

**Security of the Impact
Of Family, Ethnicity And Acculturation
On Substance Use
Among Mexican-American Adolescent Females:
A Comparison Of High Risk And Low Risk Groups.**

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Research Problem

While there is a substantial body of literature on gender differences in adolescence, little research has been done examining gender and ethnicity as risk and protective factors for substance use (Khoury, 1998; Spruijt-Metz, 1999). Hispanic adolescent females are the largest group of minority adolescent females in the nation, and research has shown that they appear to be at greater risk for substance use than any other adolescent female group (National Coalition of Hispanic Health and Human Services Organizations, 1999). Gender differences appear to interact with culture, ethnicity, and minority status to create unique health risks that impact substance use for female adolescents.

Although the literature uses the term “Hispanic” to refer to a specific ethnic group, there are distinct cultural subgroups within the Hispanic population that proscribe differing norms for and acceptance of substance use by gender that is overlooked in much of the research (Mayers & Kail, 1993). The use of “ethnic glosses” is convenient as a census and survey category but has the effect of aggregating heterogeneous groups (Gilbert & Collins, 1997). The complex cultural variations that impact substance use within and among such a broadly defined group is overlooked in much of the research.

This study examined the impact of the mother-daughter relationship, family functioning, ethnic identification and acculturation stress on the use of alcohol, tobacco and illegal drugs in two groups of Mexican American adolescent females. These two groups were at different risk levels for negative life outcomes and demonstrated variation in their substance use and in the factors that impacted use. This research provides information on those factors and information that is critical to the design of effective prevention and intervention programs for this specific minority adolescent population.

Research Background, Questions and Hypotheses

The theoretical framework for this study was the risk-protective factor approach, which asserts that there is no single definitive cause of substance use (Hawkins, Catalano & Miller, 1992; Newcomb, 1995). Multiple factors lead individuals to use substances. The particular factors are not as important as the accumulation of risk and the effect protective factors have in reducing risk vulnerability (Newcomb, 1995a; Padina, 1996). Much of the research in this area has been termed “the deficit approach” because of its focus on risks and deficits with in the individual and their environment (Spruijt-Metz, 1999). In focusing on deficits, researchers miss important protective factors. While risk factors are frequently discussed in adolescent health behavior research, there is little discussion of or research on the protective factors that promote healthy adolescent lifestyles and mitigate against substance use, abuse or dependence.

Female Hispanic adolescents demonstrate vulnerability to acculturation stress, ethnic identity conflicts, the internalization of minority status, and the negative components of this process, including depression, anxiety, delinquency, and substance use (Alva 1994; Alva & Jones, 1994). Research shows that they value relationships and rely on family and social support to cope with stress (Alva & Jones, 1994; Kobus & Reyes, 2000; Pabon, 1998). These female adolescents value relationships and rely on family and social support to cope with stress. Mothers occupy a unique and important role in the lives of these adolescents and have a significant impact on their adolescent behaviors (Chappin & Brook, 2001; Debold, Brown, Weseen & Brookins, 1999). In addition, these females have demonstrated that the developmental transition to adolescence is a critical period of vulnerability to the use of licit and illicit substances (Zapata, Katims & Ying, 1998).

All of these factors appear to have a cumulative impact on substance use in female Hispanic adolescents.

This study was guided by the following research questions: Does substance use vary between the high risk and low risk Mexican American adolescent females? Does the mother-daughter relationship, the family’s functioning, ethnic identification, and acculturation stress differ for these two groups? Does the mother-daughter relationship, the family’s functioning, ethnic identification, and acculturation stress have a relationship to substance use for these two groups?

Methodology

This research utilizes secondary data from a 1999 study on sexual and intimate violence for the Center for Disease Control, in a descriptive comparison group design with a target quota sample of 150 high risk females and a comparison group of 150 low risk females. The data included a discrete measurement of substance use in the low risk group and detailed measurement of thirteen substances for the high risk group. The high risk group substance use data was first recoded to allow for comparative analysis with the low risk group. A separate analysis was done on the high risk group’s substance use utilizing the detailed substance use data for chronicity of substance use and severity of

dangerous substance use. Table 1 presents the dependent and independent variables as they were operationalized and measured for this research. Because many of the instruments were originally designed for non-Hispanic adult populations, reliability, validity and factor analysis was done on each instrument.

Data analysis was conducted in three stages. Effect sizes were calculated where appropriate. The first, univariate analysis, utilized measures of central tendency to analyze the demographic data for both groups and chronicity in the high risk group. The second, bivariate analysis, utilized T-tests and Chi-Square tests for independent samples to determine significant differences between the groups on the independent and dependent variables. The third was multivariate analysis. Logistic regression analysis was used to compare the two groups on prevalence of substance use and the independent variables. Multiple regression analysis was used to analyze chronicity and severity of substance use and the independent variables for the high risk group. To control for spurious findings due to differences sociodemographic variables, selected significant moderating variables were entered as covariates in this stage of the analysis.

