## ORIGINAL PAPER

## **Acculturation and Adolescent Health: Moving the Field Forward**

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The racial and ethnic makeup of the population of the United States has changed more rapidly since 1965 than during any other period in history (U.S. Department of Health and Human Services 2001). In July 2006, the U.S.'s minority population reached 100.7 million, which equates to one in three residents of the nation being a member of a minority group (U.S. Census Bureau 2007). Children and adolescents represent significant proportions of this heterogeneous population, with youth representing a third of the Latino population, nearly a third of the Asian/Pacific Islander (A/PI) population, and slightly more than a quarter of the American Indian/ Alaskan Native (AI/AN) population (U.S. Census Bureau 2007). Large portions of these minority groups consist of new immigrants adjusting to life in the United States, bringing acculturation dynamics to the front of national awareness.

Minority youth have high rates of risk behaviors across a number of health indicators (e.g., violence, tobacco use, alcohol and other drug use, sexual risk taking) (Bureau of Indian Affairs 2001; CDC 2008; Grunbaum et al. 2000). Attention is often given to how these high rates illustrate health disparities, and

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attention is less often focused on understanding why these differences exist. One factor may be that minority youth have the stress associated with their families and themselves adjusting to U.S. culture added to the normative stressors associated with the social, emotional, and physical development of the adolescent life stage. Studies have associated acculturation, the process of cultural change and adjusting to a new culture, with adolescent risk behaviors across minority groups (e.g., Chen et al. 1999; Gonzales et al. 2002; Love et al. 2006).

Despite the substantive importance of this topic, acculturation research has been limited and has engendered considerable debate, mostly due to methodological challenges inherent in investigating a complex sociological and psychological construct with simple, linear items from large scale survey questionnaires (Gonzales et al. 2002; Hunt et al. 2004). In this context, the guest editors sought to advance acculturation research and the promotion of adolescent health by bringing together a group of articles that applied methodologically sophisticated designs to better understand the complexities of acculturation and its relationship to adolescent health.

A Call for Papers was published in *The Journal of Primary Prevention* in the fall of 2007. The guest editors described the special issue theme in broad terms. We solicited papers that provided new knowledge and insight into acculturation risk and protective factors; that considered a wide-range of health outcomes; and that evaluated services, programs, and policies that will help individuals and families cope with acculturation stress. Authors were encouraged to submit papers on aspects of the acculturation process for Latino, A/PI or AI/AN adolescents that have implications for primary prevention, including but not limited to the following:

- Assimilation as a risk factor for maladjustment.
- The role of ethnic identity, enculturation, or cultural identity as a cultural asset.
- Bicultural identity development.
- Family mediators of acculturation processes.
- Peer and community influences on acculturation.
- The development, implementation, and evaluation of prevention programs to reduce acculturation stress.

Twenty-four manuscripts were received and subjected to two levels of peer review. First, the special issue editors reviewed papers to ensure that the manuscripts focused on Latino, A/PI, or AI/AN adolescents in the United States; included at least one measure of acculturation; and were methodologically sophisticated and sound to warrant external peer review. Manuscripts that met these criteria were then subjected to a blind peer-review process that included distinguished social and behavioral science researchers and program developers and evaluators critiquing the articles, providing guidance for revisions, and making recommendations for publication. To support an objective process, the review and selection process was conducted so that the guest editors and peer reviewers were excluded from making decisions on any manuscripts with which they were associated. The present volume of research on acculturation and adolescent health is the result of this process and represents articles that were written by authors from a range of disciplines and who represented different perspectives.



Regrettably, no manuscripts were received that focused on AI/AN adolescents, despite a recognition that the uniquenesses of tribal communities and how youth successfully or unsuccessfully negotiate between urban and reservation cultures needs to be better understood (e.g., Freedenthal and Stiffman 2004; Novins et al. 1999). A/PI adolescents had some limited representation in the submissions, and research on the acculturation and health of Latino adolescents and families received the most attention. This pattern of research activity is similar to the one Smokowski, David-Ferdon et al. (2009) found in their review of acculturation and youth violence investigations for all of these minority groups. The review by Smokowski and colleagues in this volume helps to demonstrate that the pattern of association between acculturation and adolescents' health risks varies within and between adolescent minority groups, and more research is needed to better understand this complex relationship. Additionally, in light of the growing proportion of the U.S. population who are A/PI and AI/AN youth and their documented health disparities (Bureau of Indian Affairs 2001; Centers for Disease Control and Prevention 2008; Grunbaum et al. 2000; Indian Health Service 2007; U.S. Census Bureau 2007), increased research attention on health issues within these minority youth groups, the roles acculturation factors may play in elevating or buffering health risk, and the evaluation of prevention strategies for A/PI and AI/AN youth are warranted.

Most of the quantitative articles included in this volume pay special attention to sophisticated measurement of their acculturation variables, moving beyond simple linear operationalizations of acculturation constructs to multidimensional ones. In the assessments of acculturation, many researchers used frameworks of bidirectional acculturation change (i.e., culture-of-origin and U.S. cultural influences are interacting and both could make accommodations) and biculturalism (i.e., retaining aspects of culture-of-origin identity and establishing a positive relationship with the dominant U.S. culture). However, consistent with the acculturation field, the measures used to quantify acculturation were diverse, reinforcing the fact that there continues to be no universally accepted conceptualization of acculturation.

