Chapter Ten: Methodology and Measurement Issues

Methodology and Measurement Issues - Books

Note: The authors could not locate any books within this category.

Methodology and Measurement Issues - Articles

Agans, Robert P., Natalia Deeb-Sossa, and William D. Kalsbeek. 2006. "Mexican Immigrants and the Use of Cognitive Assessment Techniques in Questionnaire Development." *Hispanic Journal of Behavioral Sciences* 28(2): 209-30.

> The aim of this article is to identify the measurement challenges involved in obtaining sensitive health outcomes from Mexican women in both settled and unsettled segments of the United States population and to suggest how cognitive assessment techniques might be better employed to construct culturally and linguistically appropriate survey instruments. These objectives will be illustrated through a project with recent Mexican immigrants in North Carolina that constructs items to measure last menstrual period – an important indicator in gauging the gestational age of a fetus. Guidelines for conducting focus groups and cognitive interviews with this population are emphasized.

Barreto, Matt A. 2002. "National Origin (Mis)identification among Latinos in the 2000 Census: the Growth of the 'Other Hispanic or Latino' Category." *Harvard Journal of Hispanic Policy* 15: 39-63.

> The 2000 census revealed unprecedented population growth among Latinos in the United States with the total Latino population growing to more than 35 million. However, the census also revealed its inability to accurately count and distinguish between countries of ancestry among the Latino population. Over 15% of all Latinos living in the United States indicated "other Hispanic or Latino" when asked for specific country of origin for their family heritage. This misclassification has led many groups of Latinos to question the validity and accuracy of the census instrument and has frustrated others expecting to find big gains in their population. Using data from the Census 2000 Summary File 1 (SF 1), I model identification as "other" Latino at the county level. Not surprising, I find that Dominicans, Colombians, Salvadorans, and Guatemalans were among the top nationalities miscounted by the 2000 census. In sum, nearly two million Central and South Americans were misidentified by the census, putting their numbers and clout in question. Through OLS regression analysis I can identify which groups are most misrepresented and

what regional variations exist. This research holds great promise not just for advocacy groups that are eager to see a more accurate count of their population, but also for policy makers responsible for designing official government survey forms. It is my hope that this research will lead to a more accurate understanding of the Latino population in the United States, and help address problems associated with the large population identified as "others."

Carranza, Lou. 1992. ""Scale for the Measurement of Attitude Toward Chicanos" A Research Note." *Hispanic Journal of Behavioral Sciences* 14(2): 277-85.

> This article describes the construction of a scale for the measurement of attitude toward Chicanos using the method of equal-appearing intervals as outlined by Thurstone and Chave. The description includes the methods and procedures used for the collection of statements. The procedures used to calculate the median, that is, the scale value (S value) and the inter-quartile range (Q value) fore ach of the items are delineated. Both the S values and the Q values constitute the criteria for the final section of the items for two forms of the scale. The results are set forth together with the methods for scoring the scale. Finally, the result of equivalent-forms method used to estimate the reliability of the scale is reported.

Cavaza, Leopoldo J. 2003. "Measuring Acculturation: Where We Are and Where We Need to Go." *Hispanic Journal of Behavioral Sciences* 25(2): 127-46.

> Acculturation measures intend to capture the psychological, behavioral, and attitudinal changes that occur when individuals and groups from different cultures come into continuous contact with each other. This article examines the most prominent theoretical models and assumptions that drive acculturation measures. Examples of Hispanic acculturation measures are used to illustrate how these theoretical foundations are applied in empirical measures. Particular emphasis is given to discussing the strengths and limitations of two bi-dimensional measures, the Bi-dimensional Acculturation Scale for Hispanics (BAS) and the Acculturation Rating Scale for Mexican Americans-Revised (ARSMA-II). Recommendations for improving these measures are presented. Moving beyond proxy measures, improving the operationalization of acculturation indicators, and incorporating theoretical models, as well as contextual variables, are the key recommendations presented for improving measures of acculturation.

Chiriboga, David A. 2004. "Some Thoughts on the Measurement of Acculturation among Mexican American Elders." *Hispanic Journal of Behavioral Sciences* 26(3): 274-92.

> This article examines a subset of acculturation items pertaining to language fluency and use and to interpersonal relationships. This study included 3,050 Mexican American elders aged 65 to 99, randomly sampled from five states in the southwestern United States. A standard acculturation inventory was used as the source for two factor-derived scales that dealt with language and social acculturation. In addition, three other measures were derived on the basis of the acculturation inventory: language and social bi-culturality scores were created by simple counts of the number

of "in-between" scores on the inventory, and an index of neighborhood acculturation was created by computing the average score on the language acculturation factor for each of the 209 primary sampling units used in the sampling frame. The acculturation scales demonstrated reasonable levels of reliability and concurrent validity. Results suggest that multiple approaches to measuring acculturation can be created from existing measures.

