The Psychological Screening Inventory (PSI) is useful when there is limited time and resources in mental health settings and counseling centers for the screening of psychological maladjustments. However, few studies have provided norms for Mexican-Americans, and no known study has investigated PSI results as a function of acculturation level. This study investigated differences between Anglo- and Mexican-American college students on the PSI, controlling for the Mexican-Americans' acculturation level as acculturation has been shown to covary with psychosocial variables. Based on data from 105 Anglo-American and 107 Mexican-American college students, it was found that Anglo-American subjects had lower PSI scores on the Alienation and Defensiveness subscales and higher scores on the Social Nonconformity and Expression subscales than did Mexican-American subjects. However, when Anglo-Americans were compared with high acculturated Mexican-Americans, differences only on the Alienation subscale persisted between the two ethnic groups, suggesting acculturation level modifies PSI results. (Author/NB)
Mexican- and Anglo-American Differences on the Psychological Screening Inventory

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Abstract

This study investigated differences between Anglo- and Mexican-American college students on the Psychological Screening Inventory (PSI)—a brief personality instrument designed to detect persons who might benefit from more extensive evaluations in mental health settings. Furthermore, this study controlled for the Mexican-Americans' acculturation level as this variable has routinely been shown to covary with psychosocial variables. Based on data from 105 Anglo-American and 107 Mexican-American college students, it was found that Anglo-American subjects had lower PSI scores on the alienation and defensiveness subscales and higher scores on the social nonconformity and expression subscales than Mexican-American subjects. However, when Anglo-Americans were compared with high acculturated Mexican-Americans, differences only on the alienation subscale persisted between the two ethnic groups, suggesting acculturation level modifies PSI results. Implications of these findings are discussed.
Mexican- and Anglo-American Differences on the Psychological Screening Inventory

The Psychological Screening Inventory (PSI) (Lanyon, 1970) is useful for the screening of psychological maladjustment when faced with limited time and resources in mental health settings and counseling centers. This assessment device was primarily developed to detect persons who might benefit from a more extensive psychological evaluation. However, few studies have provided norms for Mexican-Americans (Vieweg & Hedlund, 1984) and no known study has investigated PSI results as a function of acculturation level (Negy & Woods, 1991). This study sought to address this deficiency and should prove useful in light of the fact that currently Mexican-Americans are the fastest growing minority population in the U.S. (Hunt, 1987). Moreover, it is expected that members from this ethnic group will increasingly become visible on university and college campuses across the nation where the PSI is frequently utilized in student counseling centers.

In addition to providing PSI norms against which other Hispanic-American populations may be compared, this study investigated performance differences on the PSI between Anglo- and Mexican-American college students. This research was primarily exploratory in nature. Because of this, it was suspected, but not formally hypothesized that the Anglo-American subjects would score low on the alienation, discomfort, and
defensiveness PSI subscales and high on the social nonconformity and expression subscales relative to the Mexican-American subjects.

The Mexican-Americans were expected to express more feelings of alienation and discomfort in response to their minority status. In addition to being minorities in society at large, they may feel uneasy in response to their attendance at a relatively conservative university (Texas A&M University) where approximately 90% of the 40,000-plus student population is comprised of Anglo-American students. Furthermore, the Mexican-Americans' relative performance on the remaining three subscales (social nonconformity, expression, and defensiveness) was expected in light of their presumed differential cultural background. Traditional Mexican culture has been described in the literature as encouraging members to be reserved and acquiescent (Chandler, 1979; Diaz-Guerrero, 1955) and to conform to conventionality and social norms (Montgomery & Orozco). This contrasts with Anglo-American culture which places a premium on individuality and opened expressiveness.

Method

Subjects

The subjects were 105 Anglo-American and 107 Mexican-American introductory psychology students (42 males, 63 females, and 53 males, 54 females, respectively) attending Texas A&M University. The means and standard deviations of the subjects'
ages were 13.74, 1.3, and 19.88, 2.4, respectively. Furthermore, all subjects participated to partially fulfill a course requirement.

Procedure

All subjects filled out a single page requesting the following demographic information pertaining to the subject: Sex, age, ethnic identity, generation level, marital status, religious preference, job title and description of the father's and mother's occupation, and highest level of education attained by the father and mother. These last two items on this page provided the information necessary to determine SES based on the Hollingshead Two Factor Index of Social Position (1958).

Secondly, the subjects filled out the Psychological Screening Inventory (PSI) (Lanyon, 1970, 1973), which is a self-report personality inventory containing 130 items to which subjects respond using a true-false format. It contains the following five subscales: 1) Alienation (Al)—this scale was originally designed to indicate the similarity of the respondent to hospitalized psychiatric patients. High alienation scores are associated with periodic anxieties, difficulties relating to others, and perhaps feelings of loneliness and isolation; 2) Social nonconformity (Sn)—this scale was originally designed to indicate the similarity of the respondent to incarcerated prisoners. High social nonconformity scores are associated with disregard for the law and social conventions, impulsivity and
acting-out behavior; 3) **Discomfort** (Di)--this scale was designed to assess the personality dimension of anxiety or perceived maladjustment. A high discomfort score suggests that the individual is susceptible to anxiety under stress, is socially ill-at-ease, and tends to get little enjoyment from life, while persons low on this scale are considered to perceive themselves as satisfied and subjectively comfortable, adaptable, and resourceful; 4) **Expression** (Ex)--this scale was designed to assess the personality dimensions of extroversion vs. introversion; and 5) **Defensiveness** (De)--this scale was designed to assess defensiveness; thus, a high score suggests that the individual wishes to be viewed in a favorable social light, while a low score suggests an abnormal degree of openness or readiness to admit undesirable traits.

