on the classification of 90% or 36 of the 40 items.

Instrument reliability was tested in two ways from the actual study sample ($n = 1447$). First, chi square analyses were run between each two questions with items indicating the same needs. Seven of the ten comparisons were significantly related beyond the .05 level of significance. In a second test of reliability, need indices were formed by adding the number of items relevant to a particular need. Each index was split at the median and was then related to the marking of individual items. This item-total analysis proved significant for each of the eight item components within each of the five needs at the $p < .01$ level.

*Sample*

The Business School of Valparaíso had recently completed a 100% residential census of the Valparaíso-Viña de Mar area through home interviews. The approximate population of five hundred thousand persons was classified by household (including street address, immediate family size, number of persons living in the household) and approximate socioeconomic group. This was private information utilized by the school in drawing samples for research purposes. A sample of about 1500 households was drawn from this census information, seeking sample proportions similar to the socio-economic structure of the two-city area. Actual interviews were conducted at the residences of 1437 respondents. This procedure resulted in a study sample consisting of twenty-six percent male and seventy-four percent female. Seventy-two percent of the respondents were either presently working or had worked previously, and forty-six percent were forty years of age or less.

*Interviewers*

The interviewers for the study were 96 first year college students preparing for a Commercial Engineer degree. The school curriculum required participation in a non-credit research seminar of four hours a week for each of the first two school years. The Maslow study presented here was part of this requirement in the first year class. Interviewers were formed into work groups of four persons and each work group was assigned sixty-four specifically designated interviews to be completed in three weeks. For the first two weeks, interviewers worked primarily in pairs, and in the third week of the study interviews primarily were conducted individually.

Training of the interviewers took place over a three week period prior to the study in which the interviewers learned and discussed the theory and methodology of the study, were presented concepts of effective interviewing, participated as respondents in interviews using the instrument and held practice interviews with four to six respondents in the field.

*Demographic ratings*

Observations of the sex, age, and socio-economic group of all respondents were made by interviewers after each interview. An extensive written guideline for assessing socio-economic level had been developed, tested, and utilized in the prior research activities of the school. This guide gave a written description of each of seven socio-economic levels, designated A (high), B (lower high), $C_1$ (upper middle), $C_2$ (middle), $C_3$ (lower middle), D (upper low), and E (low), drawing primarily on the general economic level of the neighborhood, the economic nature of the specific residence, the self-presentation and occupation of the respondent and, if available, the nature of the internal residence. Descriptive statements of each of the seven economic levels had been developed and utilized through previous research at the school and, as previously mentioned, described a wide range of life conditions. Practice with observational ratings of socio-economic group took place concurrently with general interviewer training. In the actual study sample, seven percent of the respondents were classified as socio-economic group A and B (combined for analysis due to small samples in each); eleven percent were rated at $C_1$; eighteen percent at $C_2$; twenty-six percent at $C_3$; thirty percent at D; and eight percent at E.

## Results

The primary analysis of the study is a display of the importance of the five needs within each socio-economic group. In order to prepare this analysis, a total need distribution was formed for each socio-economic level and divided into high and low categories at the median. For each level, the median fell at the fourth scale point on the zero to eight importance scale. Thus, in the following data, the "low" group consists of persons scoring from 0 through 4 on a given need and the "high" group consists of persons scoring from 5 through 8. This division permits us to examine the percentage of persons with a "high" need for each of the needs by socio-economic group.

Table 1 presents this analysis. It shows, for example, that 75.9% of the persons in the lowest socio-economic level, group E, scored in the high group for the physiological need. In the safety need 65.2% scored high, while 56.2% scored high in love need, 2.7% in esteem need and 19.6% in self-actualization need. This socio-economic level, at the time of the study in this country, represents extreme poverty. It follows that, as a group, the physiological needs of food, clothing, housing, and work are of the highest relative importance to this group. This result is consistent with the need-hierarchy concept, as is the relative position of the safety and love needs, the next two needs to emerge in relative importance. Consistent with life conditions at this level, also, is the lower relative importance of the "higher" needs of esteem and self-actualization. Logically, these needs would not emerge under survival conditions. However, the weak position of the esteem need relative to the self-actualization need is not consistent with the theory and represents a divergence from the Maslow concept of pre-potency.

