

8-1-2002

# Effects of Acculturation and Generational Status on Ethnocultural and Psychosocial Adaptation of Mexican-American Adolescents

Darrell W. Stolle

*University of Montana, stolle@selway.umt.edu*

William E. Martin Jr.

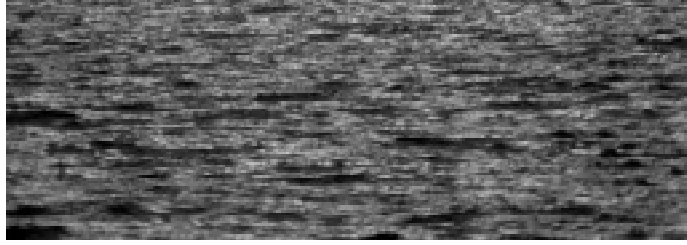
*Northern Arizona University*

Follow this and additional works at: <https://digitalcommons.wayne.edu/mijoc>

## Recommended Citation

Stolle, D. W., & Martin, Jr., W. E. (2002). Effects of Acculturation and Generational Status on Ethnocultural and Psychosocial Adaptation of Mexican-American Adolescents, *Dimensions of Counseling*, 30(2), 14-21. doi:10.22237/mijoc/1028160180

This Article is brought to you for free and open access by the Open Access Journals at DigitalCommons@WayneState. It has been accepted for inclusion in Michigan Journal of Counseling: Research, Theory and Practice by an authorized editor of DigitalCommons@WayneState.



# Effects of Acculturation and Generational Status on Ethnocultural and Psychosocial Adaptation of Mexican-American Adolescents

**Darrell W. Stolle, Ed.D.**

**William E. Martin, Jr., Ed.D.**

*Darrell Stolle, Ed.D. is an Assistant Professor of Counselor Education at the University of Montana in Missoula. William E. Martin, Jr., Ed.D. is a Professor of Educational Psychology at Northern Arizona University in Flagstaff Arizona. Correspondence can be addressed to Darrell Stolle, Ed.D., School of Education, University of Montana, Missoula, Montana 59812, e-mail, [stolle@selway.umt.edu](mailto:stolle@selway.umt.edu).*

*The extent to which acculturation and generational status affect the ethnocultural and psychosocial adaptation of Mexican-American adolescents was investigated. Participants were classified into acculturation and generational status levels from scores on the Acculturation Rating Scale for Mexican-Americans-Revised (ARSMA-II) and the dependent variable was measured using the Psychosocial Adaptation for Cultural and Contextual Correspondence-Research Version (PACCC-RV). Mexican-American adolescents with lower acculturation levels and more recent residence in the United States perceived they were ethnoculturally different from others in their environment especially in regards to communication difficulties. Similar to previous studies, acculturation and generational status appear to be measuring similar dimensions.*

**A**ccording to Cole (1991), culture can be viewed as an individual's medium of adaptation to the demands of the environment where an individual must simultaneously incorporate information based on what is occurring in their immediate context as well as those environments that surround it. As such, environments may call upon the individual to possess certain cultural characteristics that will enhance healthy psychological functioning (Swartz & Martin, 1997; Swartz & Martin, 1999; Martin & Swartz, 1999). For example, an adolescent must exhibit certain psychosocial behaviors that are contextually and culturally appropriate to feel in correspondence with his or her environment. Equally as

important, the adolescent must feel that people in the environment accept his or her ethnocultural orientation and present opportunities for him or her to experience congruence or "fit."

Achieving this congruence can be more complicated when an adolescent possesses an ethnocultural background that is uniquely different from the prevailing culture of the environment.