Table 1

Variables, Operationalization and Measurement Used in the Analysis of the High and Low Risk Groups of Mexican American Adolescent Females

<i>Variable</i>	<i>Operationalization</i>	<i>Measurement</i>
Dependent both groups		
Prevalence	Self-reported use of alcohol, tobacco or illegal drugs in the last 30 days.	Yes/No
Dependent high risk group		
Chronicity	Self-reported use of ten different substances in times and days over one year.	One score, Continuous
Severity	Self-reported chronic use of six categories of dangerous drugs: 1) alcohol; 2) heroin/opiates alone; 3) heroin and cocaine combined; 4) crack/cocaine; 5) amphetamines; and 6) inhalants in one year.	One score, Continuous

Independent

Ethnic identification	Two factors 1) ethnic identity search; and 2) affirmation, belonging, and commitment.	One score, Continuous: Multigroup Ethnic Identity Measure (Phinney, 2002).
Support of the mother	Socioemotional support and open communication with the mother.	One score, Continuous: Mother-Daughter Relationship Scale (Inazu & Fox, 1980).
Family coping behaviors	Problem solving and behavioral strategies used by families to deal with conflicts or problems.	One score, Continuous: Family Crisis Oriented Personal Scales (McCubbin, Larson, & Olsen, 1982)
Acculturation stress	Conflict from changes in traditional culture and the family, measured by 1) the number of stressful events; and 2) stress & anxiety about those events.	Two scores, Continuous: Hispanic Inventory Stress Family/ Conflict Cultural Subscale (Cervantes, Padilla, & Salgado de Snyder, 1991).

Results

The high risk group used alcohol, illegal drugs, and tobacco at twice to six times the rate of the low risk group and was significantly lower in: (a) support of the mother; (b) family coping behaviors; (c) ethnic identification; and significantly higher in (d) acculturation stress. For the high risk group, tobacco was the most chronically used substance, followed by marijuana/hashish, alcohol, cocaine, and heroin.

Three separate models emerged from the logistic regression analysis of the groups, indicating different stressors associated with the use of alcohol, illegal drugs or tobacco for groups at different levels of risk. The analysis shows some commonality in the two groups. The family's coping behaviors and worry about acculturation stress were not predictors of substance use in either group. The number of acculturation stress events significantly impacted the use of alcohol and tobacco in both groups and lower levels of the mother's socioemotional support significantly predicted illegal drug use for both groups. Ethnic identity was not a significant predictor of chronicity or severity for the high risk group and not a strong predictor of prevalence in either group.

In the high risk group analysis, lower support from the mother was the only significant predictor of higher chronicity. In the analysis of severity, lower support from

the mother, lower family coping behaviors, and higher acculturation stress events significantly predicted higher severity.

Utility for Social Work Practice

Contextual knowledge about the adolescent and the prevalence of their behavior, is necessary to understanding their substance use and formulating an effective policy, prevention or treatment response (Collins, 1995). This research has implications for social work practitioners in those arenas of practice.

The vast majority of substance use prevention programs for minority youth selectively target population subgroups, regardless of risk for any one group member. These two groups have the same ethnicity and live in the same area of their community, yet they have different rates of substance use and different factors that mediate or promote use. Additionally, each group had a separate model that was predictive of alcohol, illegal drug, and tobacco use. This indicates that there are different factors associated with the use of alcohol, illegal drugs, and tobacco for each group and there should be different prevention and treatment interventions for each. Given the disappointing research results on current substance use prevention and treatment programs, targeting specific populations for specific substances may provide more positive outcomes.

Ethnic identity was not a strong factor in the use of substances among these adolescents. This was particularly true for chronicity and severity in the high risk group. Negative ethnic identity experiences for this San Antonio study population may be less than those in a community where the population majority is non-Hispanic. Ethnic identity is currently conceptualized as a category or a continuum. These results indicate there may be more a complex interaction of the adolescent's experiences in their broader neighborhood and community which impact ethnic identity. Any emphasis on ethnic identity as a factor in substance use must recognize socioenvironmental and sociocultural factors.

The mother-daughter relationship played a significant role in predicting substance use for these adolescents. Relationships are of primary importance to females and many times are a primary factor in the initiation or improvement of substance use problems (McNeece & DiNitto, 1998; Fiorentine, Anglin, & Gil-Rivas, 1997). Given the emphasis in the Hispanic culture on gender role expectations, the mother-daughter relationship for these adolescent females appears to have heightened importance. Interventions that support and improve the mother-daughter relationship could help these female adolescents move successfully toward adulthood.

This research illustrates the impact different levels of risk have on substance use. While most research relates potential risk factors to any reported substance use, it may be that these factors are more appropriately related to different levels of adolescent substance use and the related harm for the user (Brown & Caston, 1995; Shedler & Block, 1990). The dominant ideology of U. S. substance use policy is designed to promote the goal of abstinence, which imposes a cognitive dichotomy on what is clearly

a complex behavior. In light of this research, it may be time for the public policy focus on ending or reducing consumption to pursue a more workable goal of harm reduction for prevention and treatment programs.

