Should “acculturation” be a variable in health research? A critical review of research on US Hispanics

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Abstract

Acculturation has become a popular variable in research on health disparities among certain ethnic minorities, in the absence of serious reflection about its central concepts and assumptions. Key constructs such as what constitutes a culture, which traits pertain to the ethnic versus “mainstream” culture, and what cultural adaptation entails have not been carefully defined. Using examples from a systematic review of recent articles, this paper critically reviews the development and application of the concept of acculturation in US health research on Hispanics. Multiple misconceptions and errors in the central assumptions underlying the concept of acculturation are examined, and it is concluded that acculturation as a variable in health research may be based more on ethnic stereotyping than on objective representations of cultural difference.

Introduction

With the growing awareness that poor health is disproportionately concentrated among racial and ethnic minorities in the US, the concept of “culture” as an antecedent to health status has captured the imagination of a broad cross-section of health care providers, researchers and policy makers. Health researchers commonly operationalize “culture” as level of acculturation, and various measures of acculturation are currently widely used in US health research on certain ethnic minorities. However, critical discussion about acculturation in the health literature tends to focus on issues of its measurement, while its central assumptions and constructs remain largely unexplored, unarticulated and unchallenged. In this paper, using illustrations from a review of recently published US studies of Hispanic health and acculturation, we will argue that acculturation research is plagued by essential and unavoidable conceptual and methodological difficulties which are inherent to the construct of acculturation itself. Of particular concern are presumptions about the supposed cultural characteristics of certain ethnic groups, accompanied by a pernicious failure to define what might constitute the host or “mainstream” society, erroneous assumptions about the historical origins and movement of the populations in question, and a dubious undertone of ethnic stereotyping.

Background

Acculturation and health inequalities

The concept that acculturation levels predict or explain health inequalities is rooted in a behavior or lifestyle model (Dressler, 1993), which posits that culturally based knowledge, attitudes and beliefs cause people to make behavioral choices that result in the observed health patterns. At its essence, this model presumes individuals choose or reject behaviors, based on their cultural beliefs and that such choices are a prime factor affecting their health.
In efforts to objectively model cultural influences on health, ethnic culture is commonly operationalized as level of “acculturation,” which is measured using acculturation scales designed to quantify the extent to which individuals embrace “mainstream” versus ethnic culture. These figures are then correlated with measures of the health outcomes of interest. Acculturation measures are especially common in US studies of Hispanic or Latino health, and have been used to examine a broad variety of health concerns for this group. For example, in a recent review of acculturation research on Latinas, Amaro and de la Torre (2002) report:

Consistently, these studies have demonstrated that as (Latina) women become more acculturated, they are more at risk for adverse birth outcomes; younger age at first intercourse, first use of birth control, and first pregnancy; partner violence; tobacco, alcohol, and illicit drug use; depression; sexual activity with multiple partners; and negative attitudes toward condom use. While less acculturated Latinas experience fewer health problems and risk factors, they are also less likely to have access to health care services when they need them. In comparison with more acculturated Latinas, those with lower levels of acculturation are less likely to seek prenatal care, to use needed mental health services, to have had annual Papanicolaou tests or mammograms, and to have health insurance coverage and a regular source of health care (p. 526).

The matter-of-fact reporting of such correlations implies that the acculturation variable is an uncontroversial representation of objective characteristics of the population (Harwood, 1994). However, despite its widespread use and general acceptance as a measurable variable, the concept of acculturation is only vaguely defined in the health literature. Rogler, Cortes, and Malgady (1991) in a definitive literature review on the topic, define acculturation as “the process whereby immigrants change their behavior and attitudes toward those of the host society” (p. 585). Fuller delineation of the concept is left to a presumed understanding of what constitutes a culture, which traits should be ascribed to the “mainstream” versus the ethnic culture, and what adapting to a new cultural system might entail. This vagueness of definition persists today, as illustrated by a recent volume (Chun, Organista, & Marin, 2003) intended to present a comprehensive review of acculturation theory and measurement, wherein the definition of the concept of “acculturation” is limited to terms presented in 1954 by the Social Science Research Council: “culture change that is initiated by the conjunction of two or more autonomous cultural systems…” (Social Science Research Council, 1954, p. 974). While the volume presents a variety of sophisticated discussions about how cultural change should be modeled and measured, the core concept is not defined any more specifically than this. Considering that measurement of acculturation is key to this research, it is worrisome that more precise definitions do not exist.

