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Please cite the final published version:

Ozer, S., & Schwartz, S. (2016). Measuring globalization-based acculturation in Ladakh: Investigating possible advantages of a tridimensional acculturation scale. *International Journal of Intercultural Relations*, 53, 1-15. DOI: [10.1016/j.ijintrel.2016.05.002](https://doi.org/10.1016/j.ijintrel.2016.05.002)

Publication metadata

Title: Measuring globalization-based acculturation in Ladakh
Author(s): Ozer, S., & Schwartz, S.
Journal: International Journal of Intercultural Relations
DOI/Link: <https://doi.org/10.1016/j.ijintrel.2016.05.002>
Document version: Accepted manuscript (post-print)

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Measuring globalization-based acculturation in Ladakh: Investigating possible advantages of a tridimensional acculturation scale

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Abstract:

Theories and methodologies within acculturation psychology have been advanced in order to capture the complex process of intercultural contact in various contexts. Differentiating globalization-based acculturation from immigrant-based acculturation has broadened the field of acculturation psychology to include groups who are exposed to global cultural streams without international migration. The globalization-based acculturation process in the North Indian region of Ladakh appears to be a tricultural encounter, suggesting an addendum to the bidimensional acculturation model for this group (and perhaps for others as well). This study explores the development, usability, and validity of a tridimensional acculturation measure aiming to capture the multicultural orientations initiated by the process of globalization in Ladakh. The tridimensional acculturation scale was found to fit the data significantly better compared to the bidimensional scale. Implications for the study of globalization-based acculturation are discussed.

Keywords: Ladakh, India, acculturation, tridimensional, measurement, globalization

Measuring globalization-based acculturation in Ladakh: Investigating possible advantages of a tridimensional acculturation scale

1. Introduction

Given the increase in intercultural contact that has occurred in recent decades, acculturation has emerged as a central field of research within (cross-) cultural psychology. The majority of work on acculturation has focused on international migrants (e.g., immigrants, refugees, asylum seekers; Sam & Berry, 2010). However, exposure to globalization may also induce acculturative change (Arnett, 2002; Jensen, Arnett, & McKenzie, 2011) Conceptualizing acculturation as a process instigated by both international migration and globalization, acculturation has been defined as “what happens when groups or individuals of different cultures come into contact-whether continuous or intermittent, firsthand or indirect-with subsequent changes in the original culture patterns of one or more parties” (Ferguson, 2013). Globalization-based and remote acculturation may represent a different form of cultural change from the immigration-based acculturation that has been traditionally studied (Chen, Benet-Martínez, & Bond, 2008; Ferguson & Bornstein, 2012). Here we include internal migration under the heading of globalization, given that the current wave of rural-to-urban migration has occurred largely in concert with the rise of global culture.

Research within the dominant framework theory of acculturation psychology employing a bidimensional conceptualization and operationalization represents a strong advancement from unidimensional models where heritage and receiving cultures were placed at opposite ends of a continuum. However, the bidimensional model has some clear limitations when applied to culturally complex contexts where more than two cultural streams are prominent. Specifically, in some societies, a tridimensional or multidimensional model may be needed in

cases where multiple cultural streams and/or complex globalization-based influences are present within a given context (e.g. Doucerain, Dere, & Ryder, 2013; Ferguson, 2013).

Advances needed in the field of globalization-based acculturation include an exploration of whether globalization-based acculturation in culturally complex contexts is best captured through bicultural or tricultural models. Research has suggested that, in some contexts characterized by globalization-based acculturation, examining only local and global cultural streams might be insufficient. Thus, measuring three or more dimensions may allow for tapping into more of the various cultural streams involved in globalization as a multicultural process (Benet-Martínez, 2012; Ferguson, Bornstein, & Pottinger, 2012). In line with this suggestion, we argue that, because globalization-based acculturation in some minority and indigenous groups is more complex and likely involves more than two cultural streams (e.g. ethnic, national, and global streams), it is essential to compare bidimensional and tridimensional acculturation scales to investigate what is gained by moving from a two-culture approach to a three-culture approach. That is, just as Ryder et al. (2000) compared unidimensional and bidimensional acculturation scales vis-à-vis immigration-based acculturation, it is necessary to compare bidimensional and tridimensional scales vis-à-vis globalization-based acculturation in a multicultural context.

The aims of the current study were twofold: (1) validating an instrument for assessing globalization-based acculturation in Ladakh, a region in India that is attracting foreign and domestic tourists, and where many young people travel to other parts of India to study; and (2) investigating the advantages and disadvantages of adding a third dimension (orientation toward a third cultural stream) to the bidimensional operationalization of measuring orientations toward the local and global cultural streams. We expected the tridimensional operationalization to fit the data from Ladakh significantly better than the bidimensional operationalization. Furthermore, we expected the tridimensional scale to be a better predictor

of global identity as compared to the tridimensional scale. Overall, the present study was intended to contribute methodologically to elucidating the implications of operationalizing globalization-based acculturation as a multidimensional construct in complex cultural contexts such as Ladakh.

2. Acculturation and globalization from a psychological perspective

Acculturation has widely been measured and studied through a bidimensional conceptualization in which international migrants relate independently to both heritage and receiving cultural streams during the process of cultural transition. Given this operationalization of acculturation, Berry (1980) and others have proposed an orthogonal theory including four acculturation orientations, each of which is defined by maintenance or discarding of the heritage cultural stream and adoption or rejection of the receiving cultural stream. These four categories are (1) assimilation (discarding one's cultural heritage and adopting the receiving cultural stream); (2) integration (also termed biculturalism; high orientation toward both heritage and receiving cultural streams); (3) separation (retaining the heritage and rejecting the receiving cultural stream); and (4) marginalization (rejecting both the heritage and receiving cultural streams).

Although the fourfold, orthogonal acculturation model has been adapted to refer to globalization as well as to immigration (Jensen & Arnett, 2012), it may be most applicable to situations where international migrants move from one predominantly homogeneous cultural context to another. This model may not capture the complexity that is widely prevalent in contemporary multicultural and globalized societies that are influenced by other cultural streams through media and internal migration. Extending the acculturation orientations within a tridimensional model assessing three interacting cultural streams would subdivide the assimilation orientation into orientations toward either or both of the new cultural streams. Likewise, the integration orientation would be subdivided into two bicultural orientations

comprising either of the new cultural streams along with the ethnic cultural stream, as well as a tricultural orientation (Ferguson, Bornstein, & Pottinger, 2012).

Globalization, understood as the proliferation of complex forms of connectedness that transcend nation-states and cultural borders (Tomlinson, 2007), has the potential to initiate cultural change in people who are not international migrants. Indeed, globalization has been presented as contact providing the starting point for some acculturation processes, and therefore it plays a similar role as international migration does in setting the acculturation process in motion (Berry, 2008). Young people in the contemporary globalized world do not become members of just one culture, but instead – to various degrees – have to negotiate multiple cultural affiliations (Jensen & Arnett, 2012). The intersection of acculturation and globalization has led to new advancements within acculturation psychology, termed globalization-based and remote acculturation (Chen, Benet-Martínez, & Bond, 2008; Ferguson & Bornstein, 2012).

