Variables such as low socioeconomic level, educational level, marital status, employment status, sex role orientation, and level of acculturation have been cited as contributing to depression among Hispanic women. While most of these conclusions have been based on between-group comparisons against Anglo women, this study was conducted to examine within-group differences on depression, while controlling for ethnicity and gender. Relationship status, acculturation, domestic or work orientation, and degree of traditionality/nontraditionality with regard to sex-role orientation of women were explored in relationship to depressive symptomatology in two groups of Mexican American women: a clinically diagnosed depressed group (N=23) and a nondiagnosed group (N=46). Subjects completed either English or Spanish versions of the Center for Epidemiologic Studies Depression Scale, the Attitudes toward Women Scale, the Acculturation Rating Scale for Mexican-Americans, and a demographic questionnaire. The combined variables of degree of sex-role orientation, relationship status, and domestic/career orientation accounted for 33% of the variance in depressive symptomatology for the total sample. For the nondiagnosed group, attitudes toward women explained most of the variance while none of the variance was significantly explained for the depressed group. The results suggest that degree of sex role orientation may account for depressive symptomatology in Hispanic women not diagnosed for depression, but is insufficient in explaining depressive symptomatology in clinically depressed Hispanic women. (NB)
Explaining Depression Among Clinically Depressed and Nondiagnosed Hispanic Women

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Paper presented at the Annual Meeting of the American Psychological Association
San Francisco, August 1991

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Abstract

Relationship status, acculturation, domestic or work orientation, and degree of traditionality/nontraditionality with regard to sex-role orientation of women were explored in relationship to depressive symptomatology in two groups of Hispanic women: a clinically diagnosed depressed group and a nondiagnosed group. The combined variables of degree of sex-role orientation, relationship status and domestic/career orientation accounted for 33% of the variance in depressive symptomatology for the total sample. For the nondiagnosed group, attitudes toward women explained most of the variance while none of the variance was significantly explained for the depressed group. The results suggest that degree of sex role orientation may account for depressive symptomatology in Hispanic women not diagnosed for depression, but is insufficient in explaining depressive symptomatology in clinically depressed Hispanic women. Future research should consider alternative variables and hypotheses for explaining the depressive symptomatology in clinically depressed Hispanic women.
Numerous research studies have found that the rate of depression for women exceeds that of men (Landrine, 1988; Vernon & Roberts, 1982; Weissman & Klerman, 1977). Rates of depression have been consistently higher for Hispanic women than for Hispanic men with rates reported as high as 41.5% (Vega, Kolodny, Valle, & Hough, 1986) and 64% (Salgado de Snyder, 1987) among Mexican American immigrant women.

According to Gibson (1983), Hispanic women are highly susceptible to depression as they fall into several high risk categories: a disproportionate number are poor (Belle, 1984; Hall, Williams & Greenburg, 1985), they are women, and they are members of an ethnic minority group. Other prevalent characteristics of Hispanic women that have been correlated with depression are low educational level, participation in the labor force (Bean, Curtis & Marcum, 1977; Bureau of Census, 1885; Ortiz & Cooney, 1985; Krause & Markides, 1985), marital status, and whether employment is voluntary (Keith & Schafer, 1982).

Although much of the current research points to sex role orientation of Hispanics to explain depression (e.g., Keith & Schafer, 1982; Weissman & Klerman, 1977; Canino, Rubio-Stipec, Shrout, & Bravo, 1987), the
popular belief that Hispanic families rigidly adhere to traditional sex roles is being challenged (Vasques-Nuttall, Romero-Garcia & DeLeon, 1987). Furthermore, Landrine (1988), in her review of depression and gender role relationships, indicated that socioeconomic level, marital status, and ethnicity are actually confounds of gender role and depression.

Pressures of having to conform to mainstream society and a white middle-class white male value (Pelerson, Draguns, Lonner & Trimble, 1989) have also been found in relation to depressive symptomatology (Salgado de Snyder, 1987). Occurring either at an individual or group level (Casas & Vasquez, 1987), acculturation is a dynamic process whereby cultural patterns, behaviors, or values are modified by continued contact with another group (Olmedo, 1979; Ponterotto, 1987). In light of this, Amaro and Russo (1987) caution that any research on Hispanic populations should include level of acculturation.

Variables such as low socioeconomic level, educational level, marital status, employment status, sex role orientation, and level of acculturation have been cited as contributing to depression among Hispanic women. However, these conclusions have been reached
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primarily based on between-group comparisons against Anglo women. The purpose of this study was to examine within-group differences on depression, while controlling for ethnicity and gender. The variance in depressive symptomatology was explored in Mexican American women, with one group clinically diagnosed for depression and the other a nondiagnosed sample. Acculturation level, sex role attitudes, income, domestic/career orientation, and relationship status were studied to further elucidate the significance of these variables. The relationship among these variables was explored.