Aside from the normal developmental demands placed on a child, minority children need to learn that they can participate in two different cultural settings, each with different cultural norms, without losing their own cultural identity, or abdicating loyalty to the minority community (Ogbu, 1992). However, settlement in a new cultural and social setting places extraordinary psychosocial demands on an individual that significantly affect development (Laosa, 1990). For example, Kim and Choi (1994) discuss the rift that may occur between family values taught at home and those emphasized in the social institutions of the new culture. The result is that children and adolescents become the victims of incompitable demands that may lead to manifestation of symptoms of maladjustment (Kim & Choi, 1994) and greater dependence on the peer group for support (Rodriguez & Zayas, 1990). Additionally, serious cultural conflicts arising from different value systems at home and within the dominant society can lead to cognitive dissonance and difficulty in developing a coherent identity (Camilleri & Malewska-Peyre, 1997).

For Hispanic children previous research has shown that awareness of ethnicity begins to surface by the age of nine or ten years (Oligaki, Frensch & Dodson, 1996), indicating that this process is well under way by adolescence. During this time, two primary conflicts need to be addressed by the individual (Phinney, Lochner & Murphy, 1990). The first is that of ignorance, stereotypes and prejudices expressed by those in the dominant culture that lead one to question one's value in relation to the larger society. The second is the existence of two conflicting sets of norms and values between the larger society and the culture of origin. An individual's response to these conflicts can vary from active exploration and resolution (leading to achieved ethnic identity) to refusal and failure to deal with them directly (leading to failed sense of ethnic identity). In turn, the range of psychological and behavioral responses can range from refusal to participate in either culture (marginalization), to being able to participate in both cultures equally (bicultural).

**The purpose of this study was to determine the extent to which acculturation level and generational status affected how well 7th and 8th grade Mexican American adolescents perceived they were adapting, psychosocially and ethnoculturally, to their environment.**

Two important factors affecting ethnic identity and ethnocultural conflict are generational status and acculturation that in turn, have shown a linear relationship with each other. Generally speaking, acculturation is the lowest for the first generation, and increases with later generations (Cuellar, Arnold, & Maldonado 1995a; Cuellar, Arnold, & Gonzalez, 1995b; Moyerman & Forman, 1992; Sadowki et al., 1991). Sadowski et al. (1992) also suggest that generational status is linked to modes of acculturation (i.e., marginalization, assimilation, integration) to the extent that first generation immigrants are more likely to reject the host culture, while second, third and fourth generations are more likely to integrate to varying degrees, aspects of the host culture.

The purpose of this study was to determine the extent to which acculturation level and generational status affected how well 7th and 8th grade Mexican American adolescents perceived they were adapting, psychosocially and ethnoculturally, to their environment. Their perceptions were compared across acculturation level and

generational status groups. In order to provide a control-type comparison group, perceptions were also compared to a sample of White adolescents who were not of Hispanic descent. Additionally, the extent to which acculturation and generational status were linearly related within this sample was investigated.

## Method

### Participants

The sample consisted of 231 Mexican-American and White Junior High School students whose ages ranged from twelve to fourteen years, the mean being 12.73 (SD = .59). Of these students, 53.2% were female, 46.8% were males. Regarding ethnicity, one-hundred seventy-three (74.9%) were Mexican-American, fifty-eight (25.1%) were non-Hispanic White.

The average size of students' families was 6 (SD = 2.25). Of these, 40% were single income families. Seventy-six percent (n = 176) of the participants reported the education levels attained by their parents. One hundred and twenty one (69%) had high school education, 27 (15%) had some college, and 28 (16%) were college graduates.

In regards to economic conditions of the district, school officials reported that the area from which this sample

was drawn is relatively economically disadvantaged, as evidenced by high numbers of students in each school receiving reduced or free school lunches. However, attempts to more accurately understand the socioeconomic status of the sample were difficult at best, given that we were not permitted to inquire as to whether or not students received free or reduced lunches, or to include a question regarding parent's income levels on the Parent Permission slip.