2.1. Globalization-based and remote acculturation

The distinction between immigration-based acculturation and globalization-based acculturation was proposed by Chen, Benet-Martínez, and Bond (2008), following Arnett's (2002) conception of globalization as leading to a multidimensional cultural identity. The distinction between the two types of acculturation was based on whether acculturation was caused by international relocation (e.g., immigrants, refugees, and sojourners) or caused by the influence of globalization through direct and mediated intercultural contact leading to adoption of both ethnic/local and "worldwide" cultural streams (Chen, Benet-Martínez, Wu, Lam, & Bond, 2013).

The deterritorialization caused by globalization has generated new types of remote acculturation (Ferguson & Bornstein, 2012) that differ from the prevalent understanding of acculturation as first-hand continuous contact following international migration. Indeed, one

aspect of globalization-based acculturation, remote acculturation, has been conceptualized as “intermittent and/or indirect contact between geographically and historically separate cultures” (Ferguson & Bornstein, 2012, p. 167) often occurring through popularized and prevalent mass media.

2.2. Tridimensional model of acculturation

Another recent advancement within acculturation psychology has been the employment of tridimensional acculturation scales assessing orientation toward various (sub-) cultural streams within a multicultural context. Tridimensional acculturation scales have been created and examined with people who had bicultural identities prior to the acculturation process (e.g., Russian Jews moving to the USA; Persky & Birman, 2005) or who were acculturating to more than one dominant culture (Ferguson & Bornstein, 2014). Contemporary societies evolve as increasingly multicultural conglomerates, underscoring the need for new measures within acculturation psychology to capture this cultural complexity (Doucerain, Dere, & Ryder, 2013; Ferguson et al., 2012).

2.2.1. Tridimensional globalization-based acculturation

The tridimensional operationalization of acculturation can be combined with globalization-based acculturation. Globalization-based acculturation can be conceptualized as both bidimensional and multidimensional (Chen et al., 2008), given that there may be more than one globalized cultural stream. Conceptualizing globalization-based acculturation as orientation toward both local and globalized/Western cultures mirrors the bidimensional model and can be applicable in culturally more homogeneous contexts. This conception assesses the spread of Western culture, comprised of Western values, beliefs, and practices, around the world (Chen et al., 2008; Chen et al., 2013). However, as noted above, complex globalization-based acculturation settings can be studied by employing either generic scales assessing global orientation (Chen et al., 2015) or tridimensional or multidimensional culture-

specific acculturation scales based on antecedent ethnographic information. Such multidimensional approaches emphasize the specific contexts and streams involved in each globalization context and approximate the conceptualization of globalization as a process that includes multiple cultural streams and varies across an array of culture-specific dimensions. Within such an operationalization, the process and consequences of globalization would not be understood as homogenization (Westernization) but rather a complex negotiation of multicultural affiliations (Berry, 2008). So far, only a few published studies have employed a tridimensional or multidimensional assessment of globalization-based/remote acculturation (e.g., Ferguson & Adams, 2015; Ferguson & Bornstein, 2012, 2015; Ferguson, Ferguson, & Ferguson, 2015).

The multidimensional perspective incorporates multiple cultural streams under the heading of acculturative adjustment. These streams can include ethnic, national, and global cultural forces – such as in the case of non-Western indigenous peoples. So far, the tridimensional acculturation model has not been employed in a study of indigenous peoples. Within the complex acculturation contexts of Ladakh, the conception of globalization-based acculturation and remote acculturation, along with the operationalization of a tridimensional measure, may be a more applicable approach to understanding the multifaceted and unique process of acculturation instigated by various streams of globalization vis-à-vis an indigenous group.

3. Measuring globalization-based acculturation in Ladakh

The current study of globalization-based acculturation was conducted in the Ladakhi region in the Indian Himalayas – an area that was largely isolated from continuous outside contact until the second half of the 20th century. As is the case with most intercultural meetings in the modern era, the Ladakhi region represents a complex interplay of acculturation processes. In the Ladakhi context, the globalization-based acculturation process

has been initiated by marked developments in geographical mobility through infrastructural improvements of roads and aviation, as well as through advances in telecommunication, Internet, and mass media.

Historically, the kingdom of Ladakh was exposed to acculturation through trade and wars. In 1834, Ladakh was conquered by Dogra rulers of Jammu and later annexed to the Indian union as part of the Jammu and Kashmir state. India – including Ladakh – was then colonized by Britain. However, it was only after the armed conflicts with Pakistan (1947, 1965, and 1999) and China (1962) that the roads to Ladakh were built as part of militarizing the Indian-Pakistani and Indian-Chinese borders. In 1974, the region was opened to tourism, which has resulted in a great influx of tourists primarily from other regions in India and secondarily from Western countries. Provisional merchants from the Kashmir valley, and construction workers predominantly from the state of Bihar and from Nepal, have also come to Ladakh in the past 40 years. Militarization, and especially tourism, has led to economic growth – which has facilitated Ladakhis traveling outside of the region as tourists, pilgrims, and sojourners pursuing higher education in major Indian cities. Television and Internet have also become widely accessible in the larger Ladakhi towns. In sum, the Ladakhi population has, in recent years, been exposed to other cultures through globalization-based acculturation with primary influences from both Western and mainstream Indian cultural streams.

These outside cultural influences have evoked a romanticized and essentialist perception of Ladakhi culture. This process has been marked by the political struggle for greater autonomy for the region (van Beek, 2003): Ladakhis have engaged in strong discourse around constructing and strengthening a Ladakhi cultural identity. These anti-globalization discourses, in addition to the influence of tourism, have given rise to a sense of distinctive Ladakhi identity that is perceived as needing preservation.

Globalization in Ladakh is clearly a complex process including the meeting of several cultural streams. Accordingly, in the present study, we aim to investigate the advantages and disadvantages of adding a third cultural dimension to the well-established bidimensional operationalization of acculturation designed specifically for the Ladakhi context. The investigation was based on a comparison of data collected employing both bi- and tridimensional acculturation scales to assess various acculturation experiences among Ladakhis. Specifically, the tridimensional model examined Ladakhi, larger Indian, and Western cultural streams independently. In the bidimensional model, the Indian and Western cultures were combined into a single cultural stream.

4. Study 1

In the first study, we aimed to develop, analyze, and improve a tridimensional acculturation scale for the Ladakhi context. Additionally, we sought to compare this tridimensional scale against a bidimensional version that has previously been included in research on Ladakhi populations (Ozer, 2015).