Researchers commonly describe acculturation as an extended, continuous process (Gonzales et al. 2002). This recognition suggests that to understand acculturation and to understand its relationship to adolescents' development of risky or healthy behaviors, multiple assessments over time to gauge change and longitudinal analyses are critically important. Even so, the vast majority of acculturation studies have been cross-sectional, leaving a dearth of longitudinal data. Three studies in this volume contribute to our knowledge of acculturation effects over time by utilizing longitudinal designs (Juang and Cookston 2009; Smokowski, Buchanan et al. 2009; Unger et al. 2009). The results of these three longitudinal studies demonstrate that adolescents' levels of acculturation both change over time (Unger et al. 2009) and that differential aspects of acculturation at baseline are associated with health outcomes 1 year later (Juang and Cookston 2009; Smokowski, Buchanan et al. 2009; Unger et al. 2009). Notably, the adolescents' involvement in their culture-oforigin was significantly, inversely related to subsequent depressive symptoms in Chinese American adolescents (Unger et al. 2009) and hopelessness, social problems, aggression, and substance use in Latino adolescents (Smokowski,



Buchanan et al. 2009; Unger et al. 2009), and was positively associated with self-esteem in Latino adolescents (Smokowski, Buchanan et al. 2009). Longitudinal effects, such as these, are particularly important for primary prevention program designers who want to create programs that have lasting results.

Several articles compare the differential impacts of cultural involvement (i.e., involvement in the culture-of-origin and in the U.S. culture) and acculturation stress (Juang and Cookston 2009; Smokowski, Buchanan et al. 2009; Suarez-Morales and Lopez 2009; Zamboanga et al. 2009). Decomposing the overall acculturation construct in this way illuminates different effects for these disparate dimensions. Evidence from these studies suggests that involvement in the culture-of-origin is a protective factor while involvement in U.S. culture does not display strong effects (Juang and Cookston 2009; Smokowski, Buchanan et al. 2009; Zamboanga et al. 2009). Further, acculturation stressors, such as encountering discrimination, appear to have stronger risk effects than orientation or involvement in U.S. culture (Juang and Cookston 2009; Smokowski, Buchanan et al. 2009; Suarez-Morales and Lopez 2009; Zamboanga et al. 2009). Demarcating these relative effects from different dimensions of acculturation is important because past studies relying on single or simple acculturation variables cannot be certain what these variables are actually measuring (Hunt et al. 2004).

A subset of articles move the acculturation research field forward by delineating risk and protective factors that mediate the relationship between acculturation factors and health outcomes (Guilamo-Ramos et al. 2009; Zamboanga et al. 2009). Like longitudinal designs, mediation analyses have not been well represented in past acculturation research. These studies contribute to the growing evidence that acculturation dynamics, although important, may be mediated by other factors, such as self-esteem (Zamboanga et al. 2009) or family processes (Guilamo-Ramos et al. 2009).

A second subset of studies examines how cultural protective factors, such as ethnic pride (González Castro et al. 2009), familism (Guilamo-Ramos et al. 2009; Zayas et al. 2009), and bicultural skills (Bacallao and Smokowski 2009), influence health outcomes. Several researchers examined parent-adolescent relationships and demonstrated that adolescents and their parents often differ in their levels of acculturation (Bacallao and Smokowski 2009; Guilamo-Ramos et al. 2009; Smokowski, Buchanan et al. 2009; Unger et al. 2009; Zayas et al. 2009). Since its introduction three decades ago, acculturation discrepancy theory predicted that conflicting cultural preferences between adolescents and their parents increase the adolescents' risk for behavior problems (Szapocznik et al. 1978). The studies in this volume both provide evidence for this theory (Unger et al. 2009) and go beyond it to show that specific aspects of parent-adolescent acculturation dynamics, such as perceived mutuality (Zayas et al. 2009), parents' level of involvement in U.S. culture (Smokowski, Buchanan et al. 2009), and the adolescents' and parents' bicultural development (Bacallao and Smokowski 2009) may actually benefit family relationships and decrease adolescent risk behavior.

Although a number of different health outcomes are represented, substance use (González Castro et al. 2009; Le et al. 2009; Unger et al. 2009; Zamboanga et al. 2009), depression (Juang and Cookston 2009; Zayas et al. 2009), aggressive



behavior (Smokowski, Buchanan et al. 2009; Smokowski, David-Ferdon et al. 2009), and anxiety (Suarez-Morales and Lopez 2009) have the greatest representation in this volume. The articles collected in this special issue offer important guidance to acculturation researchers on how to enhance the rigor in both their measurement of acculturation dynamics and the use of sophisticated analytic techniques, such as using Structural Equation Modeling, to examine mediating factors in acculturation processes.

Although the call for articles included requests for studies on programs designed to address issues of acculturation, no program development and evaluation articles were received. All articles provide implications of their findings for primary and secondary prevention of adolescent difficulties. The diverse, intriguing results from these investigations could help inform primary prevention programmers in designing and evaluating a new generation of interventions to aid minority families in adjusting to their new cultural system and to support the healthy development of youth and parent-adolescent relationships. The investigations in this volume make it clear that acculturation processes have diverse direct and indirect effects on a range of adolescent health outcomes. Furthermore, many of the articles demonstrate the significant influence of family processes on adolescents' functioning and suggest that interventions with components to address parenting practices, family communication and relationships, and parent-adolescent differences in levels of acculturation should be investigated. It is incumbent on primary prevention programmers to use this information in constructing new initiatives to help minority families successfully adapt to cultural changes.

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