Three of the five PSI subscales (Al, Sn, and De) were empirically developed, while the remaining two subscales (Di and Ex) were developed via construct-oriented procedures. Furthermore, the five subscales vary in internal consistency. Using the Kuder-Richardson formula, the following coefficients have been found: .62 (Al), .72 (Sn), .85 (Di), .75 (Ex), and .51 (De). The average test-retest reliability coefficient (ten days apart) for the subscales is .80. The PSI, too, has been validated by various means (for more information regarding the validation of the PSI, see Lanyon, 1970, 1973).

In addition to the demographic questionnaire and the PSI,
the Mexican-American subjects filled out the Acculturation Rating Scale for Mexican-Americans (ARSMA) (Cuellar, Harris, & Jasso, 1980). This is a 20 item scale, with each item being assigned a value ranging from one (very Mexican) to five (very Anglicized). It was scored in accordance with Cuellar, et al. (1980). Thus, a high score indicates that the individual is relatively more acculturated, and a low score indicates that the individual is relatively unacculturated. As Cuellar, et al. (1980) pointed out, the ARSMA obviously cannot tap all the components of acculturation, since acculturation is a multifaceted phenomenon composed of numerous dimensions. Nevertheless, a factor analysis showed that it identifies the following four factors: 1) language familiarity, usage, and preference; 2) ethnic identity and generation; 3) reading, writing, and cultural exposure; and 4) ethnic interaction. Furthermore, it was found to have an internal reliability of .88 as measured by coefficient alpha, and a test-retest reliability (one month apart) of .80. Moreover, the scale has been validated via several separate analyses and tests (for more information regarding the validation of the ARSMA, see Cuellar, et al., 1980).

It is worth noting that the notion of being bicultured may appear to suggest that the bicultured individual is fully functional in both the Anglo- and Mexican-American cultures. However, scoring within the bicultured range of the ARSMA indicates that the individual has some Anglo and some Mexican
characteristics and approximately equal exposure to the two cultures and does not indicate the individual's proficiency level within the two cultures.

All subjects were directed not to write their names on any of the questionnaires for anonymity purposes and were encouraged to answer the questions in a sincere manner. Although they were given unlimited time to complete the questionnaires, the task took no longer than 30 minutes to complete. After all questionnaire packets were turned in to the experimenter, the subjects were debriefed as to the nature of the study and the experimenter attempted to answer relevant questions.

Results

Part 1

The range of possible points on the ARSMA is from 20-100, which was then arbitrarily divided into three equal intervals (20-46, 47-73, and 74-100). Based on this division, Mexican-American subjects whose ARSMA scores were between 74-100 were classified as high acculturated (n = 37; 21 males, 16 females); subjects who scored between 47-73 were classified as bicultured (n = 70; 32 males, 38 females). No Mexican-American student in the present sample of subjects could be classified as low acculturated based on the criterion of the 20 to 46-points interval. Moreover, data from all 107 Mexican-American subjects were used in this part of the analysis.

To directly test for differences between Anglo- and Mexican-
American subjects on the PSI, a 2 X 2 between-subjects MANOVA was performed on the five subscales of the PSI (Al, Sn, Di, Ex, and De). The independent variables were ethnicity (Anglo- vs. Mexican-American) and sex.

Ethnicity had a significant effect on the PSI subscales, multivariate $F (5, 204) = 6.83, p = .0001$. Univariate tests revealed that Anglo-Americans scored lower than Mexican-Americans on the alienation and defensiveness subscales, $F (3, 208) = 17.36, p = .0001$, and $F (3, 208) = 5.05, p = .025$, respectively. Furthermore, it was found that Anglo-Americans scored higher than Mexican-Americans on the social nonconformity and expression subscales, $F (3, 208) = 6.56, p = .011$, and $F (3, 208) = 4.59, p = .033$, respectively. No difference between the two ethnic groups was found on the discomfort subscale, $F (3, 208) = 1.10$, n. s. Table 1 shows the means and standard deviations for the Anglo- and Mexican-American subjects on the five PSI subscales.

Sex was not associated with a significant effect on the PSI subscales, multivariate $F (5, 204) = 1.70$, n. s. Furthermore, no significant overall interaction effect was found between the two independent variables, ethnicity and sex, multivariate $F (5, 204) = 1.32$, n. s.
Part 2

In order to account for the effect of acculturation level on the PSI results presented in part 1, another 2 x 2 between-subjects MANOVA was performed on the five PSI subscales, but with data only from Anglo-American and high acculturated Mexican-American subjects. That is, this part of the analysis sought to determine whether similar PSI differences would be found between the two ethnic groups after the Anglo-American subjects had been matched with Mexican-American subjects presumably sharing relatively similar backgrounds. The independent variables were again, ethnicity (Anglo- vs. high acculturated Mexican-American) and sex.