4.1. Method

4.1.1. Procedure

Data were collected through purposive non-random sampling using an online questionnaire. The questionnaire was announced in various Ladakhi youth and student groups on Facebook along with the chance for respondents to win a cash prize of 3000 INR (US\$50). The survey was completed in English, which is taught in all Ladakhi schools from first grade. A total of 225 Ladakhis participated; however, 39 were excluded because they did not complete the acculturation measure or because they were residing outside of India. Item-level missing data rates ranged from 0% to 13.4% and were missing completely at random, Little's MCAR test $\chi^2(163) = 157.00, p = .62$.

4.1.2. Participants

The sample consisted of 186 Ladakhi youth residing either in Ladakh (22.6%) or in major Indian cities such as Delhi, Jammu, and Chandigarh (77.4%). These geographical groups (Ladakhis living in Ladakh versus those living elsewhere in India) were used in testing the consistency of the scale across various exposures to acculturation. Ladakhis temporarily living in other parts of India (often to attend universities) are an example of internal migration, and therefore of globalization-based acculturation. Mean participant age was 24.26 years ($SD = 4.24$). The sample was diverse in terms of gender (74.7% male), religion (75.3% Buddhist, 23.1% Muslim, and 1.5% other) and SES (59.1% low, 30.6% medium, and 10.2% high)¹.

4.1.3. Instruments

The survey consisted of four instruments. The first asked for background information, including experienced cultural distance (two items asked whether the person felt different from Indians and Westerners) and discrimination (one item asking whether the person ever felt any discrimination because of being Ladakhi). These items were responded to using a 5-point Likert scale ranging from 1 (not different/never) to 5 (completely different/very often). The other instruments administered were the Ladakh Acculturation Scale – revised version (LAS-2D; bidimensional scale including a Ladakhi and a hybrid Western culture subscale), the Ladakh Acculturation Scale (LAS-3D) – Indian and Western Dimensions (tridimensional subscales), and the Global Identity Scale (Türken & Rudmin, 2013).

The original Ladakh Acculturation Scale (LAS; Ozer, 2015) was developed based on recommendations in acculturation psychology to assess Ladakhi and new cultural dimensions independently within several life domains (Arends-Tóth & van de Vijver, 2006; Zane & Mak, 2003). The scale follows a culture adaptation conception of acculturation to align with

¹ Low: below 160.000 INR, medium: 160.000 – 320.000 INR and high: 320.000 INR and above for the total household income.

ethnographic descriptions of the culture-specific context (van Beek, 2000), in which cultural identification may lag behind behaviorally based cultural adaptation within the Ladakhi process of globalization-based acculturation. That is, many Ladakhis adopt Western behavior without identifying with the West (Ozer, 2015). Items were adapted and worded to fit the culture specific Ladakhi context based on one year's fieldwork by the first author. Originally, the scale (LAS) consisted of 20 self-report statements regarding cultural orientation toward (a) ethnic Ladakhi culture and (b) the hybrid Western cultural stream. The hybrid Western culture subscale was operationalized as a hybrid of mainstream Indian and Western cultural streams, based on Ladakhi perceptions of Indian mainstream cultural stream as highly Westernized (Ozer, 2012). Based on reliability coefficients and examination of validity through principal components analysis, the original scale (LAS) was revised by dropping two items with poor loadings. The new revised version (LAS-2D) consisted of 18 items, with 9 items referring to Ladakhi cultural stream and 9 referring to the hybrid Western cultural stream. Using a 5-point Likert scale, the LAS-2D assessed 9 domains of behavior, attitudes, and values within both private and public spheres (see Table 1).

To create the tridimensional model, the LAS-2D Hybrid Western Dimensions subscale was decomposed into separate Indian and Western components². The Ladakh Acculturation Scale – Indian Dimension (LAS-3D Indian Dimension) specifically assessed orientation toward a mainstream Indian cultural stream. Likewise, the Ladakh Acculturation Scale – Western Dimension (LAS-3D Western Dimension) assessed orientation toward a Western cultural stream (see Table 1 for item means and Table 2 for alphas). Sample items include, “I enjoy eating Ladakhi food such as peba, mok mok, skyu, and tukhpa” (Ladakhi culture), “I watch movies and listen to movies from India (e.g. Bollywood)” (Indian cultural stream), and

² The Ladakhi subscale is the same in LAS-2D and LAS-3D.

“I want my future children to live in accordance with the Western way of life” (Western cultural stream).

The Global Identity Scale (GIS; Türken & Rudmin, 2013) is a measure of cross-cultural global identity. The scale assesses globally oriented identity in terms of culture and nationalism. The scale consists of 10 items rated on a 6-point Likert scale, with five items assessing cultural openness and five assessing non-nationalism. Examining scale validity through CFA indicated that the first item on the cultural openness subscale loaded poorly on a latent factor representing the subscale (0.31), and consequently this item was dropped. With only 4-5 items on each subscale, composite reliability was assessed employing Raykov's (2004) rho, which takes into account the number of items on the scale (see Table 2). Inspecting the indication of low reliability within the cultural openness subscale ($\rho = .59$) through an inter-item analysis indicated a weak correlation ($r = .06, p = .48$) between world community identification and listening to music from other cultures. Sample items include, “I identify with a world community (cultural openness”) and “I feel intense pride when I think about my country” (non-nationalism; reversed). The GIS was included as an index of construct validity examining the various cultural LAS-2D/3D subscales in relation to the orientation toward globalization established as the central theme in the Ladakhi acculturation process. The scale was chosen because of its thorough review of previously developed scales and its cross-cultural assessment of validity. The reliabilities found in our study resembles those reported by Türken and Rudmin (2013).

4.2. Results

The advantage and utility of bi- and tridimensional acculturation measures were assessed based on certain assumptions of what would indicate favorability of either of the models. Within both the bidimensional and tridimensional models, each subscale should provide scores characterized by construct validity and internal consistency reliability. Construct

validity was assessed by analyzing the extent to which the acculturation and GIS scales and subscales correlate in the expected directions. The scales were further analyzed for consistency across various exposures to acculturation (i.e., living in or outside of Ladakh), and the utility of categorizing the results into eight acculturation orientations were explored.

4.2.1. Analysis of internal structure of the subscales from the LAS

On average, the present sample reported a stronger orientation toward the Ladakhi cultural stream than toward either Indian or Western new cultural elements (Table 1). As shown in Table 1, an exception to this pattern was the item regarding entertainment, for which both Indian and Western cultural streams were endorsed more highly. Another general pattern was a decrease in cultural orientation toward the hybrid Western cultural stream when it was operationalized as separate scales for Western and Indian cultural streams. This pattern could reflect a positive perception of cultural openness regarding a world culture, whereas orientation toward more specific cultural elements (e.g., Indian culture) may engender a more critical stance. The moderate correlations (see Table 2) of the LAS-2D Hybrid Western Dimension with the separated LAS-3D Indian and Western Dimensions suggest that a hybrid operationalization of outside cultural orientation does not capture the same as orientations toward Indian and Western cultural streams.