### *Equivalence of Subgroups*

In order to examine any effects that demographic variables, other than the independent variables, might have had on the analyses, ANOVA analyses or Chi-square tests for independence were performed on the demographic variables of age groups, family size groups, gender, and parent's education levels by the independent grouping variables of generational status and acculturation levels. No significant differences were found among any of the acculturation or generational status sub-groups and their performance on the dependent variables for any of the demographic variables. As such, it was determined that these demographic variables did not differentially affect the dependent variables.

### *Instrumentation*

The *Acculturation Rating Scale for Mexican-Americans-Revised (ARSMA-II)* is the first instrument discussed which was used in the study to specify levels of the independent variables, acculturation and generational status. The second psychometric instrument discussed is the *Psychosocial Adaptation for Cultural and Contextual Correspondence-Research Version (PACCC-RV)* which was used to measure the dependent variable, psychosocial and ethnocultural adaptation.

*ARSMA-II* is a 30 item questionnaire that provided information to establish levels for the independent variables of generational status and acculturation (Cuellar et al., 1995b). Items are worded to address primarily behavioral aspects of acculturation and are presented in English and Spanish on the same page. Responses are given on a five-point Likert-type scale. The questionnaire contains two orthogonal subscales that measure orientation toward Mexican culture (MOS) and Anglo culture (AOS). By subtracting the mean MOS score from the mean AOS score, a linear acculturation score is produced which represents the respondent's level of acculturation along a continuum from Very Mexican to Very Anglo oriented. The authors provide a table with suggested cutting scores to classify the Mexican-American respondents into one of five possible levels: Very Mexican, Mexican Oriented to approximately balance bicultural, Slightly Anglo oriented bicultural,

Strongly Anglo Oriented and Very assimilated. Responses to the *ARSMA - II* also provided information to classify the Mexican-American respondents into the generational levels, 1st generation, 2nd generation, and 3rd (and higher) generation.

The norming sample for the *ARSMA-II* consisted of 379 university students representing five generation levels of Mexicans, Mexican-Americans and White non-Hispanics living in south Texas. Strong evidence for construct and concurrent validity and internal consistency have been reported for the whole instrument, as well as for the two subscales (Cuellar et al., 1995a). Internal consistency for the MOS produced a coefficient alpha of .88, while the AOS yielded an alpha of .83. Additionally, scores obtained on the *ARSMA-II* have been highly correlated with the original *ARSMA* ( $r = .89$ ;  $N = 171$ ). While this data was obtained via a young adult sample, the *ARSMA-II* was still deemed an appropriate instrument for use with adolescents. Several factors were carefully considered in this regard. First, a panel of experts was consulted, including the author of the *ARSMA-II*, who agreed on the face validity of this instrument for this particular population. Second, consultation with classroom teachers resulted in agreement as to the reading level appropriateness. Third, the fact that it was written in both English and Spanish was highly desirable, and lastly, there were simply no other instruments available that specifically measured acculturation for Mexican-American individuals that were also normed on adolescents.

The *PACCC-RV* is a shortened version of the *PACCC* (Swartz, 1996) comprised of 40 items that measure the extent to which an individual perceives that cultural and contextual factors are affecting his or her ability to adapt successfully to his or her environment. Items for the *PACCC* and *PACCC-RV* were developed using a five factor theoretical model comprised of cultural orientation, family environment, community environment, communication, and language. Cultural orientation encompasses acculturation, beliefs, values, norms, traditions, ceremonies, coping style, and cognitive style. Family environment includes family structure, family relations, and involvement in the culture of origin. The community environment is defined by community structure, support networks, rules for social conduct, and movement of residence. Communication relates to communication mode, interpersonal relations, expression of emotions, and response style. Language refers to the accuracy, fluency, style, and preference for communication through spoken and written language.