To attempt to measure such a nebulous attribute would seem an ambitious undertaking at best. This inherent difficulty is amplified by the notable lack of uniformity in the methodologies employed in acculturation research. Acculturation is always measured by proxy variables, which centrally include questions about the individual’s use of English versus their minority language in various settings. Some measures also include questions about the individual’s preferred ethnic identity, and that of their friends and associates; as well as their and their parents’ place of birth and residency patterns. A few also ask about knowledge of miscellaneous historical events from the country of origin, and subscription to family values and gender roles thought to be associated with the ethnic group (see for example: Cuellar, Harris, & Jasso, 1980; Hazuda, Stern, & Haffner, 1988; Marin & Marin, 1991; Cuellar, Arnold, & Maldonado, 1995; Balcazar, Castro, & Krull, 1995; Amaro & de la Torre, 2002).

Many researchers have roundly criticized the lack of consistency and rigor in acculturation measurement (Rogler et al., 1991; Recio Adrados, 1993; Harwood, 1994; Salant & Lauderdale, 2003; Rudmin, 2003). Zane and Mak (2003) point out that “notwithstanding the widespread use that some of these measures have enjoyed, it is often unclear to what extent these measures have content validity, namely the extent to which a measure adequately samples the behavior of interest” (pp. 40).

These contemporary concerns about developing techniques for adequately modeling and measuring acculturation presuppose the validity of the construct itself. However, a brief review of the origins and historical development of acculturation studies would seem to challenge this assumption.

Acculturation in historical context

The concept of acculturation originated during the period of European colonial expansion. It was used to describe the process by which artifacts, customs, and beliefs change when people from different cultural traditions come into contact. Rooted in the field of American anthropology, the term has been traced to as early as 1880, when it was used to describe the “great changes” experienced by the native American population faced with the “overwhelming presence of millions” (Herskovits, 1958, 3). By the early 20th century, as concern over controlling the movements and activities of immigrant and native populations in the Unites States
grew, interest in the acculturation concept also grew. Advocates for restricting immigration drew on common notions of social Darwinism, describing the supposed “negative” mental traits of the new immigrants, characterizing certain migrants as “mental defectives” or “defective classes” (Thielman, 1985; Escobar, Hoyos Nervi, & Gara, 2000). While this extreme perspective was gradually modified, many early studies presumed less assimilated immigrants were at a social, economic, political, and health-related disadvantage, and touted assimilation or acculturation into American society, as the “key salubrious influence that would eventually dispel most of the immigrants’ disadvantages” (Escobar & Vega, 2000, p. 64).

Concerned with the growth of acculturation studies in the absence of a clear definition or approach, and troubled by the dubious political ends for which such studies were being enlisted, anthropologists in the 1930s began a collaborative effort to delimit the concept of acculturation and develop a standard definition to direct future studies (Redfield, Linton, & Herskovits, 1936). Research on cultural contact and cultural change flourished in anthropology during the 1940s and 1950s, but as anthropologists became more historically conscious about the complexities inherent in the process of cultural and social change, the “superficially defined states of acculturation” lost their relevance (Chance, 1996, 383). By the 1960s, interest in acculturation phenomena declined sharply in cultural anthropology.

Despite the discrediting of the notion of acculturation among anthropologists, in the 1960s acculturation studies began gaining prominence in the field of epidemiology. Beginning with the seminal work of Henry and Cassel (1969) on the association between modernization and blood pressure, interest in the notion of acculturation as an explanatory variable in health research has proliferated (Palinkas & Pickwell, 1995). Since 1966, almost 2000 articles have been indexed on Medline under the key word “acculturation,” and acculturation studies have been steadily increasing over the past 40 years (see Fig. 1).