Cruz, Theresa H., Stephen W. Marshall, J. Michael Bowling, and Andrés Villaveces. 2008. "The Validity of a Proxy Acculturation Scale Among U.S. Hispanics." *Hispanic Journal of Behavioral Sciences* 30(1): 425-446.

This study examines the validity of a proxy acculturation scale composed of four acculturation-related variables. The authors use data from a nationally representative sample of 1,437 U.S. Hispanics. Results indicate good internal scale reliability, a high degree of correlation between the proxy scale and the full acculturation measure, and substantial agreement between dichotomized versions of the two scales. Although reliability declines slightly, validity increases with removal of generational status from the scale. Validity is found to be high for the three largest subpopulations by country of ancestry (Mexico, Puerto Rico, and Cuba). The proxy acculturation scale is a useful tool for the measurement of acculturation level among the majority of U.S. Hispanics when use of a more comprehensive acculturation scale is infeasible or impractical.

Davis, Darren W., and Brian D. Silver. 2003. "Stereotype Threat and Race of Interviewer Effects in a Survey on Political Knowledge." *American Journal of Political Science* 47(1): 33-45.

Social desirability is generally thought to underlie the propensity for survey respondents to tailor their answers to what they thing would satisfy or please the interviewer. While this may in fact be the underlying motivation, especially on attitudinal and opinion questions, social desirability does not seem to be an adequate explanation for interviewer effects on factual questions. Borrowing from the social psychology literature on stereotype threat, we test an alternative account for the race-of-interviewer effects. Stereotype threat maintains that the pressure to disconfirm and to avoid being judged by negative and potentially degrading stereotypes interferes with the processing information. We argue that the survey context contains many parallels to a testing environment in which stereotype threat might alter responses to factual questions. Through a series of framing experiments in a public opinion survey and the reliance on the sensitivity to the race of interviewer, our results are consistent with expectations based on a theory of "stereotype threat." African American respondents to a battery of questions about political knowledge get fewer answers tight when interviewed by a white interviewer than when interviewed by an African American interviewer. The observed differences in performance on the political knowledge questions cannot be accounted for by differences in the educational background or gender of the respondents.

Félix-Ortiz, María, Michael D. Newcomb, and Hector Myers. 1994. "A Multidimensional Measure of Cultural Identity for Latino and Latina Adolescents." *Hispanic Journal of Behavioral Sciences* 16(2): 99-115.

> Many scales are available to measure acculturation. Unfortunately, most rely on a single indicator scale and fail to consider bi-culturality. Therefore, the multidimensional and multifaceted aspects of the complex phenomenon of cultural identity have not been adequately appreciated or assessed. Latino(a) college students (N = 130) responded to multiple items regarding language use, values/attitudes, behavior, and familiarity with aspects of American and Latino/a culture. Using exploratory factor analysis with oblique factor rotation, 10 interpretable and reliable factors were identified and compared to other criteria. The cultural identity scales included: Three for language, four for behavior/familiarity, and three for values/attitudes. Behavior and language differentiated between highly bicultural individuals, Latino/a identified, American identified, and low-level bi-culturals.

Marín, Gerardo, and Raymond A. Gamba. 1996. "A New Measurement of Acculturation for Hispanics: The Bi-dimensional Acculturation Scale for Hispanics (BAS)." *Hispanic Journal of Behavioral Sciences* 18(3): 297–316.

> This article reports the development of a bi-dimensional acculturation scale for Hispanics (BAS). The scale proves an acculturation score for two major cultural dimensions (Hispanic and non-Hispanic domains) by including 12 items (per cultural domain) that measure three language-related areas. A random sample of 254 adult Hispanics was surveyed to develop and validate the scale. The scores obtained with the BAS show high internal consistency and high validity coefficients. The scale works well with Mexican Americans and with Central Americans.

Oetting, E.R., Randall C. Swaim, and Maria Carla Chiarella. 1998. "Factor Structure and Invariance of the Orthogonal Cultural Identification Scale among American Indian and Mexican American Youth." *Hispanic Journal of Behavioral Sciences* 20(2): 131-54.

> Some theories and measures of cultural identification are based on a uni-dimensional continuum, requiring that, as identification with one culture increases, identification with another decreases. Others, such as multicultural theories, allow high identification with different cultures but rarely incorporate low identification. Orthogonal cultural identification theory specifies that identification with one culture can be independent of identification with another. Short scales have been developed to assess orthogonal cultural identification, applicable across a variety of cultures. Comparisons of measurement models indicated that, for both Mexican American and American Indian adolescents, measures of minority and White American cultural identification are, as predicted, independent and that cultural identification is strongly rooted in the family. Although minor ethnicity differences occurred in a few higher order paths, multi-group tests indicated essential invariance of factor loadings and higher order structure across gender, grade level, and ethnic minority group.