A series of exploratory factor analyses were performed on several data sets (Fairfield, 1998; Stolle, 1998; Swartz, 1996; Martin, Swartz, & Madson, 1999) resulting in a three factor structure. The three factors were designated as

cultural orientation, contextual satisfaction, and contextual satisfactoriness. Cultural orientation describes how a person sees her or himself as a cultural being (unique internalization of culture) in relation to others in her or his environment (Swartz & Martin, 1999). It measures how well a person believes that his or her ethnocultural ways are similar or different from others in his or her environment. The second factor addresses issues of contextual satisfaction; how well an individual perceives that he or she is experiencing social supports from his or her environment. Contextual satisfactoriness is the third factor that pertains to whether the individual perceives that he or she is effectively meeting the psychosocial and ethnocultural expectations of the environment.

**T**wo important factors affecting ethnic identity and ethnocultural conflict are generational status and acculturation that in turn, have shown a linear relationship with each other.

The readability of the PACCC-RV is at the 5.31 grade level as measured by the Flesch-Kincaid scale. Reliability estimates of internal consistency using Cronbach's alpha resulted in a full scale of .89. Estimates of .90, .87, and .90 were found for each of the respective factors, cultural orientation, satisfactoriness, and satisfaction. Interfactor correlations were as follows; cultural orientation and satisfaction, .588, cultural orientation and satisfactoriness, -.054, and satisfaction and satisfactoriness, .068.

#### **Data Collection Procedures**

The PACCC-RV and ARSMA-II were administered by classroom teachers of the students who participated in the study. Careful attention was paid to uniformity of distribution and directives issued in regards to completion of the instruments. Students who chose to participate and did not self-identify as Mexican American, were instructed to leave the ARSMA-II blank, and proceed to the PACCC-RV. Those who did self-identify as Mexican-American, were asked to complete both instruments.

#### **Data Screening and Statistical Analysis**

A total of 231 cases were entered into this analysis, allowing for a minimum of 48 cases per cell. Prior to analysis of the data, the dependent and independent variables were examined to insure that standard assumptions for univariate and multivariate analyses were met. Data were inspected for accuracy of entry, and missing values. Assumptions for plausible central tendencies, normalcy, outliers, linearity, homogeneity of variance and multicollinearity and singularity were also tested and found to be within acceptable ranges for respective parameters. Therefore the variables were

entered into the statistical analysis unchanged.

#### **Reliability**

A measure of internal consistency for this sample's performance on the PACCC-RV was undertaken as well. Cronbach's alpha for the total PACCC-RV score was .89. Measures of internal consistency for each of the scales were as follows: (a) Cultural Orientation, .82, (b) Contextual satisfaction, .76. and (c) contextual satisfactoriness, .64.

#### **Correlation of the Independent Variables**

A Pearson Product-Moment Correlation Coefficient was calculated on the total acculturation and generational status scores resulting in  $r(231) = .85, p = .000$ .

## **Results**

One-way multivariate analyses of variance (MANOVA) and accompanying univariate ANOVA analyses were used to analyze scores obtained on the three dependent variables, cultural orientation, contextual satisfaction and contextual satisfactoriness for each independent variable (acculturation and generational status). Tukey's Honestly Significant Differences (HSD) statistic was used for ANOVA post hoc analyses to compare paired mean differences. Finally, univariate ANOVA's with post hoc Least Significant Differences (LSD) analyses of the PACCC-RV's five factor model were conducted to obtain a further understanding of the dimensions associated with significant differences in dependent variables.

#### **Acculturation**

It was hypothesized that adolescents' average scores on the PACCC-RV would be higher (more perceived difficulty adapting psychosocially and ethnoculturally to the environment) and significantly different across acculturation level groupings as follows: low acculturation > medium acculturation > high acculturation > non-Hispanic White.