The study of acculturation by health researchers in the US has focused almost exclusively on four major ethnic minority groups: African Americans, Asian Americans, Native Americans and Hispanics/Latinos (Chun et al., 2003). These groups indeed were by far those most mentioned in the articles from our Medline search. Although these groups are popularly thought of as culturally diverse within the United States, it is unclear why they and not others have been singled out for acculturation studies. What might be the logic behind applying the acculturation model to American Indians and African Americans, for example, who are by no means recent immigrants coming into new contact with an unfamiliar culture? One is led to wonder whether the focus on these particular groups may be based less on objective considerations than on widely held cultural stereotypes which purport that certain ethnic groups are particularly driven by traditionalism and folk beliefs (Lucas & Barrett, 1995; Hahn, 1995; Hahn & Stroup, 2002).

**Systematic literature review**

In order to examine these and related conceptual and methodological difficulties in greater detail, we have systematically reviewed a set of articles addressing Hispanic health and acculturation, published in the US within the last 5 years. A Medline search of articles key-worded for “Acculturation” and “Hispanic or Latino/a or Mexican-American” between 1996 and 2002 produced 205 articles. After an initial review, we identified 69 articles whose primary variables include Hispanics/Latinos and Acculturation (see Table 1). Each of these articles was carefully reviewed and coded for specific content elements, including definitions of acculturation,
components of the acculturation measurement used, hypotheses being examined, other variables measured, conclusions drawn, and characterizations of Hispanic versus mainstream culture. All phases of the literature review were cross-checked in analysis conference sessions in which project personnel discussed specific articles and reached consensus about how coding categories should be applied. Any anomalies or discrepancies in coding procedures were addressed and resolved during these sessions. In the following sections we will draw on this set of articles to illustrate, document and provide specific examples in support of our general critique of the use of the acculturation construct in health research.

Problems with the concept of acculturation

Critics of acculturation research have long pointed out that, due to a lack of clear definitions and insufficient conceptualization of acculturation, its central concepts remain implicit, poorly stated, simple, ambiguous, and inconsistent (Rogler et al., 1991; Recio-Adrados, 1993; Harwood, 1994; Palinkas & Pickwell, 1995; Escobar & Vega, 2000; Escobar et al., 2000; Arcia, Skinner, Bailey, & Correa, 2001; Weigers & Sherraden, 2001; Ponce & Comer, 2003; Salant & Lauderdale, 2003; Rudmin, 2003). In a recent review of literature on acculturation and alcoholism among Hispanics, Gutmann (1999) for example, reports that definitions of the term “acculturation” were never provided, but instead, readers were assumed to share a common understanding of what acculturation means. He contends that in the rush to associate specific health concerns and ethnonational origins, “many scholars may unwittingly be employing and promoting what are actually refurbished stereotypes in the mold of ‘national character traits’” (p. 174).

In our review of 69 Hispanic acculturation articles, we found that 66% (46/69) included no definition of
acculturation at all. The 33% (23/69) that did define acculturation are remarkably consistent in both the content and vagueness of the definitions they present. To illustrate, the following definition in a recent article by Salabarria-Pena et al. (2001) is typical in its essence, though perhaps more detailed than most: “Acculturation is an adaptation process occurring when individuals from one culture are in contact with a host culture. By this process, individuals adopt characteristics of the mainstream culture and retain or relinquish traits of their traditional background” (p. 662).

All definitions of acculturation we have encountered refer to a process of cultural change resulting from contact between two cultures. Conceptually, the construct can therefore be said to minimally require at least four basic elements: (1) Cultural Difference: At least two different cultural traditions are being compared; (2) Identifiable Groups: An identifiable group of individuals share each culture; (3) Cultural Contact: A situation of immigration or new contact is occurring between the two cultures; (4) Cultural Change: New cultural traits are being added to or replacing previous traits. In the following sections, we will consider problems with assuming each of these elements for US Hispanics.