Method

Subjects.

Following approval of the institutional review board, women of Mexican ancestry (18 years or older) with a primary diagnosis of major depression or dysthymic disorder (n=23) were recruited from an outpatient mental health center. This facility provides services to low-income Hispanic clients, residing in a large southwestern city. A comparison group of women not diagnosed as depressed (n=46) was recruited from a low income high school district and primary health care clinic in the same general area.
Instruments.

All measures administered were available in Spanish or English. Several instruments not available in Spanish were translated into English. Two independent translators used blind back-translations to ensure language and meaning reliability. Ambiguous and unclear items were clarified by consensus.

**CES-D** The brief Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was used to detect recent depressive symptomatology. The CES-D consists of 20 four-point items ranging from rarely to most or all of the time. Scores could range from zero to 60, with a score above 16 indicative of depressive symptomatology. High levels of internal consistency with coefficient alpha ($\alpha=.85$), and split-half correlations ($\alpha=.87$) (Radloff, 1977), have been established for Anglos, African-Americans, and Mexican-Americans. Discriminant validity has been determined between the CES-D and other mental health measures (Radloff & Locke, 1986). A Spanish translation of the CES-D, used with a Spanish-speaking sample, exhibited similar properties (Radloff & Locke, 1986).

**Attitudes toward Women Scale.** A short version of the Attitudes toward Women Scale (AWS; Spence,
Helmreich & Stapp, 1974) was used to measure attitudes toward the rights and roles of women in contemporary society (sex role orientation). The scale consists of 15 items, with four response alternatives ranging from agree strongly to disagree strongly. The overall score indicates degree of traditionality/nontraditionality with regard to sex-role orientation. Higher scores indicate a greater amount of nontraditionality. This short version has been demonstrated to correlate almost perfectly with the original 55 item instrument (Spence & Helmreich, 1972). Scores on the short version could range from zero to 45. Nelson (1988) has reported the extensive reliability and validity data of both the short and long form of this scale, indicating reliability of .84. This scale has been cross-culturally validated with a British and American sample; however, no data is currently available with American ethnic minorities.

**Acculturation Rating Scale for Mexican-Americans.**

The *Acculturation Rating Scale for Mexican-Americans* (ARSMA; Cuellar, Harris & Jasso, 1980) was used to identify level of cultural affiliation and language fluency. The ARSMA is a twenty item questionnaire based on a 5-point Likert scale ranging from
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Mexican/Spanish (1) to Anglo/English (5). Scores can range from 20 to 100. This scale yields five levels of acculturation anchored from one to five: very Mexican (1); Mexican-oriented bicultural (2); equal, true, or syntonic bicultural (3); Anglo-oriented bicultural (4); very Anglicized (5). Internal reliability of .88 and test-retest reliability of .80 have been reported. This scale has been cross-culturally validated among Mexicans, Mexican-Americans, and Anglos. Also, this scale has demonstrated high concurrent validity of .86 with the Behavioral Acculturation Scale, and .81 with the Bicultural Inventory (Cuellar, et al., 1980).

Demographics. A 28 item demographic questionnaire was also administered to gather information regarding relationship status, level of relationship involvement, employment status, and level of income. Relationship status included: single/never married, married, separated, divorced or widowed. Level of relationship involvement listed: not involved in a serious relationship, involved in a serious relationship/not living with partner, and involved in a serious relationship/living with partner. Domestic or career orientation was measured by a four point likert-type item ranging from solely engaged in domestic activities
in own home to solely engaged in work activities outside the home. Level of income was broken into eight categories ranging from less than $7,000 to $7,000 or more. Other relevant variables such as age, counseling experience, number of children, volunteer time and religion were also collected.

Procedure

Women meeting the eligibility criteria who responded to an initial letter, or for the depressed sample an initial inquiry by their therapist, were contacted by telephone. The study protocol was briefly explained. Subjects were given the choice of having the questionnaire packet delivered to their home, picking the packet up from a public location (local community center), or having the packets mailed to their home. A letter describing the research protocol and consent form assuring confidentiality and anonymity were included in each packet.

Results

The age range of the nondiagnosed sample was 34 to 69 with a mean of 44.6. The age range of the depressed sample was 29 to 74, with a mean of 46.6. The majority of both samples was either married or married but separated. The nondiagnosed sample was educated at
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high school or beyond with some college being the most frequent response. The depressed sample reported some college and high school equally as the modal response. The most frequently reported income category for both groups was $15,000 to 24,999. A series of t-tests run on income, level of relationship involvement and relationship status were nonsignificant pointing toward homogeneity of the two groups.