Results of the MANOVA indicated a significant Wilks' Lambda = .838,  $F(9) = 4.59, p = .0001$  on the overall main effect of the acculturation variable. The means and standard deviations of the PACCC-RV sub-scales scores for each level of acculturation are presented in Table 1. Higher scores reflect more perceived difficulties in psychosocial adaptation. Subsequent univariate ANOVA analyses were conducted to determine which of the dependent variables was significantly different based on acculturation levels. Cultural orientation (perceived

ethnocultural similarities or differences from others in the environment) was the only dependent variable that was significant ( $F(3, 227) = 11.18, p = .0001$ ) of the three analyzed together. The effect size was  $\eta^2 = .13$ . The post hoc Tukey's HSD test revealed the following paired mean differences ( $p < .05$ ): (a) the average cultural orientation score for the low and medium acculturated Mexican-American adolescents was significantly higher (more perceived ethnocultural differences than others in their environment) than the mean for the White adolescents (effect sizes respectively, .98 and .65) and (b) the average cultural orientation score for the low acculturated Mexican-American adolescents was significantly higher than the mean of the high acculturated Mexican-American adolescents (effect size = .53).

A further analysis was undertaken to ascertain which of the five theoretical factors of the PACCC-RV related to cultural orientation were being most affected by acculturation. One significant difference was found among the acculturation level groups on communication,  $F(3, 225) = 5.50, p = .0012$ . A post hoc analysis using Fisher's Least Significant Difference (LSD) showed that the low acculturated Mexican-American adolescents had higher scores (more perceived difficulties in communication) than the medium acculturated Mexican-American adolescents, high acculturated Mexican-American adolescents, and the White adolescents.

### Generational Status

It was hypothesized that adolescents average scores on the PACCC-RV would be higher (more perceived difficulty adapting psychosocially and ethnoculturally to the environment) and significantly different across generational status level grouping as follows: first generation > second generation > third generation > non-Hispanic White.

Results from the MANOVA revealed a significant main effect Wilks' Lambda = .815,  $F(9) = 5.34, p = .0001$  indicating a greater difference in mean scores obtained on dependent measures than one would expect by chance. The means and standard deviations of the PACCC-RV sub-scales scores for each level of generation status are presented in Table 2. Separate univariate ANOVA's were conducted on each dependent variable in order to determine where the significant differences were. The univariate ANOVA analyses, again, revealed that the cultural orientation variable ( $F(3, 27) = 12.13, p = .0001$ ) was the only significant dependent variable of the three analyzed together. The overall main effect size  $\eta^2 = .14$ . The post hoc Tukey's HSD ( $p < .05$ ) resulted in the following mean differences between the subgroups: (a) First and second generation Mexican-American adolescents scored significantly higher (more perceived

**Table 1: Summary of Means and Standard Deviations for Cultural Orientation, Contextual Satisfaction and Contextual Satisfactoriness by Acculturation Level**

		Acculturation Level			
		Low (n = 67)	Medium (n = 57)	High (n = 49)	White (n = 58)
<b>Cultural Orientation</b>					
Mean		70.02	66.16	62.6	58.22
SD		10.74	10.64	13.86	12.10
<b>Contextual Satisfaction</b>					
Mean		22.55	21.82	21.93	20.98
SD		5.71	5.85	7.00	5.74
<b>Contextual Satisfactoriness</b>					
Mean		17.97	17.26	16.65	16.94
SD		4.2	4.36	5.13	5.34
<b>PACCC-RV Total Score</b>					
Mean		110.55	105.24	101.22	96.15
SD		14.50	17.21	19.60	19.22

**Table 2: Summary of Means and Standard Deviations for Cultural Orientation, Contextual Satisfaction, Contextual Satisfactoriness and Total PACCC-RV Score by Generational Status**

		Generational Status			
		First (n = 48)	Second (n = 73)	Third (n = 52)	White (n = 58)
<b>Cultural Orientation</b>					
Mean		69.85	68.08	61.71	58.22
SD		8.15	11.46	14.17	12.10
<b>Contextual Satisfaction</b>					
Mean		22.04	21.37	23.08	20.98
SD		5.07	5.33	7.76	5.74
<b>Contextual Satisfactoriness</b>					
Mean		17.73	17.82	16.38	16.95
SD		4.45	4.19	5.01	5.33
<b>PACCC-RV Total Score</b>					
Mean		109.62	107.27	101.40	96.15
SD		13.72	15.68	21.26	19.22

ethnocultural differences than others in their environment) than White adolescents (effect sizes respectively, .96 and .81); and (b) First and second generation Mexican-American adolescents scored significantly higher than third generation Mexican-American adolescents (effect sizes respectively, .57 and .45).