**Cultural difference**

At its essence, the acculturation model posits the existence of two different, identifiable cultural orientations: the ethnic versus the mainstream, and attempts to place the acculturating individual on a continuum between them. Clearly, the idea of “culture” is central to the concept of acculturation. It is therefore particularly troubling that only a handful (8%, 6/69) of the articles in our review included any definition of “culture” at all, and that these were notably vague definitions, merely listing very general attributes, such as attitudes, norms, values, beliefs, and behaviors. Thus, in place of a carefully delineated construct to be measured, culture is implicitly understood in this research to be a cluster of nebulous characteristics carried by ethnic group member (Horn, 1993; Lock, 1993).

Lacking a coherent framework for identifying cultural elements, the acculturation studies we reviewed rely on two tenuous assumptions: that ethnic and mainstream cultures are analytically unambiguous, and that the characteristics of each are obvious and readily identifiable.

Conceptually, acculturation measurement requires a dichotomous instrument design that plots individuals on a continuum between binary opposites: ethnic culture and mainstream at each end (Gutmann, 1999). Simplistic, linear acculturation scales, with the culture of origin at one extreme and the host culture at the other have come under criticism, and in recent years, have been replaced by increasingly sophisticated acculturation models that attempt to capture the multilevel and multidirectional nature of the acculturation process (Cuellar et al., 1995; Zane & Mak, 2003; Berry, 2003). These are designed to identify acculturative types beyond the simplistic high versus low acculturation dichotomy, classifying some individuals, for example, as integrated or assimilated. Even so, these more complex scales still rely on the assumption of the existence of two “distinct cultures” (Berry, 1998, p. 39). While individuals may be plotted onto a multidimensional matrix of acculturation types, conceptually the assumption of a dichotomy between mainstream and ethnic culture persists.

Fundamentally, the notion of such a dichotomy posits an “ethnic” culture which is presupposed to be different from the “mainstream” culture. However, despite the relative rigor with which instruments, scales and outcome measurements are calibrated, tested and applied in this research, the discussion of what is meant to constitute each end of the continuum is almost completely missing, left to an assumed shared understanding of the cultures in question.

Definitions of the “mainstream” are strangely absent altogether from this literature. Indeed, none of the articles in our review attempt to define or delineate “mainstream” culture at all, but still, all contrast the ethnic culture against such a presumed norm. Only one article (Parker et al., 1998) addresses the idea of mainstream culture in any way, raising the question of whether the “lack of a defined reference group (e.g. the majority reference group)” may pose an inherent limitation to establishing any behavioral correlates relating to acculturation (p. 141). In place of explicit consideration of what might constitute “mainstream” culture or what Zane and Mak (2003) call “White American culture,” there are pervasive references to an unexamined, presumably homogenous dominant society, an “invented majority” (Ponce & Comer, 2003, p. 4) to which the ethnic group members are thought to be adapting.

Likewise, the nature and content of the ethnic culture is never clearly delineated and defined in this literature. Indeed, none of the articles in our review clearly articulate the specific attitudinal and behavioral domains to be assigned to the ethnic group. Instead, they measure proxy variables (primarily language) presumed to be indicative of the cultural traits of the group, without explaining how those traits might be extrapolated from the variables actually being measured.

Still, assertions about the presumed values, morals, and beliefs of Hispanics abound in these articles, attributing the health outcomes of concern to various stereotypic cultural features, such as religiosity, the centrality of the family or “traditional” gender roles. For example, in a study examining breast cancer beliefs among Hispanic and Anglo women, Hubbell et al.
Basic to the concept of acculturation is the notion that there are identifiable groups of individuals who share distinct cultural characteristics. The measurement of acculturation inherently requires identification of bounded and appropriately labeled groups. As is common practice in current health research, acculturation studies generally employ rather simplistic group distinctions, placing people into broad categories, such as African American or Hispanic. While such categories may seem matter-of-fact and obvious, they are in actuality products of a specific socio-historical context. Anthropologists have long argued that, rather than simply classify objective characteristics of groups of people, racial/ethnic classifications represent social constructs of difference, based on arbitrary aspects of physical appearance or behavior (Boas, 1995; Williams, 1996; Witzig, 1996; American Anthropology Association, 1998). Such classifications delimit boundaries where there are no natural borders, reflecting political and economic relationships and specific contexts of social order rather than concerns related to objective scientific measurement of group identity (Barth, 1969; Schulman, Rubenstein, Chesley, & Eisenberg, 1995; Nickens, 1995; Braun, 2002).