As one moves from lower to higher socio-economic levels in this table, "higher" order needs become stronger and the earlier, lower needs decline in importance. At socio-economic levels $C_3$, $C_2$, $C_1$ and AB, the love and self-actualization needs are strongest and needs of physiology and safety have declined relatively. Esteem need increases, but remains at a low level.

**TABLE 1**

**Percentage of Persons in Each Socio-Economic Group Residing in the High Part of all Needs Seen by Each Need***

| Socio-Economic Group | Need | | | | |
|---|---|---|---|---|---|
| | Physiological | Safety | Love | Esteem | Self Actualization |
| A/B | 23.0% (100) | 38.9% (95) | 76.4% (89) | 7.3% (96) | 53.5% (99) |
| $C_1$ | 41.1% (151) | 51.7% (151) | 75.5% (147) | 4.0% (152) | 32.0% (150) |
| $C_2$ | 52.0% (254) | 58.8% (250) | 62.1% (248) | 1.6% (251) | 39.4% (249) |
| $C_3$ | 60.0% (370) | 69.0% (364) | 61.9% (362) | 2.5% (362) | 23.0% (365) |
| D | 68.4% (415) | 72.0% (411) | 62.9% (410) | 0.5% (416) | 18.6% (408) |
| E | 75.9% (112) | 65.2% (112) | 56.2% (112) | 2.7% (112) | 19.6% (112) |

NOTE: Numbers in parentheses refer to number of respondents. Slight variations in the population within each socio-economic group are due to the dropping of a respondent on a need for which there was an incomplete response to questionnaire items.

*Friedman Two-way Analysis of Variance by Ranks for related samples: $X_r^2 = 118.9$, df = r, $p < .001$.

Overall, Table 1 presents data highly compatible with the need hierarchy concept: (1) lower level needs are relatively more important in lower socio-economic groups and become relatively less important in higher socio-economic groups, (2) with the exception of esteem need, the order of importance of needs within each socio-economic group is consistent with the order stated in the pre-potency theory, and (3) moving from socio-economic level to socio-economic level, the comparative order of emergence of the most important need follows the physiology-security-love sequence of the Maslow concept. The major difference of the data in relation to the theory is the weak relative position of esteem within each level.

*Analysis of esteem need.* A concurrent study of need theory was undertaken which shows a particular cultural meaning of the concept of esteem. This study was designed to understand more fully the meaning of the five needs to a population cross-section of 85 persons. It utilized open ended sentence completed questions that were then coded into the five need categories by two researchers. Fifteen of the sentences were phrased in a positive form, e.g., "I consider that the family (a house, work) is . . ." and three questions were placed in a negative form, "I consider that the family (my house, work) never should be . . ."

A content analysis of the categories allowed an examination of the specific terms people use to refer to esteem related items. It was found that the esteem-related items seemed tied to the concept of dignity (*dignidad*). The particular cultural connotation of this concept is that a person can walk on the street with pride—that he has not done anything that would shame his family or himself. This concept refers to the pride and integrity of a person, and is independent of one's social or material position. Specific terms of decent, correct, honest, humble, honorable, and dignified were taken to signify the dignity concept.

Examining the aggregate frequency of positive and negative items mentioned across the needs, it became apparent that "esteem" items were relatively more frequently mentioned to the negative questions than to the positive questions. Especially the items having to do with the absence of dignity—dishonor, indecency, incorrectness—were mentioned in response to the negative questions. For example, of all the items coded as physiological, 19.2% pertained to the negative questions; of the items coded as safety 10.2% pertained to the negative questions; 19.7% for love; 1.1% for self-actualization; and 47.8% for esteem. Overall, esteem items accounted for 13.1% of all the responses to positive items, but for 35.4% of all the responses to negative items. These data give rise to the suspicion that esteem centers heavily on the concept of dignity. It may also be that dignity is assumed to exist for each person, and is important only in the possibility of loss. This need may be the first to emerge in the hierarchy, or may simply be extra-hierarchical—a cultural given.