The results from this part of the analysis revealed that ethnicity continued to have an effect on the PSI subscales, multivariate $F (5, 134) = 3.63, p = .004$. However, univariate tests indicated that only on the alienation subscale did the two ethnic groups score significantly different. As previously found, Anglo-American subjects scored lower than Mexican-American subjects on alienation, $F (3, 134) = 8.84, p = .003$. Although observation of the means show that the scores on the remaining four subscales were consistent in the direction of the findings in part 1, the differences were no longer statistically
Multivariate F tests were not significant for sex nor for an ethnicity X sex interaction ($F$ (3, 134) = 1.86, n. s., and $F$ (5, 134) = 1.62, n. s., respectively).

Discussion

This study provided results from Mexican-American college students' performance on the PSI. These data should prove useful as norms against which other Hispanic-American populations may be compared as most PSI norms have been derived primarily from Anglo-American subjects (Vieweg & Hedlung, 1984).

Additionally, differences between Anglo- and Mexican-Americans' performance on the PSI were investigated. As expected, Anglo-American subjects scored lower on the alienation and defensiveness subscales and higher on the social nonconformity and expression subscales than Mexican-American subjects. As previously indicated, these differences were anticipated in response to the two ethnic groups' dissimilar cultural backgrounds and to the Mexican-Americans possibly feeling disenfranchised from the mainstream.

Contrary to expectations, no difference between the two ethnic groups was found on the discomfort subscale. Given that this scale primarily estimates psychosocial maladjustment, the
absence of contrasting results can be viewed as positive information.

The second part of the analysis took acculturation into consideration by comparing Anglo-Americans only with Mexican-Americans determined to be highly acculturated based on their ARSMA scores. The results revealed that only on one subscale, alienation, did the two ethnic groups statistically differ. This finding suggests that acculturation level interacts as a modifying variable with performance on the PSI.

It deserves mentioning that the mean SES level of the Anglo-Americans who participated in this study was somewhat higher than the mean SES level of the Mexican-Americans (2.21 vs. 3.37, respectively--on a scale from one to five, where one indicates relatively high SES and five indicates relatively low SES). This SES disparity persisted when comparing the Anglo-Americans solely with the high acculturated Mexican-Americans (2.21 vs. 2.67, respectively). In a previous study by the authors (Negy, Woods, & Davidson, 1991) acculturation was found to moderately covary with SES ($r = .44$), suggesting that in addition to acculturation, SES was playing some role in distinguishing the two ethnic groups on the alienation, social nonconformity, expression, and defensiveness subscales.

Lastly, acculturation has been found to correlate with various psychosocial variables including, but not limited to, attitudes toward marriage (Tharp, Meadow, Lennhoff, &
Satterfield, 1968), alcohol usage (Neff, Hoppe, & Perea, 1987), cognitive style (Ramirez, Casteñeda, & Herold, 1974), and intelligence (Gonzales & Roll, 1985). It is not unreasonable to expect acculturation to covary with performance results on psychological inventories. The findings from the present study suggest the importance of assessing acculturation level of Hispanic-Americans when evaluating and testing members of this population prior to interpreting an individual's performance on the PSI as well as on other psychological instruments.
References


Table 1

Means and Standard Deviations for the Anglo- and Mexican-American subjects on the PSI Subscales

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Anglo-American</th>
<th>Mexican-American</th>
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<tbody>
<tr>
<td>PSI Subscale</td>
<td>M</td>
<td>SD</td>
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<tr>
<td>Al</td>
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<tr>
<td>Sn</td>
<td>50.86 9.65</td>
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<tr>
<td>Di</td>
<td>49.83 9.59</td>
<td>48.74 9.81</td>
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<tr>
<td>Ex</td>
<td>56.34 10.53</td>
<td>53.12 9.93</td>
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<tr>
<td>De</td>
<td>48.51 8.14</td>
<td>51.15 10.21</td>
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n = 105  
n = 107
Table 2

Means and Standard Deviations for Males and Females on the PSI subscales

<table>
<thead>
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<th>Females</th>
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<td></td>
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<td>57.31</td>
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<tr>
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<td>10.05</td>
<td>49.37</td>
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Anglo-Americans

sex

<table>
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<th>Females</th>
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<td>SD</td>
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<tr>
<td>De</td>
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<td>10.05</td>
<td>49.74</td>
<td>10.27</td>
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Table 3

Means and Standard Deviations for the Anglo- and high acculturated Mexican-American subjects on the PSI subscales

<table>
<thead>
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<th>PSI Subscale</th>
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<th>High Acculturated Mexican-Americans</th>
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<td>Sn</td>
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<tr>
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<td>55.52</td>
</tr>
<tr>
<td>De</td>
<td>48.51</td>
<td>50.88</td>
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n = 105

n = 37