Despite their common-sense appeal, the familiar group labels habitually used in US health research are in fact based on a confusing potpourri of characteristics, ranging from skin color to geographic origin to language preference. To more fully appreciate the arbitrariness of these group labels, consider the term “Hispanic.” This term is used to refer to people with origins in the Spanish speaking countries of the New World, which includes over 400 million people from many different ethnic groups and subgroups, in more than 20 different countries (Haub, 2002). However, these differences are commonly ignored in health research, presuming homogeneity among people of diverse Hispanic origin.

Indeed, nearly three-fourths (72%, 50/69) of the articles we reviewed did not limit their sample to a specific geographic area or country of origin, but instead lumped people together from all over the Spanish-speaking world. Many (55%, 38/69) did not specify national origins at all, but used only generic terms such as “bilingual,” “Hispanic” or “Latino” to describe their sample. Those that do identify the national origins of their samples, often mix people from widely dispersed Spanish-speaking regions, including Mexico, Cuba, Puerto Rico, Central and South America, presumably on the assumption that people from these varied origins would share salient cultural features simply due to their sharing a linguistic heritage.

Failure to attend to the immense diversity of this population obscures any conceptual or methodological problems such diversity brings to bear upon modeling Hispanic “acculturation”—namely that there are likely more differences than similarities among these groups in relation to their histories and social circumstances. As Ponce and Comer (2003) argue, “the ‘Hispanic culture’ is a myth that serves poets, philosophers and politicians, but is ineffective as a scientific concept” (p. 5).

Cultural contact

At a fundamental level, the acculturation model relies on an important premise about the historical origins and movement of the populations in question: that distinct groups are coming into new contact. This notion,
although rarely if ever, explicitly considered, is an orientating idea behind virtually every application of the acculturation construct we have encountered. Terms such as “culture of origin” and “the new culture” are ubiquitous in this literature. For example, Berry (2003), in a recent article, reminds acculturation researchers of the “need to understand key features of the two original cultural groups ... prior to their major contact...” (p. 19, emphasis added). The sophisticated argument he puts forth about the multidimensional and multidirectional nature of the acculturation process consistently presumes cultural contact is occurring between historically distinct groups, reflected in his frequent use of phrases such as “culture-contact situation” and “groups in contact.”

While the notion of cultural-contact may make some sense for colonial or immigrant situations, for most ethnic minorities to which the acculturation model is applied in the US health literature, the idea that two distinct cultures are coming into contact amounts to historical fiction.

Consider the case of Mexicans in the US as a compelling example. The idea that people of Mexican heritage, as a group, should be considered new to the US ignores the profound historical and geographic links that have always existed between Mexico and the US. In many parts of the US, people of Mexican heritage have been living side-by-side and intermarrying with people of Anglo origins throughout the entire period of Anglo habitation (Chandler, Tsai, & Wharton, 1999). At the same time, the Mexican-US border is a permeable one, with people traveling back and forth across it throughout their lives, and across generations. In the areas along both sides of the border there is a free mixing of influences from both countries through cyclical migration, international industrial capital, and rapid transportation and communication (Weigers & Sherraden, 2001; Oppenheimer, 2001). Furthermore, people of Mexican origin on both sides of the border are long time, active participants in global or metropolitan cultures, where it is impossible to separate the influences of Western European cultures from other sources of cultural attributes (Harwood, 1994; Edgerton & Cohen, 1994). To treat Anglo and Mexican cultures as analytically separable and distinct cultural traditions in these areas is both arbitrary and fallacious.