Paxton, Pamela, and Anthony Mughan. 2006. "What's to Fear from Immigrants? Creating an Assimilationist Threat Scale." *Political Psychology* 27(4): 549-68.

> We argue that cultural threat, stressed in recent studies of anti-immigrant sentiment, is properly measured in the U.S. case as "assimilationist threat": a resentful perception that immigrants are failing to adopt the cultural norms and lifestyle of their new homeland. We explore the meaning and form of assimilationist threat in the minds of Americans through an analysis of four focus groups, two in Los Angeles, CA, and two in Columbus, OH. Using information from the focus groups, we develop and test a set of survey questions covering three dimensions of immigrants' commitment to their new country: language, productivity, and citizenship. We produce a summary scale of assimilationist threat that can be used by other researchers seeking to understand the causes and consequences of anti-immigrant sentiment.

Petersen, William. 2001. "Surnames in US Population Records." *Population and Development Review* 27(2): 315-22.

> Two federal agencies have used surnames to classify persons by ethnicity. As two important twentieth-century examples, names were used to set immigration quotas, and the Census Bureau used names as the defining characteristic of Hispanics. However, many names have been changed and, if unaltered, they are in any case an unreliable index of ethnic identity.

Singelis, Theodore M., Ann Marie Yamada, Concepcion Barrio, Joshua Harrison Laney, Pa Her, Alejandrina Ruiz-Anaya, and Sara Terwilliger Lennertz. 2006. "Metric Equivalence of the Bi-dimensional Acculturation Scale, the Satisfaction with Life Scale, and the Self-Construal Scale Across Spanish and English Language Versions." *Hispanic Journal of Behavioral Sciences* 28(2): 231-44.

> The metric equivalence of translated scales is often in question but seldom examined. This study presents test-retest data that support the metric equivalence of the Spanish and English language versions of three measures: the Bi-dimensional Acculturation Scale, the Satisfaction with Life Scale, and the Self-Construal Scale. Participants were randomly assigned to one of four test conditions designating the language order of the presented questionnaire packets: (a) English-English, (b) English-Spanish, (c) Spanish-English, and (d) Spanish-Spanish. Internal and test-retest reliabilities were found to be adequate both within and across language versions. In addition to reliabilities, a comparison of the means across language versions supported their metric equivalence. Language effects and implications are discussed.

Smith, Stanley, and June M. Nogle. 2004. "An Evaluation of Hispanic Population Estimates." *Social Science Quarterly* 85(3):731-45.

> **Objective:** Estimates of the Hispanic population have traditionally been based on historical trends, ratios, or some variant of the cohort-component method. In this article, we describe and test a methodology in which estimates of the Hispanic population are based on symptomatic indicators of population change such as births, deaths, and school enrollments. **Methods:** Using a variety of techniques, we develop Hispanic population estimates for counties in Florida. We

evaluate the accuracy of those estimates by comparing them with 2000 Census counts. **Results:** Hispanic population estimates have larger errors than estimates of total population; errors vary considerably by population size and growth rate; some techniques perform better than others in places with particular population characteristics; and averages often perform better than individual techniques. **Conclusions:** In many circumstances, symptomatic data series can provide more accurate estimates of the Hispanic population than more commonly used techniques.

Umaña-Taylor, Adriana J., and Mark A. Fine. 2001. "Methodological Implications of Grouping Latino Adolescents Into One Collective Ethnic Group." *Hispanic Journal of Behavioral Sciences* 23(4): 347-62.

This study examined the methodological appropriateness of categorizing Latinos as a homogenous population when assessing ethnic identity, self-esteem, emotional autonomy, and familial ethnic socialization. Reliability coefficients of Phinney's Multi-group Ethnic Identity Measure (MEIM), Rosenberg's Self-Esteem Scale (SES), Steinberg and Silverberg's Emotional Autonomy Measure, and Umaña-Taylor's Familial Ethnic Socialization Measure (FESM) were compared among Colombian, Guatemalan, Honduran, Mexican, Nicaraguan, Puerto Rican, and Salvadoran adolescents (N = 1,176) living in the United States. The measures demonstrated moderate to strong coefficients for certain Latino populations but considerably lower coefficients for other Latino groups. Furthermore, the concurrent validity of the MEIM and the FESM varied across Latino groups. Nationality, immigration history, and generational status are discussed as possible reasons for the divergent findings among groups. These findings call into question the grouping of Latino nationals into one homogenous population and have implications for researchers who study pan-ethnic populations (i.e., Latinos, Asians).