A further analysis was undertaken to ascertain which of the five theoretical factors of the PACCC-RV related to cultural orientation were being most affected by generational status. One significant difference was found among the generational status groups on communication,  $F(3, 225) = 4.88, p = .0026$ . A post hoc analysis using Fisher's Least Significant Difference (LSD) showed that the first and second generation Mexican-American adolescents scored significantly higher (more perceived difficulties in communication) than the White adolescents.

## Discussion

There was substantial but not complete support for the first hypothesis.

Acculturation did show a significant main effect on the dependent variables of cultural orientation, contextual satisfaction, and contextual satisfactoriness. For the most part, a visual inspection of the means by acculturation levels shows that the size of the means reflect the hypothesized directions of higher scores (more perceived difficulty adapting psychosocially and ethnoculturally) for adolescents with lower acculturation levels. However, the dependent variable that showed significant differences across the acculturation levels was cultural orientation. Post hoc analyses showed that low and medium acculturated Mexican-American adolescents perceived that they were more ethnoculturally different than others in their environment when compared to non-Hispanic White adolescents. Furthermore, the same differences were found comparing low acculturated Mexican-American adolescents to high acculturated Mexican-American adolescents. One of the five factors making up cultural orientation was significantly different across the groupings based upon acculturation. There was more perceived communication difficulties based upon lower acculturation levels.

Again, there was ample support for the second hypothesis with respect to generational status. There was significance for the overall main effect and 75% of the means were observed to be in the hypothesized directions of higher scores (more perceived difficulty adapting

**Post hoc analyses showed that low and medium acculturated Mexican-American adolescents perceived that they were more ethnoculturally different than others in their environment when compared to non-Hispanic White adolescents. Furthermore, the same differences were found comparing low acculturated Mexican-American adolescents to high acculturated Mexican-American adolescents.**

psychosocially and ethnoculturally to the environment) for adolescents with more recent generational status. Once more, the dependent variable cultural orientation was significant across generational status levels. More specifically, first and second generation Mexican-American adolescents perceived that they were more ethnoculturally different than others in their environment when compared to third generation Mexican-Americans and non-Hispanic White adolescents. As for acculturation level, there were more perceived communication difficulties based upon more recent generational status.

While the effect sizes for the significant overall main effects were relatively low, the effect sizes were high for the differences on cultural orientation between the low acculturation/first generation and non-Hispanic White adolescents. Furthermore, the effect sizes were medium for the differences on cultural orientation between the low acculturation/first generation and the high acculturation/third generation adolescents.

In sum, the Mexican-American adolescents in this study who were less acculturated and more recent residents of the United States perceived that they were more ethnoculturally different from people in their environment compared to Mexican-American and non-Hispanic White adolescents. Furthermore, the adolescents felt they communicated differently from people around them, they related better to people from their own ethnic and cultural group, and experienced greater difficulty in demonstrating their feelings. It must be pointed out that while there were consistent differences between Mexican-American adolescents and non-Hispanic White adolescents, there also were differences across acculturation and generation status levels within the Mexican-American adolescent group.

It may be that these perceptions of ethnocultural differences, especially related to communication, affected how well these adolescents believed they "fit" into their environment. While the factor that most directly measures "fit", contextual satisfactoriness, reflected means in the expected directions, they were not statistically significant. As such, caution is required about concluding that these adolescent perceptions of being ethnocultural different from people in their environment lead to feelings of not "fitting."