However, the acculturation research on Mexican-Americans disregards the highly intertwined nature of these populations and national histories. Cultural traits that coexist within both populations are arbitrarily uncoupled, with some being credited to the “Hispanic” cultural heritage, and others to the “mainstream.” For example, in our literature review we found that certain characteristics, such as familialism, conventional gender roles, or religiously based morality, are commonly understood to be “traditional” Hispanic traits. In contrast, purportedly “modern” characteristics, such as lack of familial support, high stress and tolerance for self-destructive behaviors are ascribed to “mainstream” culture. Assigning coexisting cultural characteristics of multi-faceted individuals to contrasting ethnic and mainstream cultures seems plainly tautological. Naming specific traits as belonging to one or the other cultural tradition is rationalized on the basis of the acculturation construct itself, at the same time that it is being used to test it.

An especially perplexing aspect of the assumption of new contact in these studies is the ubiquitous practice of combining foreign immigrants and US-born Hispanics in the study samples. Only a handful of articles limited their sample to foreign-born Hispanics (4%, 3/69), while many (22%, 12/69) failed to distinguish immigrants from non-immigrants at all. It was quite common for the studies to include questions about birthplace or years of residence in the US, but still, most readily attribute any differences noted between foreign- and American-born subjects to cultural factors, rather than the effects of immigration.

This practice is particularly worrisome when considering that place of nativity and residence are routinely incorporated into the acculturation measurement itself. When immigrant status is collapsed into the acculturation scale, it becomes impossible to separate important differences in socioeconomic background and opportunity experienced by people raised and educated outside the US from the alleged “cultural” patterns the scales are intended to identify (Padilla & Glick, 2000). Rumbaut (1997) has argued that failure to attend to differences that might exist between recent arrivals and long-term residents, essentially treats histories of immigration as irrelevant to studies of acculturation, and considers “…immigrants and natives … as lump sums, as if these were homogeneous aggregates worthy of meaningful comparison...” (p. 499).

Cultural change

Cultural change is a central element of the concept of acculturation. Definitions of acculturation consistently refer to “social change,” “or “changes in the original cultural patterns,” of acculturating individuals (Escobar et al., 2000; Berry, 2003; Trimble, 2003). As we have discussed above, recently acculturation research has moved away from unidirectional models of change and toward more nuanced concepts of multidimensional change, developing bicultural and orthogonal models of acculturation (Cuellar et al., 1995; Zane & Mak, 2003). Still, the idea that acculturation “is a salient form of social change” (Trimble, 2003, p. 4) remains fundamental to all of these approaches. But what might constitute the kind of change that acculturation models envision?
In the early 20th century, the notion of acculturation was clearly conceived in terms of social evolution. The acculturating individual was understood to be moving from a primitive cultural orientation toward a more modern one. As Harris (1968) observes, “civilized man was supposed to have literally thought himself out of the state of nature by steadily inventing more and more clever and reasonable institutions, customs, and subsistence processes” (p. 39). While such overt presumptions about modern and primitive culture have long gone out of fashion, the notion that the acculturating individual is moving away from “traditional” values and toward those of the “mainstream” is deeply embedded in current acculturation models (Lucas and Barrett, 1995; Hahn, 1995; Yoder, 1997; Rudmin, 2003).

Indeed, in the articles we reviewed, the term “traditional” is commonly used to describe Hispanic culture, referring to “traditional health practices,” “traditional values and norms,” and “Hispanic traditions.” But what is this “tradition” so widely presumed in this literature? Are the beliefs and practices assigned to Hispanic culture indeed prevalent in Hispanic countries?

In a study of treatment for alcohol abuse among Mexican-Americans in the US, Gutmann (1999) found that claims about “changes” in drinking patterns among acculturating individuals are consistently made in the absence of any knowledge of actual past or present drinking patterns in their countries of origins. He points out that “without knowledge and experience with alcohol use and abuse in Mexico and Latin America it is very difficult to make accurate assessments regarding any kind of cultural changes that might be experienced by immigrants and to trace the sources of the changes” (p. 180).