Factorial validity for both the bi- and tridimensional acculturation scales was investigated through principal axis factoring analysis employing a promax rotation ($\kappa = 4$). Kaiser-Meyer-Olkin (KMO) values were acceptable for both models, with values above .60 (.72 for the bidimensional model and .71 for the tridimensional model). The scree plot suggested a two-factor solution for the bidimensional scale and a three-factor solution for the tridimensional scale. The tridimensional factor solution explained 39% of the total variance, and the bidimensional factor solution explained 26%. These low levels of shared variance could be regarded as a limitation. Nonetheless, the subscales yielded acceptable Cronbach's

alphas. Both models produced generally acceptable component loadings ranging from .30 to .80 (see Table 3) with two exceptions of items loading below .30. Two sets of items were problematic in terms of low loadings and cross-loadings (a difference of less than .20 in loadings between factors). These problematic items concerned use of English language (on the LAS-2D Western Dimension subscale) and on the community items concerning endorsement of political autonomy in Ladakh, Indian nationalism, and global community. Additionally, the item concerning preference for Western food had a suspiciously high cross-loading. This could reflect a unidimensional conception of the food item in relation to Ladakhi and Western cultural streams, with the possibility of Ladakhi caution with regards to the encroachment of Western culture on their traditional ways. The component loadings within the LAS-2D Hybrid Western Dimension subscale were, on average, smaller than those within the differentiated Indian and Western subscales. One exception was the item asking about food preferences. Therefore, both the bidimensional and tridimensional models were characterized by clear and acceptable factor structure with two sets of items suggesting revisions.

4.2.2. Construct validity

The correlation matrix in Table 2 illustrates the relationships among the different acculturation and global identity scales and subscales, thereby providing important information about dimensionality and concurrent validity. First, within the bidimensional model, a strong negative correlation between LAS-2D Ladakhi Dimension and LAS-2D Hybrid Western Dimensions would appear to support a unidimensional operationalization of acculturation in the Ladakhi context. However, the correlation was small and positive, $r = .09$. Within the tridimensional model, the correlations between the LAS-3D Ladakhi Dimension subscale, and the LAS-3D Indian and Western Dimension subscales were $r = .11$ and $r = -.16$. Even though one of these correlations was significant at the $p < .05$ level, they

were small – suggesting that a unidimensional model would not fit the data well. Second, a strong positive correlation between the LAS-3D Indian and Western Dimension subscales would suggest that these two subscales could be collapsed into a single hybrid scale. Instead, the small and nonsignificant correlation ($r = .12$) between the LAS-3D Indian and Western Dimension subscales suggests that a tridimensional model appears to fit the Ladakhi context better than a bidimensional model.

The Global Identity Scale (GIS) was included as a criterion measure of non-nationalism and openness toward new cultural influences. Because the non-nationalism and cultural openness subscales were not significantly intercorrelated, $r = .12$, $p = .12$, they were analyzed separately. The LAS-3D Western and Indian dimensions (new cultural influence) were expected to be significantly associated with cultural openness, whereas the LAS-3D Ladakhi Dimension was not. Hierarchical regression analysis controlling for demographic indicators (age, gender, SES, and level of education; see Table 4) indicated that the Western subscale was positively and significantly associated with cultural openness but the Indian and the ethnic subscales were not. As expected, the LAS-3D Ladakhi and Indian Dimensions were negatively associated with non-nationalism, but the LAS-3D Western Dimension was not. The finding of the expected relationships regarding cultural openness, non-nationalism, and cultural orientations toward both Indian and Western cultural streams appear to support the construct validity of a tridimensional acculturation scale. The one exception regarding Indian cultural orientation and cultural openness could relate to the complex relationship between culture and nationalism within the multicultural Indian context.

The bidimensional and tridimensional models were then compared (in their entirety) as predictors of cultural openness and non-nationalism through a hierarchical multiple regression analysis. When the effects of demographic indicators (age, gender, SES, and level of education) were accounted for, the bidimensional (LAS-2D) model explained 10.6% of

variability in cultural openness, whereas the tridimensional (LAS-3D) model explained 20.1% of variability. Likewise, the bidimensional model explained 8.5% of variability in non-nationalism, whereas the tridimensional model explained 17.9% of variability. Both of these comparisons favor the tridimensional model as a predictor variable.

4.2.3. Consistency across acculturation contexts

The Ladakhi acculturation experience is multifaceted, and a valid measure should be consistent across differing groupings based on location within India (in Ladakh or elsewhere in India), and thereby across differing exposures to globalized cultural streams.

Splitting the data into those living in Ladakh versus elsewhere in India indicated only small dissimilarities in the patterns of correlations between the cultural subscales in the tridimensional model. Among those living in Ladakh, the correlation between the LAS-3D Ladakhi and Western Dimensions was negative and significant, $r = -.37, p = .02$, compared to the nonsignificant correlation in the group outside Ladakh, $r = -.12, p = .17$. The stronger correlation in the sample residing in Ladakh suggests somewhat of a perceived opposition between ethnic and Western orientations. Still, the difference between these correlations was not statistically significant, $z = -1.37, p = .17$, supporting the presence of multiple external cultural dimensions within both contexts. Additionally, within the tridimensional model, the correlation between the LAS-3D Ladakhi and Indian Dimension subscales was nonsignificant for the sample residing in Ladakh, $r = -.08, p = .62$, as well as for the sample residing outside Ladakh, $r = .15, p = .09$, with no significant difference in this correlation between the two samples, $z = -1.20, p = .22$. Last, the correlation between the LAS-3D Indian and Western Dimension subscales was positive and significant for those living in Ladakh, $r = .35, p = .03$, but not for those living elsewhere, $r = .03, p = .76$. This correlation difference approached significance, $z = 1.76, p = .08$. The significant correlation among individuals residing in Ladakh suggests that “globalized cultures” may be more likely to include a hybrid of both

Indian and Western influences for the Ladakhis still living in Ladakh than for those who are living elsewhere in India. Overall, the tridimensional acculturation model appears to apply somewhat more strongly for Ladakhis who live elsewhere in India, although in no case are the correlations strong (or strongly different) enough to contraindicate the use of the tridimensional model. The differences that we found could be caused by the influence of familiarity with and prevailing adoption of a mainstream Indian cultural stream when living outside Ladakh, thereby more clearly differentiating it from a Western cultural stream.

On average, the Ladakhis in our sample perceived some degree of cultural distance between themselves and both mainstream Indian culture ($M = 2.76$, $SD = 1.09$) and Western culture ($M = 3.41$, $SD = 1.18$). However, there was no significant difference between the groups living in Ladakh or other places in India in relation to the perception of cultural difference toward Indian culture, $t(184) = 0.31$, $p = .76$, nor Western culture, $t(184) = 1.47$, $p = .14$. Likewise, there were no significant differences between the degree of experienced discrimination among the Ladakhis inside Ladakh ($M = 1.98$, $SD = 1.05$) and those living elsewhere in India ($M = 2.30$, $SD = 1.10$), $t(184) = -1.69$, $p = .09$.