This emergent finding concerning the concept of dignity would appear to merit more direct and systematic study. In addition, one may be encouraged to seek for more values than those Maslow formulated which may be unique to Latin societies.

## Discussion

This study evaluated the Maslow hierarchy of needs theory in a Latin American nation, Chile. Cross-cultural testing is warranted due to the cultural universality of the theory implied by Maslow (1970) and because of a general desire to evaluate culturally sensitive administrative theory in order to develop concepts appropriate to various societies.

The results of the study showed substantial support for the pre-potency idea. Taking socio-economic group as a measure of "degree of deprivation," the progressive emergence of need importance was generally supportive of Maslow's theory. With the exception of the esteem need, the four needs of physiology, safety, love, and self-actualization emerged in relative importance specified by the theory when viewed by adjacent socio-economic levels.

It should be noted this test of the theory makes several key assumptions. First, it was assumed that people in lower socio-economic groups experience greater deprivation. In other words, deprivation was not measured directly and has only been inferred from a broad rating of economic level. Secondly, the actual theory of Maslow is a satisfaction/activation theory—a higher need becomes important only as a lower need is satisfied. The test of the theory in this study extrapolates this relationship into a deprivation/domination proposition. This says the less a need is satisfied (more deprived) the more important it is. This test is consistent with the theory, but is still an inference from it.

Given these qualifications, the theory is supported. The fact that previous evaluations have not been supportive of the theory could be due to a number of factors. First, the present study operationalized the needs across a broad spectrum of an individual's life. The authors are aware of no other studies that incorporate issues of family, housing, clothes, and food into the measurement of needs. Secondly, this study gained a cross section sample of the society and interviewed persons in the home. Other studies are conducted typically in a work organization and thus have a more homogenous sample. Finally, the values of the society are different. Maslow's theory may be appropriate for Chilean society, but not for the U.S. Any or all of these factors may be important.

Finally our attention was drawn to the role of the esteem need. In this study esteem was found to be the weakest Maslow need by a large margin. Upon further analysis of the meaning of this need, we suggested that (1) the concept of dignity is more appropriate than the concept of esteem, and (2) one is assumed to possess dignity and it therefore does not function as a motivator like the other Maslow needs may operate.

In one report of need construct validity in the U.S., esteem had the poorest validity of the Maslow needs (Schneider and Alderfer, 1973). In studies of the relationship of Maslow needs to two other scales of work motivation and job description, only the esteem need failed to correlate or it showed the weakest correlation to other constructs. These results, in addition to the outcomes presented here, may argue for a hierarchy of four needs. With this modification, Maslow would be judged substantially correct in the present context.

The results of this study are somewhat paradoxical: a theory developed in the U.S. but still not proven valid there, appears to have substantial support in a Latin American country. We believe previous studies of this theory have erred in considering too narrowly the relevant dimensions of an individual's life, and in utilizing too narrow a socio-economic range for study. However, in addition to these changes of measurement and sample, there are also changes in culture represented in the present study. Consequently, one still cannot even tentatively draw a conclusion about the universality of the theory of human needs. Only additional work designed to distinguish the effects of theory, method, and culture will allow us to progress toward a truer understanding of the parts of management theory that are general and the parts that are unique.

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# COMPRENSIÓN DE LECTURA EN CHINO SIN APOYO FONÉTICO

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*Esta investigación tuvo como objetivo explorar la comprensión de la lectura china a nivel introductorio por hispano-hablantes, mediante el entrenamiento en tareas visuales sin referentes fonéticos. Cuatro grupos independientes de 15 sujetos cada uno, pasaron por una fase de sensibilización, un pretest general, de una a cuatro fases de entrenamiento y un postest general. Las etapas de entrenamiento se dividieron en sub-fases de estudio (observación de reactivos) y de prueba (igualación a la muestra chino-español, español-chino). Todas las pruebas implicaban la lectura sin apoyo fonético. El nivel de la ejecución fue una función del número de fases de tratamiento recibidas, siendo el entrenamiento con oraciones ilustrativas el que produjo el mayor efecto. Estos resultados contradicen un postulado importante de la corriente audiolingual.*