Similar to previous findings (Cuellar et al., 1995a; Cuellar, et al., 1995b; Moyerman & Forman, 1992; Sadowki et al., 1991), a strong positive relationship ( $r = .85$ ) was found between acculturation and generational status, as well as, significant effects of these variables on psychosocial and cultural adaptation. The effects of both variables are nearly interchangeable. As such, the findings in this study with Mexican-American adolescents (12-14 years old) adds to past research that shows that acculturation and generational status are measuring similar dimensions.

## Implications

The question of how adolescents perceive themselves culturally in relation to their context is one that seems to have direct impact on how mental health agencies and schools are able to meet the needs of a culturally diverse society. In the past, broad generalizations about the psychosocial needs of diverse individuals were made on the basis of group membership- often to the exclusion of variables that make an individual unique within the group. Trimble (1991) coined the term "ethnic gloss" to explain this phenomenon, one that ultimately leads to relational approaches based on stereotypes and assumptions. In response, attention has been focused on variables such as acculturation and generational status, to name a few, that enhance understanding of the differences that exist within different ethnic groups. From a psychosocial perspective, acculturation is generally considered to be a behavioral and attitudinal change (Marin, 1992) caused by contact with another culture; however, little attention is given to how one perceives oneself in relation to another culture. The results of this study suggest that Mexican-American adolescents perceive themselves as being different primarily along the lines of how they communicate with others in their environment. Questions about how well they "fit" into their particular context are not causing psychosocial disturbance, although they might certainly be a factor.

With this in mind, it seems important that professionals (counselors, teachers, clergy) working with Mexican-American children explore the extent to which a student perceives their ability to communicate is impacting his/her adaptation to a new context. This information could then be used to generate activities that specifically target identified areas of difficulty. Examples of some activities might include; a language training program that addresses day to day procedural and conversational dialogue in order to help individuals feel more confident in their abilities to cope with a new environment, a cultural orientation program or workshop that would

**The results of this study suggest that Mexican-American adolescents perceive themselves as being different primarily along the lines of how they communicate with others in their environment.**

include lessons on acculturation and the feelings normally associated with cultural transitions. This workshop might also include activities that allow an individual to realistically assess their expectations of their new environment, and provide problem-solving strategies for a specific environment. Finally, another activity might include counseling to maintain a positive self-image, or to process interpersonal struggles related to their own cultural orientation. These activities, as well as many others could be informed by knowledge of a person's perceptions of themselves in relation to their environment.

## Conclusion

In conclusion, we found that Mexican-American adolescents who were less acculturated and/or more recent residents of this country demonstrated a heightened awareness of their differences in relation to their environment. This included perceived discrepancies between the adolescent and their environment, especially in regards to communication modes, interpersonal relations, expression of emotions, and response style. Perceiving oneself as ethnoculturally different in an environment is very likely associated with feelings of not being psychosocially congruent but we cannot make that conclusion definitively from our results. Future research should focus on determining the extent to which perceptions of being ethnoculturally different causes feelings of being incongruent within an environment. Furthermore, the extent to which communication difficulties may be a leading contributor to these perceptions of ethnocultural differences needs further investigation.

## References

- Camilleri, C. & Malewska-Peyre, H. (1997). Socialization and identity strategies. In J. W. Berry, P. R. Dasen, & T. S. Saraswathi (Eds.), *Cross Cultural Psychology-Volume 2: Basic Processes and Human Development* (pp. 41-68). Boston, MA: Allyn-Bacon.
- Cole, M. (1991). A cultural theory of development: What does it imply about the application of scientific research. *Learning and Instruction*, 1, 187-200.
- Cuellar, I., Arnold, B., & Maldonado, R. (1995a). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences*, 17, 275-304.
- Cuellar, I., Arnold, B., & Gonzalez, G. (1995b). Cognitive referents of acculturation: Assessment of cultural constructs in Mexican Americans. *Journal of Community Psychology*, 23, 339-356.
- Fairfield, T. S. (1998). Psychosocial adjustment, community attitudes, and contextualized culture of persons who are seriously mentally ill. *Unpublished doctoral dissertation*, Northern Arizona University, Flagstaff, AZ.
- Kim, U. & Choi, S. H. (1994). Individualism, collectivism and child