4.2.4. Categorizing tridimensional cultural orientation

Cultural orientation categories have generally been derived by crossing the cultural dimensions to create a four-category matrix (Berry, 1980): integration, assimilation, separation, and marginalization. Adding a third dimension to the bidimensional model would result in eight acculturation orientations through cross-tabulation of 2 (high vs. low LAS-3D Ladahi Dimension) X 2 (high vs. low LAS-3D Indian Dimension) X 2 (high vs. low LAS-3D Western Dimension) cultural orientations, using a scale midpoint (not sample median) split as suggested by Ferguson, Bornstein, and Pottinger (2012). Thus, the integration orientation was divided into three subcategories: (1) endorsement of Ladakhi, Indian, and Western cultural streams, (2) orientation toward Ladakhi and Indian cultural streams, and (3) endorsement of

Ladakhi and Western cultural streams. Likewise, assimilation was divided into three subcategories: (1) endorsement of Indian and Western cultural streams, (2) orientation toward the Indian cultural stream only, and (3) endorsement of the Western cultural stream only. High scores on LAS-3D Ladakhi Dimension and low scores on LAS-3D Indian and Western Dimension subscales were categorized as separated. Lastly, below midpoint scores on all three LAS-3D (Ladakhi, Indian, and Western) subscales were categorized as marginalized. Table 5 shows the eight (original) and four (collapsed) acculturation orientations derived by scale-midpoint split in the tridimensional model compared to the four acculturation orientations from the bidimensional operationalization.

Further, to illustrate a key advantage of using a tridimensional approach, we examined differences in cultural openness and non-nationalism across the three possible subtypes of integration (tricultural, Ladakhi-Indian bicultural, and Ladakhi-Western bicultural). Significant differences in cultural openness emerged among the three subtypes of integration, $F(2,142) = 4.69, p = .01, \eta^2 = .06$. Pairwise differences emerged between the tricultural orientation and the Ladakhi-Indian bicultural orientation ($p < .01$) but not between the Ladakhi-Western and either the tricultural ($p = 1.00$) or the Ladakhi-Indian orientation ($p = .91$). Thus, triculturals scored significantly higher on cultural openness as compared to Ladakhi-Indian biculturals. Likewise, there was a significant difference between the integration subcategories in relation to non-nationalism, $F(2,142) = 5.35, p < 0.01, \eta^2 = .07$. Pairwise differences emerged between the Ladakhi-Indian bicultural orientation and both the tricultural ($p = .03$) and the Ladakhi-Western bicultural orientation ($p < .01$) but not between the Ladakhi-Western bicultural and the tricultural orientation ($p = .37$).

The overall patterns for the tridimensional and bidimensional models are similar, with the highest cultural openness scores within the assimilation and integration orientations and the lowest scores within the separation orientation. Seven more participants within the

separation strategy were detected in the tridimensional model. With a midpoint split, most of the participants reported an integration orientation, suggesting a prevalence of tricultural and bicultural orientations. In this regard, the tridimensional categorization with eight acculturation orientations clearly provided more nuanced information as compared to the fourfold model.

5. Study 2

Results from Study 1 suggest that, in the Ladakhi context, a tridimensional acculturation scale represents an improved measure compared to a bidimensional version. Subsequently, the final version of the scale, the Ladakh Acculturation Scale - Tridimensional (LAS-T; see Appendix A) was created based on the findings from Study 1, changing the wording of items with poor loadings on the EFA. The English language item was changed from assessing language use to assessing language preference (to account for the greater use of English at universities in large Indian cities compared to within Ladakh). Likewise, the political item was revised to assess attitudes toward maintenance and adoption of regional cultural elements (rather than orientation toward local autonomy, nationalism, and a Westernized community). This revision was furthermore guided by the complex relationship between cultural openness and non-nationalism among Ladakhis. These changes to the scale suggest a need to validate the modified tridimensional scale. The item on preference for Western food was retained, as it was needed to maintain the internal consistency of the Western cultural subscale.

The aim of Study 2 was to validate the factor structure of the Ladakh acculturation scale - Tridimensional (LAS-T) by comparing it to a model with a two-factor structure consisting of two subscales: (1) Ladakhi cultural orientation and (2) hybrid Western cultural orientation (a hybrid of both Indian mainstream and Western cultures).

5.1. Methods

5.1.1. Procedure

Data were collected on hard copy at Eliezer Joldan Memorial College in Leh, Ladakh. The survey was completed in English, with the students gathered in lecture rooms to fill out questionnaires. A Ladakhi research assistant was available to help clarify and understand the question sheet.

5.1.2. Participants

The Study 2 dataset was obtained from 291 Ladakhi youth residing and studying in or around Leh. None of these same participants also took part in Study 1. The mean participant age was 20.43 years ($SD = 1.70$). The sample was diverse in terms of gender (70.1% female), religion (72% Buddhist, 27% Muslim, and 1% other) and SES (85.9% low, 8.3% medium, and 5.8% high).

5.1.3. Instruments

The survey consisted of (a) background information including age, gender, religion, and SES and (b) the revised tridimensional Ladakh Acculturation Scale (LAS-T) consisting of 27 items with subscales assessing cultural orientation toward Ladakhi ($\alpha = .82$), mainstream Indian ($\alpha = .64$), and Western cultural streams ($\alpha = .75$). These cultural subscales included the following cultural domains: clothing, food, language, friends, community, entertainment, celebration, identity, and childrearing. All items were answered through a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”.

5.2. Results

Confirmatory factor analysis was employed to assess the goodness of fit for both a three-factor and a two-factor model for the LAS-T. The three-factor model included three latent variables with 9 manifest variables (items) in each subscale assessing orientation toward ethnic Ladakhi cultural stream, Indian cultural stream, and Western cultural stream. The two-factor model comprised two latent variables with 9 manifest variables assessing orientation

toward ethnic Ladakhi cultural stream and 18 manifest variables assessing orientation toward the hybrid Western cultural stream.

We examined the fit of the bidimensional and tridimensional models to the data and then compared these two models through invariance tests conducted as confirmatory factor analyses. In both steps, we used the Satorra-Bentler chi-square correction (Satorra & Bentler, 1994) to adjust for non-normality. When evaluating the fit of each model to the data, we used the fit index values suggested by Kline (2010): comparative fit index (CFI) $\geq .90$, Tucker-Lewis Index (TLI) $\geq .90$, and root mean square error of approximation (RMSEA) $\leq .08$. Consistent with West, Taylor, and Wu (2012, p. 219), these cut-offs were used to make statements about model fit, but not to reject models that meet some criteria but not others. We then empirically compared the fit of the two models (bidimensional versus tridimensional) using differences in the chi-square, CFI, and TLI between the two models (Dimitrov, 2010). A significant chi-square value, a CFI difference of .01 or greater, and a TLI difference of .01 or greater would indicate a significant difference in model fit.