Considering this criticism, it is striking that, while the articles in our review readily ascribe certain characteristic behaviors and practices to putative foreign cultural traditions, not a single article makes any effort to examine or document the presence or absence of those behaviors and practices in the country in question. In place of careful cross-cultural and historical analysis, we continually encountered sweeping assertions regarding retention or loss of presumed cultural traditions. For example, discussions such as the following are commonly employed to explain why low acculturation levels are associated with valued outcomes such as lower tobacco and alcohol use, or better compliance with cancer screening programs:

Latino cultural practices have served as protective factors for the group. Shared traditions and values have kept Latinos together as an ongoing, distinctive community despite devastating poverty, high unemployment decrepit housing, and poor health status… Latinos who remain close to their cultural traditions experience better health outcomes (Molina, Zambrana, & Aguirre-Molina, 1994, p. 26).

While such declarations are quite prevalent in the articles we reviewed they are virtually never accompanied by any literature or data that would support the claims about the nature of life in the native country. The authors have not deemed it necessary to investigate key questions underlying their theories about cultural change: What is life actually like in the country of origin? Are levels of family cohesion indeed higher within Hispanic countries? Are rates of alcohol use indeed lower among men living in Mexico? Are women within Hispanic countries in fact resistant to accepting cervical and breast cancer screening programs?

It is interesting to consider the mechanisms by which traditional culture is believed to affect the behaviors of interest. Ninety percent (62/69) of the articles we reviewed report specific correlations between acculturation levels and health outcomes. Most of these (61%, 38/62) find low acculturation to be associated with a valued health outcome. Through the protective effect of cultural factors such as familialism and traditional gender roles, low acculturated individuals are thought to be protected from things like drug abuse, poor birth outcomes, tobacco use, and adolescent delinquency. Conversely, 42% (26/62) of the articles find low acculturation to be associated with poor health outcomes.

Whether a positive, negative or neutral correlation between acculturation and health is reported, these studies consistently characterize Hispanic culture either as a “source of dysfunction” or as a “therapeutic panacea” (Santiago-Irizarry, 1996). Lucas and Barrett (1995) have argued that in such a model, whether responsible for good or poor health, the ethnic culture is understood as “primitive” and natural, either disruptive and degenerate, or pristine and harmonious, but always instinctive and inherent rather than rational and intentional. Thus the ethnic culture is understood to lie in contrast to the advantages and pitfalls of Western culture, with the acculturating individual proceeding away from tradition and toward modernity.

**Socio-economic factors**

Another serious limitation of the acculturation studies we have reviewed is their general disregard for the impact of material barriers on the observed health patterns. Sheldon and Parker (1992) have argued that the intense interest in current US health research on racial/ethnic categories downplays or ignores the impact of socio-economic inequalities on the lives of people living in the United States. Indeed, the studies we reviewed routinely fail to seriously explore the role of socio-economic, educational and related factors.
In nearly every study we reviewed, language preference is treated as diagnostic of culture, with increasing preference for English taken to indicate an individual's progress in taking on the traits of the "mainstream" culture. Language preference is the primary component of the acculturation measures used in 90% (62/69) of these studies, and the only acculturation indicator used in several (28%, 19/69). Meanwhile, there is a perplexing absence of discussion regarding the possible impact of English competence on the health and behaviors of interest. While some (28% 19/69) of the articles do mention that reliance on Spanish could pose problems for Hispanics, only one (Gonzalez et al., 2001) discusses the structural and clinical barriers that a lack of English may pose.

Furthermore, with rare exception, there is a general neglect in the articles we reviewed, of obvious questions concerning the health impact of poverty and lack of education. While only a handful of the articles (14%, 10/69) do not address socio-economic difference at all, and most (68%, 40/69) include some socio-economic indicators, they most commonly merely mention these factors as demographic descriptors of the sample, without considering the impact they may have on the outcomes in question. Those that do consider the impact of socio-economic variables, consistently fail to analyze how they might be associated with the cultural factors of interest, instead presenting them independently from discussion of the influence of acculturation.

With this inattention to the effects of socio-economic factors in acculturation research "culture" comes to be understood as a characteristic of an individual, independent of its context. Recio Adrados (1993) has argued that this amounts to a denial of the importance of the social structure and context of culture, and focuses instead on the presumed influence of disembodied ideas and values. He contends that such excessive separation of culture from social structure, "simplifies reality and does not serve the interests of the minority groups" (p. 60). The separation of socio-economic factors from the equation arbitrarily excludes important questions about unequal access to services, information, and economic resources, allowing questionable notions about cultural difference to drive interpretation, and equating unexplained variance with "culture" (Cohen, 1992).