*The aim of the present research was to examine reading comprehension of introductory chinese by spanish-speaking subjects by means of a visual training task which did not use phonetic referents. Four independent groups of 15 subjects each went through a sensibilization phase, a general pretest, from one to four training phases and a general postest. The training phases were comprised of study sub-phases (item observation) and test sub-phases (chinese-spanish or spanish-chinese matching to sample). All tests implied reading without phonetic support. Performance was a function of the number of training phases with the greatest effect occurring in the condition where training was given with illustrative sentences. These results contradict an important premise of the audiolingual school.*

Diversas investigaciones que han involucrado el proceso de transferencia mediada (Sidman, 1971; Sidman y Cresson, 1973; Sidman, Cresson y Willson, 1974; Saldaña, 1974), presentan evidencia experimental de que para el surgimiento de la "comprensión" de la lectura, no resulta suficiente entrenar a un sujeto en la igualación de palabras impresas idénticas. Tampoco basta el entrenamiento en la igualación de palabras auditivas (dictadas) con estímulos visuales (dibujos fotografías): "aprender equivalencias entre estímulos auditivos y visuales es lo menos útil y tal vez lo menos crítico para el desarrollo de la lectura con comprensión" (Sidman y Cresson, 1973, p. 515).

Adquirir la comprensión de la lectura sin el aprendizaje audio-oral, parece ser un objectivo no fácilmente alcanzable con el uso de materiales gráficos figurativos, dada la dificultad de representar de esta manera conceptos no objetuales (por ejemplo: "bien", "muy", etc.). Por ello, las palabras de las lenguas ideográficas resultan un material lingüístico idóneo para explorar el desarrollo de la lectura con comprensión sin la emisión de respuestas vocales.

Los ideogramas son unidades de significado, cuya estructura gráfica es independiente del sonido que les corresponde; su uso experimental permite aprovechar las equivalencias semánticas entre las palabras de las lenguas alfabéticas y las de las ideográficas, y además, controlar la posibilidad de que los elementos gráficos-fonéticos del repertorio previo de la lengua nativa del sujeto interfirieran en el desarrollo de la comprensión de la lectura.

El objetivo de esta investigación fue indagar la posibilidad de adquirir la "comprensión de la lectura" en lengua china por sujetos hispanohablantes, mediante el entrenamiento en tareas puramente visuales, sin ninguna referencia fonética al idioma chino.

Por otra parte, la "lectura oral" y la "comprensión de la lectura" (según las define Sidman, 1971) ¿podrían darse con elementos lingüísticos aislados o estructurados sintácticament? La contestación de las preguntas formuladas permitiría alcanzar los objetivos de esta investigación.

## Método

### *Sujetos*

60 sujetos universitarios que cursaban estudios profesionales en distintas carreras.

### *Materiales*

Se utilizaron tres juegos de materiales, cada uno consistente de 146 hojas de papel ordinario, color blanco, en dos tamaños (12.5 x 7.15 cms. y 20.0 x 12.5 cms.), en las cuales se fotocopiaron los "estímulos" (ideogramas dibujados por un especialista, para las fases de estudio/prueba) y, por separado, las traducciones manuscritas correspondientes en español. Se emplearon también hojas de registro para la cuantificación de aciertos/errores en las ejecuciones, considerando apartados específicos para las distintas etapas instruccionales (subdivididas en fases de estudio, prueba, repetición).

### Procedimiento

Se utilizó un diseño de 4 grupos independientes, de 15 sujetos cada uno. Previamente a la aplicación de los tratamientos, todos los sujetos pasaron por: a) Una fase de la "sensibilización", que implicó un procedimiento de igualación de tareas en dos subfases: discriminación/reconocimiento de diez números escritos en chino, y discriminación de diez ideogramas correspondientes a palabras (en este último caso, sin traducción al español). b) Un pretest general, consistente en dos oraciones escritas en chino, que el sujeto debía traducir oralmente al español. Los resultados de este pretest garantizaron la equivalencia de los grupos antes del tratamiento. Todos los sujetos pasaron por una fase de sensibilización, un pretest general, la etapa I de entrenamiento, y un postest general. La diferencia entre las condiciones es el número de etapas instruccionales (I, II, III, IV) que debería cursar cada grupo. Por ejemplo los sujetos del grupo 1 pasaron a postest general después de la etapa I, los del grupo 2 después de la etapa II, etc.