The tridimensional model, $\chi^2(287) = 383.36, p < .001, RMSEA = .040, CFI = .92, TLI = .90$, appeared to provide a better fit to the data compared to the bidimensional model, $\chi^2(289) = 463.60, p < .001, RMSEA = .053, CFI = .85, TLI = .82$. Model comparisons indicated that the tridimensional model yielded a significantly better fit to the data, $\Delta\chi^2(2) = 37.72, p < .001, \Delta CFI = .07, \Delta TLI = .08$.

6. Discussion

In relation to the development of a tridimensional acculturation scale measuring globalization-based acculturation in the cultural complex context of Ladakh, it is important to discuss the performance of the scale, the scale validity in relation to popular views of globalization, and how cultural streams are understood and operationalized within an

acculturation scale. Within this frame, we discuss the advantages of the tridimensional approach in the present results.

6.1. Advantage of the tridimensional model

In the present study conducted in Ladakh, analyses of reliability, validity, and utility support the tridimensional acculturation model. The bidimensional model with a hybrid Western subscale did not fit the data especially well. Both bidimensional (Berry, Phinney, Sam, & Vedder, 2006) and tridimensional (Ferguson, Bornstein, & Pottinger, 2012) acculturation studies have generally found the integration acculturation orientation to be the most commonly endorsed, especially among adolescents and young adults. The high preference for integration assessed through attitude could be viewed as just a part of a more complex multilayered phenomenon of integration (Boski, 2008). If the preference for integration orientation is higher among individuals exposed to globalization as compared to immigrants (90% in Study 1), such a finding might reflect the rather voluntary character of globalization-based and remote acculturation. The voluntary nature of globalization-based acculturation is contrasted with the pressuring policies and discourses that often characterize the context of reception surrounding immigration-based acculturation (Castles, 2011). Nuancing the integration orientation (see Table 5) into both tricultural (60.2%) and bicultural (Ladakhi-Indian (21.6%) or Ladakhi-Western (8.2%)) orientations can provide refined methods for combining cultural elements and for examining the possible effects of these combinations. The limitations of the four acculturation orientations could otherwise be addressed by employing a cluster analysis or simply using the continuous cultural orientation variables (Demes & Geeraert, 2014; Rudmin, 2003), which would change the distribution and possibly the categories. In this study, where we focus on scale development, the sample-independent midpoint split method was employed so as to enable comparison across samples.

There are advantages and disadvantages to both empirically (e.g., cluster analysis) and rationally (e.g., scale midpoint) derived methods of distinguishing between categories

Our results may be comparable to studies of Jamaican migrants moving to the US (Ferguson et al., 2012; Ferguson & Bornstein, 2014), non-immigrants exposed to remote acculturation in Jamaica (Ferguson & Bornstein, 2012, 2015), diverse groups of emerging adults in South Africa who adapt to American and African cultural streams (Ferguson & Adams, 2015), and Zambian adolescents exposed to American, British, South African, and Zambian culture developing hybridized identities (Ferguson, Ferguson, & Ferguson, 2015). These studies all support the utility of a tridimensional or multidimensional model.

6.2. Perception and measure relating to the process of globalization

A face validity question regarding measures related to the process of globalization concerns the discrepancy between the empirical conceptualization of globalization and local laypeople's understandings of globalization (as it is often confounded with concepts such as modernization and Westernization) (Yang et al., 2011). To some extent, this discrepancy relates to the division between the universal process of globalization (which applies to both Western and non-Western contexts) and the impacts and outcomes related to globalization (e.g., Western culture spreading around the world; Berry, 2008). Both effects of and responses to globalization have been found to operate differently across various culture-specific contexts (Tomlinson, 2007).

For Ladakhis living in the Ladakhi and broader Indian contexts, globalization was not found to be a unidirectional process, but rather a set of multifaceted and simultaneous processes of homogenization, pluralization, traditionalization, and hybridization. This intersection of processes has prompted and strengthened a variety of local cultural identities influenced by both adoption and rejection of new cultural elements (Ghosh, 2011; Ozer, Bertelsen, Singla, & Schwartz, under review). In the culture-specific context of Ladakh,

globalization is popularly regarded as the same as Westernization or modernization. This perception relates to the anti-development discourses presenting simplistic imageries of a traditional Ladakh and equating globalization with the influx of Western monoculture, disregarding the complexity and great variety of modes of adaptation to the process of globalization (van Beek, 2000). The notion of multicultural acculturation in Ladakh, with three distinct predominant cultural influences related to local, national, and global cultural streams, has, for example, been recognized in domains such as dress, language, and music (Dinnerstein, 2013). Stressing the importance of Ladakh's historical and societal ties with the rest of India, along with the reported cultural differences (indicating that the Ladakhis regard themselves as being culturally different from mainstream Indian culture) and the extremely small correlations between the Indian dimension and both the Ladakhi and Western dimensions of the LAS-3D scale, supports the broadening of a globalization-based acculturation measure in Ladakh to include not just a Western cultural stream but also an Indian cultural stream as a significant new cultural influence.

6.3. Cultural demarcation and flexibility

Advancing acculturation psychology through a tridimensional or multidimensional model opens a discussion of how many cultures are reasonable to include in a study and how these cultures are demarcated, and furthermore how such models are to be operationalized within a quantitative measure. Cultural streams are not bounded entities. They are fluid and changing, and indeed Ladakhi culture is transformed by Western influences. Thus, “traditional” Ladakhi culture may exist only in some people's minds. From such a perspective, cultural elements are adopted and integrated – both at the level of the individual person and at the level of the cultural context – as part of the process of negotiating and forming a sense of cultural identity through selective acculturation (Weinreich, 2009). Globalization, with people all over the world obtaining access to much of the same

information and media, provides opportunities for many individuals to “self-select” some cultural elements to integrate into their local and global cultural identities (Arnett, 2002). However, from a macro perspective, cultural orientations can still be assessed in terms of nuances of the salient cultural streams in question, while still recognizing that these cultural streams do not exist as bounded and demarcated entities.

Grasping the complexity of interacting cultural systems affecting the acculturating individual’s partial and plural engagement with various cultural streams and cultural selectivity (Morris, Chiu, & Liu, 2015) is a great challenge for acculturation psychology. Optimally, the assessment of culturally complex orientations during globalization-based acculturation, including various cultural and sub-cultural elements, would include several cultural streams within a multidimensional assessment instrument. However, including numerous cultural dimensions could result in unwieldy numbers of categories or subcategories (Birman, Persky, & Chan, 2010). The choice of how many, and which, cultural orientations to include in a study should be based on ethnographic information concerning the culture-specific context in question.