**Conclusion**

Despite its prominence in current research on the unequal distribution of poor health among ethnic minorities in the US, acculturation as a variable in health research is riddled with serious conceptual and factual errors. We have examined a long list of misconceptions and questionable assumptions that underlie the acculturation construct as it is currently widely applied in Hispanic health research. We noted a marked propensity in the articles we reviewed to separate culture from the larger social structure and the dynamic social processes in which behavior and beliefs are generated, and to relegate consideration of the socio-economic challenges associated with immigration, poor English language skills, and poverty, to their effects as separate or confounding variables. At the same time, we found that critical discussion about acculturation in the health literature has concentrated almost entirely on issues of psychometric modeling and principles of measurement, while neglecting the central question of what is being measured. We have shown that, in place of careful exploration and definitions of the characteristics of the population being studied, this research relies on a priori assumptions about the nature and content of presumed cultural difference.

But how could such a flawed concept have become so widely used and accepted in current health research? Could it be due to professional dogma? Stanfield (1993) has argued that such dogma exists in the field of racial and ethnic studies, which because it is highly ideological, is not subjected to the usual conceptual and methodological scrutiny:

> Because confirmations based in folk wisdom have taken precedence over the pursuit of truth in this research area, it is not surprising to find that the rules of procedure and evidence that usually apply to other less ideologically charged sub-fields are broken, bent, or ignored when ethnicity or race is the subject matter… (p. 6).

How might research on the effect of cultural orientations on health be better conducted? Are there ways to remedy these errors, and allow the study of the impact of cultural change on health, while avoiding inaccurate assumptions about the history and circumstances of the target population, not reinforcing ethnic stereotyping, and attending to the socio-economic context? The lessons learned in anthropology's extensive experience in studies of culture change could provide significant depth and insight to this field of study. There is great potential for interdisciplinary research to generate more realistic and useful models of the impact of culture on health, incorporating consideration of the range of cultural, social, economic, and political conditions pertinent to the groups in question. This research could help to address some of the more serious shortcomings we have outlined in this paper. Particularly important would be the careful examination of the specific cultural elements in question within their actual cross-cultural and historical context to replace sweeping assertions about Hispanic culture, which could lead to better understanding of key issues that impact both cultural change and health, such as the practical realities of
immigrant life and the harsh influences of discrimination.

However, such efforts, even if successfully carried out, clearly could not be expected to result in a quantifiable representation of cultural influences on health. Culture is extremely complex and context specific, and it is not at all understood how culture may affect cognition or behavior of individuals, much less of groups. Culture simply cannot, in our opinion, be reduced to a measurable variable. Despite its current popularity, acculturation itself does not seem to be a useful concept for psychometric measurement. Escobar and Vega (2000) have argued that acculturation is a “fuzzy” construct which can include an almost limitless set of elements. We agree with their recommendation that use of acculturation measures be suspended, at least until their ambiguity and lack of predictive power can be remedied: an event that we do not anticipate is forthcoming.

In the absence of a clear definition and an appropriate historical and socio-economic context, the concept of acculturation has come to function as an ideologically convenient black box, wherein problems of unequal access to health posed by more material barriers, such as insurance, transportation, education, and language, are pushed from the foreground, and ethnic culture is made culpable for health inequalities. The increasing sophistication with which acculturation is measured and modeled does not remedy its core, conceptual flaws, but only, to borrow Stanfield’s terms, “lends a professional gloss to what are in reality nothing more than cultural and social stereotypes and presumptions derived from historically specific folk wisdom” (Stanfield, 1993, p. 4). Could the wide popularity of the concept of acculturation in current US health research be a case of the “emperor’s new clothes,” nothing more than ethnic stereotypes wrapped in a cloak of scientific jargon woven out of sophisticated psychometric formulas?

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