### Resultados

El análisis de varianza del porcentaje de aciertos en el Postest General ($F = 30.17$; gl. 3; $p < .001$) muestra que se puede adquirir la comprensión de la lectura en un nivel introductorio, con entrenamiento en clases de respuestas puramente visuales. Tal resultado se logró tanto para los sujetos del grupo tres, (cuya variante con respecto al dos era la introducción de una etapa con oraciones ilustrativas de la estructura sintáctica), como para los del grupo cuatro (implicó la adición de ensayos de práctica con oraciones semejantes a las de la etapa tres). El grupo tres obtuvo 90.0% de aciertos y el cuatro, 93.3%. Este efecto se observa muy limitadamente en los resultados de los grupos uno y dos, lo cual implica que no es suficiente un entrenamiento en los elementos constitutivos de las oraciones, para que éstas sean leídas correctamente.

Las diferencias entre los grupos uno y dos resultaron estadísticamente significativas, con respecto a las tareas realizadas en el Postest General, lo cual implica que el entrenamiento en la lectura de las combinaciones de ideogramas para formar plurales (etapa dos) es determinante para la adquisición de la lectura y que para la comprensión se necesita introducir oraciones ilustrativas que tipifiquen las estructuras gramaticales que se emplean.

### Discusión

El logro de la comprensión de la lectura sin entrenamiento audio-oral de la lengua china, contradice el postulado de la corriente audiolingüista que sostiene que dicho entrenamiento es indispensable para este proceso. Sin embargo, el uso de ideogramas evitó la interferencia de elementos gráficos y fonéticos del idioma de los sujetos hacia el aprendizaje del chino. Estos permitió recurrir exclusivamente a la asociación de componentes gráficos del chino con los lingüísticos del español (gráficos, fonéticos y semánticos) para lograr la traducción del chino al español y del español al chino. Los sujetos aprendieron una equivalencia semántica entre tales componentes, y el manejo de estructuras sintácticas del chino, a pesar de que no había equivalencia formal de uno a uno; ni de las relaciones sintácticas del español con las del chino, ni de los elementos lexicales de ambas lenguas.

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## Brief Reports

# COMPARACIÓN ENTRE ESCALAS CON ÍTEMS AGRUPADOS E ÍTEMS DISPERSOS AL AZAR EN EL INVENTARIO PUERTORRIQUEÑO DE INTERESES VOCACIONALES

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En la construcción de inventarios de intereses vocacionales o de personalidad ha sido costumbre el que los items que constituyen cada escala se dispersen en forma aleatoria a través de todo el inventario.

En el caso de los exámenes de aptitud y de aprovechamiento la práctica es diametralmente opuesta. Generalmente los items correspondientes a un área de conocimiento o que miden una particular aptitud mental se presentan juntos en el supuesto de que ésto define mejor la tarea del examinando lo que aumenta la validez de cada subprueba. Normalmente para valorar un inventario de intereses vocacionales o de personalidad se requiere que se utilice una mascarilla o clave por cada escala que tenga el inventario. Si se agrupan los items de cada escala, cada hoja de contestaciones podría quedar valorada en su totalidad de una sola vez. Para el orientador que no tiene acceso a una computadora la economía de tiempo es considerable. El presente estudio comparó las medias aritméticas y las correlaciones en escalas de items agrupados y dispersos.

### *Método*

Se seleccionaron 50 estudiantes que cursaban el segundo y tercer años de estudios universitarios. Se administraron dos formas del Inventario Puertorriqueño de Intereses Vocacionales (Cirino, 1970). Una de las formas contiene las 194 items del Inventario agrupadas por escalas. La otra continue los mismos 194 items distribuídos al azar. Para evitar efectos del orden de administración, a la mitad de los estudiantes se le administró primero una forma del IPIV y a la otra mitad se le administró primero la otra forma.