References

- Alva, S. (1994) Psychological distress and alcohol use in Hispanic adolescents. *Journal of Youth and Adolescence*, 24 (4), 481-497.
- Alva, S., & Jones, M. (1994). Psychosocial adjustment and self-reported patterns of alcohol use among Hispanic adolescents. *Journal of Early Adolescence*, 14(4), 432-448.
- Baer, J. (1999). Family relationships, parenting behavior, and adolescent deviance in three ethnic groups. *Families in Society*, 80 (3), 279-285.
- Brown, J. & Caston, M. (1995). On becoming at-risk through drug education. *Evaluation Review* 19 (4), 451-493.
- Cervantes, R., Padilla, A., & Salgado de Snyder, V. (1991). The Hispanic Stress Inventory: A culturally relevant approach to psychological assessment. *Psychological Assessment*, 3 (4), 438-447.
- Chappin, S. & Brook, J. (2001). The influence of generational status and psychosocial variables on marijuana use among Black and Puerto Rican adolescents. *Hispanic Journal of Behavioral Sciences* 23 (1), 22-35.
- Collins, R. (1995). Issues of ethnicity in research on the prevention of substance abuse. In G. Botvin, S. Schinke & M. Orlandi (Eds.) *Drug Abuse prevention with multiethnic youth*. (pp. 28-47). Thousands Oaks, CA: Sage Publications.
- Debold, E., Brown, L., Weseen, S., & Brookins, G. (1999) Cultivating hardiness zones for adolescent girls: A reconceptualization of resilience in relationships with caring adults. In N. Johnson, M. Roberts & J. Worell (Eds.). *Beyond appearance: A new look at adolescent girls*. (pp. 181-204). Washington, DC: American Psychological Association.
- Fiorentine, R., Anglin, M.D. & Gil-Rivas, V. (1997). Drug treatment: Explaining the gender paradox. *Substance Use and Misuses*, 32 (6), 653-678.
- Gilbert, M. & Collins, R. (1997). Ethnic variation in women's and men's drinking. In R. Wilsnack & S. Wilsnack (Eds.), *Gender and alcohol: Individual and social perspectives* (pp.357-378). New Brunswick, NJ: Rutgers Center of Alcohol Studies.
- Hawkins, J. Catalano, R. & Miller, J. (1992). Risk and protective factors for alcohol and other drug use in adolescence and early childhood: Implications for substance abuse prevention. *Psychological Bulletin* 112 (1), 64-105.

- Inazu, J. & Fox, G. (1980). Maternal influences on the sexual behavior of teenage daughters: Direct and indirect sources. *Journal of Family Issues*, 1, 81-102.
- Khory, E. (1998). Are girls different: A developmental perspective on gender differences in risk factors for substance use among adolescents. In W. Vega & A. Gil (Eds.). *Drug use and ethnicity in early adolescence*. (pp.95-124). New York, NY: Plenum Press.
- Kobus, K. & Reyes, O. (2000). A descriptive study of urban Mexican American adolescents' perceived stress and coping. *Journal of Hispanic behavioral sciences*, 22 (2), 163-179.
- Mayers, R. & Kail, B. (1993). Hispanic substance abuse: An overview. In R. Sanchez, B, Kail & T. Watts (Eds.). *Hispanic substance use* (pp.5-18). Springfield, IL: Charles C. Thomas.
- McCubbin, H., Larson, A. & Olsen, D. (1982). (F-Copes) Family crisis oriented personal evaluation scales. In H. McCubbin & A. Thompson (Eds.) *Family assessment inventories*. Madison, WI: University of Wisconsin-Madison.
- McNeece, A. & DiNitto, D. (1998). *Chemically dependency: A systems approach*. Boston, MA: Allyn and Bacon.
- National Coalition of Hispanic Health and Human Services Organizations (1999). *The state of Hispanic girls*. Washington, DC: COSSMHO Press.
- Newcomb, M. (1995). Drug use etiology among ethnic minority adolescents. In G. Botvin, S. Schinke & M. Orlandi (Eds.) *Drug Abuse Prevention with Multiethnic Youth*. (pp. 105-129). Thousand Oaks, CA: Sage Publications.
- Pabon, E. (1998). Hispanic adolescent delinquency and the family: A discussion of sociocultural influences. *Adolescence*, 33 (132), 941-955.
- Padina, R. (1996, September), Risk and protective factor models in adolescent drug use: Putting them to work for prevention. *National conference on drug abuse prevention research: Presentations, papers and recommendations*. (NIH Publication No. 98-4293, pp.17-26). Rockville, MD: U. S. Department of Health and Human Services.
- Phinney, J. (2002). *The mutligroup ethnic identity measure (MEIM)*. Retrieved June 6, 2002 from <http://www.calstatela.edu/academic/psych/ftp/meim.doc>
- Shedler, J. & Block, J. (1990) Adolescent drug use and psychological health: A longitudinal inquiry. *American Psychologists* 45 (5), 612-630.

Spruijt-Metz, D. (1999). *Adolescence, affect and health*. East Sussex, UK: Psychology Press Limited.

Zapata, J., Katims, D. & Ying, Z. (1998). A two year study of patterns and predictors of substance use among Mexican American youth. *Adolescence*, 33 (130), 391-404.