The goal of measuring acculturation in relation to globalization includes the challenge of capturing a flexible form of multicultural integration that is strongly dependent on domain and situation. For example, people may be more likely to endorse multiculturalism in public situations than in private ones, and multiculturalism may relate differently to behaviors than to values or identities. Domains such as behaviors, values, and identities can vary somewhat independently but can still be integrated under the larger auspices of acculturation (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). In the present study, some life domains loaded more strongly than others on their respective cultural subscales in the EFA, suggesting specific domains that may represent important markers of how each cultural stream is perceived. On the ethnic Ladakhi cultural subscale, the high loadings for the clothing and

language items could reflect Ladakhis' traditional dress at cultural events, along with communal and political efforts to preserve the Ladakhi language. Strong markers of an Indian cultural stream relate to identity and friend items, possibly reflecting the Ladakhi experience of studying or working in major Indian cities and engaging with new friends and coworkers, as well as the sense of national identity. High loadings for identity and childrearing on the Western subscale could reflect a popular perception of the Western cultural stream as being open-minded and liberal. These categorizations might reflect endorsement of different cultural streams in public (e.g., with friends, in school) and in private (e.g., childrearing, language) – although it should be noted that Ladakhis tended to organize Western cultural components in traditionally private areas such as childrearing and cultural identity.

Developing more items to facilitate more formal categorization of groups of life domains (e.g., public versus private; Arends-Tóth & van de Vijver, 2007) might represent a way of advancing future acculturation research in a more flexible and domain-specific manner. The inclusion of more than two cultural dimensions and future developments toward categorization of somewhat independent superordinate domains could help to move the field away from the “one size fits all” assumption that may preclude a more complex understanding of globalization-based acculturation. Other approaches to studying acculturation, employing more qualitative and flexible methodologies for capturing acculturation experiences across dimensionality, hybridity, and multicultural affiliation (Bhatia, 2012; Doucerain et al., 2013), could also provide a useful supplement to the quantitative approach. Indeed, the LAS-T was created based on ethnographic fieldwork, and the interplay between quantitative assessments and qualitative interviewing should be preserved throughout the research process (i.e., results from quantitative studies should be followed up using qualitative interviews, and vice versa).

Research employing a tridimensional acculturation scale in the context of Ladakh could elucidate both advantageous and disadvantageous trajectories in (cultural) identity formation when interacting with three cultural streams. Likewise, employing the tridimensional or multidimensional conceptualization of globalization-based and remote acculturation in studies with other indigenous non-Western youth could advance the psychological understanding of local responses to the process of globalization.

6.4. Limitations

The present findings should be interpreted in light of several important limitations. First, collecting the data online (as in Study 1) limits the representativeness of the sample, as many Ladakhis in remote areas do not have access to the Internet, and in the larger towns of Ladakh, Internet connection is costly and unstable. Thus, the participants in Study 1 represent Ladakhis highly exposed to remote acculturation through the Internet. With that said, results from Study 1 (online data collection) and Study 2 (paper data collection) were consistent with and similar to one another.

Second, Ladakhis studying in other Indian cities are exposed to both remote acculturation and acculturation from internal migration. In this study, the acculturation experiences of Ladakhis in other Indian cities are conceptualized as globalization-based, representing the strong process of globalization found in tertiary education. Future research could differentiate the various mechanisms of acculturation in the Ladakhi context to examine how sojourning in larger Indian cities might include dissimilar acculturation effects as compared to Ladakhis within the Ladakh region.

Third, framing the understanding of acculturation in Ladakh as occurring along three cultural dimensions may represent a simplification of a more multifaceted and multicultural process. Ladakhi culture is strongly influenced by Kashmiri, Iranian, and Tibetan cultural streams. Likewise, the Western cultural influx can be divided into many sub-cultures, such as

back-packers, trekkers, and spiritually oriented tourists. Furthermore, an Indian mainstream cultural stream is a hybrid construct integrating elements from various distinct cultures from multiple Indian regions.

Fourth, Ladakhi identity is not homogeneous and irreducible, and does not exist in a uniform way, as it is mediated by regional, individual, and religious variations (van Beek, 2003). Our measure of Ladakhi cultural orientation is therefore an approximation of various characteristics, values, and practices and aggregates over a lot of nuances. Capturing other aspects of ambiguity would require a more qualitative methodological approach and calls for other studies investigating the psychological implications of negotiating the nuances inherent in any cultural stream. A qualitative component could further explore the individual and dynamic differences in acculturative adaptation inherent in the process of globalization, which are often generalized and oversimplified when quantitative approaches are used.

Fifth, the present validation study involving a tridimensional acculturation measure for the context of Ladakh is limited by the inclusion of only one external criterion scale. Future research should investigate additional correlates of the three cultural subscales of the LAS-T.

6.5. Conclusions

Understanding the lack of information found in the bidimensional conceptualization of acculturation among non-Western indigenous and minority groups such as Ladakhis may yield important information needed for developing a universal conception of globalization-based acculturation. Although the immigration-based acculturation process is generally conceptualized as a bicultural interplay between heritage and receiving cultures, globalization-based and remote acculturation in more culturally complex contexts may involve a greater number of intersecting cultural streams. The notion of globalization-based and remote acculturation is fairly new and requires much more in-depth study.

Globalization-based acculturation is also strongly prevalent in many African, Asian, and Latin American countries (Jensen et al., 2011). Conceptualizing and operationalizing acculturation in a more flexible manner allows for an approach that can capture the multifaceted nature of cultural adjustment for individuals who acquire additional cultural streams through exposure to globalization. The utility and relevance of employing a multidimensional acculturation assessment should be based on the culture-specific context and the predominant modes of intercultural contact that characterize a given society. Thus, this multidimensional operationalization is only reasonable in certain settings in which more than two primary cultural streams are present.

With more flexible and differentiated models of acculturation, including sensitivity to various influential cultural streams and globalization as a starting point for acculturation, acculturation psychology can establish a cornerstone in the development of a psychology of globalization (Marsella, 2012). Advancements, such as the employment of a tridimensional model of assessing acculturation, could facilitate the psychological study of cultural globalization. When relevant, the tridimensional acculturation model bestows to capturing more of the complexity of globalization-based acculturation. We hope that the present study has helped to further this line of work.

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Table 1.

Items of the Ladakh Acculturation Scale with mean and standard deviations. The items are replicated in four different cultural dimensions.

Item	LAS-2D/3D Ladakhi Dimension	LAS-2D Hybrid Western dimension	LAS-3D Indian Dimension	LAS-3D Western Dimension
Clothing	4.13 (0.85)	3.90 (0.68)	3.13 (0.99)	3.74 (0.83)
Food	4.54 (0.68)	3.84 (0.81)	3.80 (0.68)	3.51 (1.02)
Language	4.04 (0.86)	3.75 (0.97)	3.13 (0.94)	3.93 (0.98)
Friends	4.24 (0.87)	3.92 (0.84)	3.55 (0.87)	3.80 (0.88)
Community	4.19 (0.90)	4.07 (1.08)	4.39 (0.78)	2.96 (1.18)
Entertainment	3.85 (0.93)	4.20 (0.69)	3.97 (0.72)	3.96 (0.92)
Celebration	4.10 (0.84)	3.42 (0.99)	3.34 (0.92)	3.22 (1.02)
Identity	3.85 (0.99)	3.85 (0.88)	3.38 (0.99)	2.93 (1.01)
Child-rearing	4.40 (0.82)	3.73 (1.01)	2.84 (1.02)	2.67 (1.05)

Table 2.