### *Resultados*

Se obtuvieron las medias aritméticas de hombres y mujeres en las trece escalas y se examinaron las diferencias utilizando una prueba de *t* para datos correlacionados. En el caso de los varones solamente en una escala hubo diferencia significativa. En el caso de las mujeres hubo cuatro escalas con diferencias significativas, la mayor de alrededor de dos puntos. Al correlacionar las dos formas de cada escala se obtuvo una correlación tan alta o más alta que la confiabilidad. Esto ocurrió con hombres y mujeres.

## *Conclusiones*

Las correlaciones indican que las escalas con items agrupados miden esencialmente lo mismo que las escalas con items al azar y que el agrupar los items por escalas tiene poco efecto sobre su media aritmética. Con base en este hecho se justificaría el agrupar los items de las escalas. Sin embargo, el tipo de escala que se utilice deberá ser normalizado ya que normas hechas con un tipo de escala podrían ser distintas a las normas de escalas de otro tipo. El estudio no examinó el efecto de la agrupación de items sobre la validez de la escala. Sin embargo, la similaridad de las medias aritméticas de uno y otro tipo de escala y la alta intercorrelación entre ellas sugieren que de haber algún efecto éste es probablemente mínimo.

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## Brief Reports

# EFEITO DO ANONIMATO NAS ATITUDES DE ALUNOS COM RELAÇÃO À ESCOLA, A SI MESMOS E AOS COLEGAS EM FUNÇÃO DE SEXO

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Tem sido discutido as vantagens e desvantagens de se pedir a identificação do sujeito no momento em que responde à uma escala de atítude. Assim, enquanto Butler (1973), Abrami *et al.* (1976) e Barna (1974) constataram que o fato de se identificar ou deixar de fazê-lo não influi no tipo de resposta, Horan *et al.* (1974) e Fuller (1974) observaram diferentes respostas entre indivíduos que se identificaram e outros que não o fizeram. Uma análise da bibliografia na área indica ainda que as amostras utilizadas tem sido indivíduos adultos, na sua maioria estudantes universitários, o que não permite a generalização dos resultados obtidos para amostras mais novas.

Com referência às atitudes com relação ao contexto escolar, os observadores têm indicado que a escola se caracteriza por uma pressão ao conformismo e uma posição passiva diante do professor, enfatizando comportamentos mais típicos do sexo feminino e desencorajando aqueles mais típicos do sexo masculino. Isto poderia resultar numa atitude mais negativa com relação à escola por parte de alunos de sexo masculino, que transpareceria em medidas de atitudes que não exigissem a identificação do sujeito.

Foi o objetivo do presente estudo investigar o efeito do sexo e da condição de identificação versus anonimato em respostas a escalas de atitudes com relação à situação escolar e auto-conceito. A amostra foi constituida por 118 alunos da 5a série da cidade de Brasília, dos quais 58 constituiram o grupo de "anônimos" e o restante o grupo que se identificou.

Três escalas foram utilizadas. A primeira avaliava a atitude do aluno para com a escola e a sua satisfação com a mesma. A segunda avaliava a maneira como o sujeito se via em termos de suas capacidades e da extensão de sentimentos positivos que tinha com relação a si mesmo. A terceira tinha como objetivo medir o relacionamento do aluna com os seus colegas.

Os resultados obtidos indicaram que apenas o fator sexo na primeira escala foi significativo, tendo os alunos do sexo femino uma atitude mais positiva com relação à escola de que os alunos do sexo masculino.

Várias hipóteses poderiam explicar as diferenças não-significativas entre as respostas dos alunos que se identificaram e aqueles que não o fizeram. Uma delas é que talvez os sujeitos do grupo "anônimo" realmente não se sentissem como tal, imaginando que, ao entregarem o instrumento respondido, um código fosse utilizado, permitindo uma posterior identificação. Também é possível que a identificação não constranja os alunos a expressar suas atitudes.

Comparando as atitudes com relação à escola, a si mesmos e aos colegas, observou-se que os maiores escores ocorreram com relação ao auto-conceito, e os menores com relação à escola. Especulou-se que diferentes resultados seriam obtidos em populações estudantis de nível sócio-econômico baixo, onde um auto-conceito mais negativo deve-se somar a atitudes mais negativas com relação à escola.

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