Means and standard deviations are reported in Table 1. The depressed Hispanic women reported a lower acculturation score than the nondiagnosed group. Average score for depression, as measured by the CES-D, for the depressed group was 31.31 (sd=8.38), while the nondiagnosed group averaged 7.03 (sd=4.59). Also, the depressed group demonstrated a more traditional attitude toward women than the nondiagnosed group of Hispanic women.

Insert Table 1

Two research questions were asked in this study. First, what proportion of the variance of depression is accounted for by six predictor variables which
included: relationship status (RSTAT), level of involvement in relationship (INVOL), domestic/career orientation (DCAR), income (INCOME), acculturation (ACCUL) and attitude toward women (AWS). A multiple regression \[F(3,37) = 3.77, R^2=.02\] indicated that 33% of the variance is accounted for by the linear combination of relationship status, domestic/career orientation, and attitude toward women (see Table 2). As shown in Table 3, the Attitudes toward Women Scale (AWS) is most predictive of depression, as it accounts for 20 percent of the total variance. Income, level of acculturation and level of involvement did not enter into the equation.

Insert Tables 2 and 3 here

The second research question examines the relationship among acculturation, attitudes toward women, and depression. Pearson product moment correlations, for nondiagnosed Hispanics, revealed significant relationships between level of acculturation and AWS, \(r=.41, p<.01\) and a negative relationship between acculturation and depression (CES-
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D), \(r = -.48, p < .01\). A negative correlation was also found between AWS and CES-D \(r = -.35, p < .05\) No significant correlations among the variables for the depressed Hispanic women were found. Other correlations included: level of involvement and domestic/career orientation \(r = -.36, p < .05\); level of involvement and income \(r = .53, p < .01\); and domestic/career orientation and acculturation \(r = .66, p < .01\).

Insert Table 4

Discussion

The present study sought to explain the variance in depressive symptomatology among clinically depressed and not diagnosed for depression Hispanic women. Acculturation, sex-role attitudes, relationship status, level of relationship involvement, domestic/career orientation and income were investigated. An analysis of the data indicated relationship status, domestic/career orientation, and sex roles accounted for 33% of the variance in depressive symptomatology overall \(p < .01\). Furthermore, attitudes toward women
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seemed to account for the majority of this variance (p < .01). This supports Keith and Schaffer's (1982) research that nontraditional sex-role orientation and working outside of the home are important factors when examining depressive symptomatology. Some researchers contend that sex-role orientation can explain the consistent gender differences in depression (Weissman & Klerman, 1977; Canino et al., 1987; Amaro & Russo, 1987). However, the present research indicates that there is also a further differential effect between clinically depressed and nondiagnosed groups when gender and ethnicity are held constant.

Income level was not predictive of depressive symptomatology. Reported income clustered into two groups: lower income (under $15,000) and lower-middle ($15,000 to 25,000). This restricted range may have precluded any differential effect. Landrine (1988) contends that socioeconomic level, marital status and ethnicity are highly correlated. Perhaps the influence of socioeconomic level was subsumed by the effects of ethnicity. However, relationship status did enter the equation suggesting that it remains a predictive factor for depressive symptomatology even when ethnicity is held constant.
The correlational analysis for the nondiagnosed group indicated that acculturation, attitudes toward women, and depressive symptomatology were significantly correlated. The more highly acculturated the individual, the less depressive symptomatology was evident. This supports Salgado de Snyder's (1987) research that acculturative stress is related to depression. The more traditional the individual as measured by the AWS, the more depressive symptomatology was reported. The more acculturated, the less traditional were the attitudes held toward women. This adds further support to the Vasques-Nuttall et al. (1987) notion that more liberal sex-role orientation or breaking out of traditional sex-roles may provide a buffering effect against depressive symptomatology. Interestingly, for the depressed group, none of the variables were significantly correlated indicating that a different process is operating with clinically depressed Hispanic women. Although not the focus of the study, a negative correlation was noted between level of relationship involvement and domestic/career orientation. This supports Kranau, Green and Valencia-Weber's (1982) results that highly acculturated women were less likely to be married,
divorced or widowed than their less acculturated counterparts. Positive correlations were also noted between employment status and acculturation, and involvement and level of income. This may suggest that more acculturated individuals are less traditional and more likely to pursue employment outside of the home.

The results support other research findings on depression in the general Hispanic female population that implicate relationship status, domestic/career orientation, acculturation, and especially attitudes toward women. However, our results do not support this relationship among clinically diagnosed depressed women. This suggests that an alternative hypothesis is required for this group, an explanation heretofore unaddressed by the literature on Hispanics.