- development: A Korean perspective. In P. M. Greenfield & R. R. Cocking (Eds.), *Career counseling: Contemporary topics in vocational psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Laosa, L. M. (1990). Psychosocial stress, coping and development of Hispanic immigrant children. In P. D. Isaac & L. Myers (Eds.), *Mental health of ethnic minorities*. New York: Praeger.
- Martin, Jr., W. E., Swartz, J. L., & Madson, M. (1999). Psychosocial factors that predict the college adjustment of first year undergraduate students: Implications for college counselors. *Journal of College Counseling, 2*, 121-133.
- McFadden, J. (1996). A transcultural perspective: Reaction to C. H. Patterson's "Multicultural counseling: From diversity to universality." *Journal of Counseling and Development, 74*, 232-235.
- Moyerman, D. R., & Forman, B. D. (1992). Acculturation and adjustment: A meta-analytic study. *Hispanic Journal of Behavioral Sciences, 14*, 163-200.
- Ogbu, J. U. (1992). Understanding cultural diversity and learning. *Educational Researcher, 21*, 5-14.
- Oligaki, L., Frensch, P. A., & Dodson, N. E. (1996). Mexican-American children's perceptions of self and school achievement. *Hispanic Journal of Behavioral Sciences, 18*, 469-484.
- Phinney, J. S., Lochner, B. T., & Murphy, R. (1990). Ethnic identity development and psychological adjustment in adolescence. In A. R. Stiffman & L. E. Davis (Eds.), *Ethnic Issues in Adolescent Mental Health*. Newbury Park, CA: Sage Publications.
- Rodriguez, O., & Zayas, L. H. (1990). Hispanic adolescents and antisocial behavior: Sociocultural factors and treatment implications. In A. R. Stiffman and L. E. Davis (Eds.), *Ethnic Issues in Adolescent Mental Health*. Newbury Park, CA: Sage Publications.
- Sodowski, G. R., Lai, E. W., & Plake, B. S. (1991). Moderating effects of sociocultural variables on acculturation attitudes of Hispanics and Asian Americans. *Journal of Counseling and Development, 70*, 194-204.
- Swartz, J. L. (1996). Factor analytic identification of cultural and contextual components of mental health: Application to psychological services. *Unpublished doctoral dissertation*, Northern Arizona University, Flagstaff, AZ.
- Swartz, J. L., & Martin, Jr., W. E. (1999). Impact of culture and context on psychosocial adaptation: Person-environment correspondence. *Journal of Counseling and Development, 77*, 281-293.
- Swartz, J. L., & Martin, Jr., W. E. (in press). Culture as an essential aspect of person-environment fit. In W. E. Martin Jr. & J. L. Swartz (Eds.), *Person-environment psychology and mental health: Assessment and intervention*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Swartz, J. L., & Martin, W. E., Jr. (1997). Ecological psychology theory: Historical overview and application to educational ecosystems. In J. L. Swartz & W. E. Martin, Jr. (Eds.), *Applied ecological psychology for schools within communities: Assessment and intervention* (pp. 3-27). Mahwah, NJ: Lawrence Erlbaum Associates.
- Stolle, D. W. (1998). Construct validity of the psychosocial adaptation for cultural and contextual correspondence-rv. *Unpublished doctoral dissertation*, Northern Arizona University, Flagstaff, AZ.
- Tabachnick, B. G., & Fidell, L. S. (1989). *Using multivariate statistics* (6th ed.). New York: Harper-Collins Publishers.
- Trimble, J. (1991). Ethnic specification, validation prospects and the future of drug use research. *International Journal of the Addictions, 25*, 149-170.