Future research on Hispanic women and depression should clearly distinguish between depressive symptoms in the general Hispanic population and clinically diagnosed samples. Replication with more stringent control of the diagnosis of depression and consideration of other variables which may predict depressive symptomatology, such as expression of anger, education level, or values and beliefs, may further distinguish depressive symptomatology between clinically
depressed and nondiagnosed Hispanic women.

An investigation of a nondiagnosed Hispanic women sample using more heterogeneous socioeconomic levels than were evident in this study may be timely, given the increasing middle and upper-middle socioeconomic classes now evident among Hispanics. This may help to rectify the failure of past research to separate class from ethnicity, thus confounding the results and conclusions with regard to socioeconomic level and ethnicity.
References


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Counseling and Development, 65, 308-312.


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## Table 1

### Mean Scores for Hispanic Depressed and Nondiagnosed

<table>
<thead>
<tr>
<th>GROUP</th>
<th>RSTAT</th>
<th>INVOL</th>
<th>DCAR</th>
<th>INCME</th>
<th>ACCUL</th>
<th>ATWS</th>
<th>CES-D</th>
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<tbody>
<tr>
<td>Depressed (n = 23)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>M</td>
<td>2.76</td>
<td>2.21</td>
<td>2.12</td>
<td>2.97</td>
<td>2.47</td>
<td>28.53</td>
<td>31.31</td>
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<tr>
<td>SD</td>
<td>1.30</td>
<td>.93</td>
<td>1.17</td>
<td>1.60</td>
<td>.83</td>
<td>6.53</td>
<td>8.38</td>
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<tr>
<td>Nondiagnosed (n = 46)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.05</td>
<td>2.06</td>
<td>2.95</td>
<td>3.35</td>
<td>2.95</td>
<td>32.78</td>
<td>7.03</td>
</tr>
<tr>
<td>SD</td>
<td>.91</td>
<td>.00</td>
<td>1.27</td>
<td>1.69</td>
<td>.57</td>
<td>7.78</td>
<td>4.59</td>
</tr>
</tbody>
</table>

RSTAT = relationship status  
INVOL = level of relationship involvement  
DCAR = domestic/career orientation  
INCME = income  
ACCUL = level of acculturation  
ATWS = attitude toward women  
CES-D = depressive symptomatology
Table 2

Multiple Regression on Depression (CES-D)

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Prob&gt;F</th>
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<td>Model</td>
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<td>2729.08</td>
<td>909.69</td>
<td>6.18</td>
<td>.02</td>
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<tr>
<td>Error</td>
<td>37</td>
<td>5444.48</td>
<td>147.15</td>
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</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>8173.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R squared</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Table 3

Depression (CES-D) as a Function of Attitude Toward Women (ATWS), Domestic or Career Orientation, and Relationship Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>T parameters</th>
<th>Prob &gt; T</th>
<th>Partial R</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATWS</td>
<td>-.93</td>
<td>.004</td>
<td>.20</td>
</tr>
<tr>
<td>RELATIONSHIP</td>
<td>3.56</td>
<td>.05</td>
<td>.07</td>
</tr>
<tr>
<td>DOMESTIC/CAREER</td>
<td>-2.84</td>
<td>.08</td>
<td>.06</td>
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</table>
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Table 4

Intercorrelations Among Scales for Hispanic Depressed and Nondiagnosed

<table>
<thead>
<tr>
<th>Scale</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<td>Hispanic Depressed (n=23)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Relationship</td>
<td>-.11</td>
<td></td>
<td>.11</td>
<td>.37</td>
<td>-.29</td>
<td>.19</td>
</tr>
<tr>
<td>2. Involvement</td>
<td>--</td>
<td>-.14</td>
<td>.25</td>
<td>.21</td>
<td>.13</td>
<td>.06</td>
</tr>
<tr>
<td>3. Domestic/Career</td>
<td>--</td>
<td>-.08</td>
<td>.18</td>
<td>.18</td>
<td>-.14</td>
<td></td>
</tr>
<tr>
<td>4. Income</td>
<td>--</td>
<td>-.14</td>
<td>.26</td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Acculturation</td>
<td>--</td>
<td>.11</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ATWS</td>
<td>--</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. CES-D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Hispanic Nondiagnosed (n=46)|     |     |     |     |     |     |
| 1. Relationship             | -.17| -.17| -.20| .20 | -.10| .32 |
| 2. Involvement              | --  | -.36*| .53**| -.18| -.08| -.05|
| 3. Domestic/Career          | --  | -.08| .66**| .29 | -.27|     |
| 4. Income                   | --  | .17 | .13 | -.22|     |     |
| 5. Acculturation            | --  | .41**| -.47**|     |     |     |
| 6. ATWS                     | --  |     | .35*|     |     |     |
| 7. CES-D                    |     |     |     |     |     |     |

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