Correlation matrix, descriptive statistics, and Cronbach's alphas for the scales and subscales

	LAS-2D Hybrid Western	LAS-3D Indian	LAS-3D Western	GIS _{cultural} openness	GIS _{non-} nationalism	Mean	SD	Reliability
Ladakh Acculturation Scale 2D/3D - Ladakhi Dimension	.09	.11	-.16*	-.14	-.34**	4.15	0.52	$\alpha = .78$
Ladakh Acculturation Scale 2D - Hybrid Western Dimension		.47**	.46**	.28**	-.15	3.85	0.48	$\alpha = .68$
Ladakh Acculturation Scale 3D - Indian Dimension			.12	.13	-.36**	3.50	0.52	$\alpha = .77$
Ladakh Acculturation Scale 3D - Western Dimension				.43**	.05	3.41	0.63	$\alpha = .82$
Global Identity Scale (GIS _{cultural} openness)					.12	4.51	0.73	$\rho = .59$
Global Identity Scale (GIS _{non-} nationalism)						2.60	1.01	$\rho = .77$

Note: * significant at $p < .05$ and ** significant at $p < .01$

Table 3.

Exploration of the factorial structure through principal axis factoring analysis for both the bidimensional and tridimensional acculturation model

Item domain	Bidimensional model		Tridimensional model		
	Ladakhi	Hybrid Western	Ladakhi	Indian	Western
Clothing _{Ladakhi}	.62	--	.63	--	--
Food _{Ladakhi}	.49	--	.50	--	--
Language _{Ladakhi}	.64	--	.64	--	--
Friends _{Ladakhi}	.57	--	.55	--	--
Community _{Ladakhi}	.32	--	.29	--	--
Entertainment _{Ladakhi}	.52	--	.51	--	--
Celebration _{Ladakhi}	.51	--	.50	--	--
Identity _{Ladakhi}	.58	--	.56	--	--
Child-rearing _{Ladakhi}	.53	--	.50	--	--
Clothing _{Hybrid Western}	--	.42			
Food _{Hybrid Western}	--	.48			
Language _{Hybrid Western}	--	.33			
Friends _{Hybrid Western}	--	.54			
Community _{Hybrid Western}	.29	.36			
Entertainment _{Hybrid Western}	--	.47			
Celebration _{Hybrid Western}	--	.50			
Identity _{Hybrid Western}	--	.45			
Child-rearing _{Hybrid Western}	--	.51			
Clothing _{Indian}			--	.49	--
Food _{Indian}			--	.38	--
Language _{Indian}			--	.57	--
Friends _{Indian}			--	.65	--
Community _{Indian}			.33	.43	--
Entertainment _{Indian}			--	.39	--
Celebration _{Indian}			--	.56	--
Identity _{Indian}			--	.59	--
Child-rearing _{Indian}			--	.56	--
Clothing _{Western}			--	--	.53
Food _{Western}			-.25	--	.37
Language _{Western}			--	.28	.24
Friends _{Western}			--	--	.56
Community _{Western}			--	--	.65
Entertainment _{Western}			--	--	.68
Celebration _{Western}			--	--	.64
Identity _{Western}			--	--	.80
Child-rearing _{Western}			-.20	--	.73

Note. Values below .2 has been suppressed and marked with --.

Table 4.

Hierarchical regression analysis revealing the relationship between the LAS-R cultural subscales and the GIS subscales when controlling for age, gender, SES, and level of education.

	Global Identity Scale - cultural openness				Global Identity Scale - non-nationalism			
	B (SE)	95% CI	β	<i>p</i>	B (SE)	95% CI	β	<i>p</i>
LAS-3D-Ladakhi Dimension	0.07 (.11)	[-.15, .28]	.05	.55	- 0.49 (.15)	[-.78, -.19]	- .25	< .01
LAS-3D-Indian Dimension	0.15 (.10)	[-.06, .35]	.11	.15	- 0.62 (.14)	[-.06, .35]	- .33	< .01
LAS-3D-Western Dimension	0.48 (.09)	[.31, .65]	.42	< .01	0.09 (.12)	[.31, .65]	.06	.46

Table 5.

Categorization of acculturation orientations and related $GIS_{\text{cultural openness}}$ and $GIS_{\text{non-nationalism}}$ score for both tridimensional and bidimensional acculturation model.

Acculturation orientation	Group	Tridimensional model			Bidimensional model		
		Frequency (%)	GIS score cultural openness (SD)	GIS score non-nationalism (SD)	Frequency (%)	GIS score cultural openness (SD)	GIS score non-nationalism (SD)
Integration	High Ethnic, Indian and Western	103 (60.2)	4.64 (0.65)	2.59 (0.98)	-	-	-
	High Ethnic and Indian only	37 (21.6)	4.21 (0.79)	2.11 (0.78)	-	-	-
	High ethnic and Western only	14 (8.2)	4.46 (0.76)	3.00 (0.71)	-	-	-
	Subtotal	154 (90.0)	4.53 (0.71)	2.53 (0.95)	175 (94.1)	4.49 (0.72)	2.55 (0.99)
Assimilation	High Indian and Western only	3 (1.8)	5.50 (0.43)	3.67 (1.42)	-	-	-
	High Indian only	0 (0)	-	-	-	-	-
	High Western only	0 (0)	-	-	-	-	-
	Subtotal	3 (1.8)	5.50 (0.43)	3.67 (1.42)	3 (1.6)	5.50 (0.43)	3.67 (1.42)
Separation	High ethnic only	14 (8.2)	4.51 (0.78)	3.11 (1.01)	7 (3.8)	4.54 (0.88)	3.06 (0.96)
Marginalization	Low ethnic, Indian and Western	0 (0)	-	-	1 (0.5)	-	-
Total N		171			186		

Appendix A.

Ladakh Acculturation Scale – Tridimensional (LAS-T)

Scale: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, and (5) strongly agree

1. I feel good and proud wearing Ladakhi clothes (gonja & sulma).
2. I like to wear Indian clothes.
3. I like to wear Western clothes.
4. I enjoy eating Ladakhi food such as paba, mok mok, skyu, and tukhpa.
5. I enjoy Indian food such as rice, chapatti, dal, and chicken masala.
6. I enjoy Western food such as pizza, burger and pasta.
7. I like to speak Ladakhi when it is possible.
8. I like to speak Hindi when it is possible.
9. I like to speak English when it is possible.
10. I enjoy the company of Ladakhi friends.
11. I enjoy the company of friends from India (the plains).
12. I enjoy the company of friends from Western countries.
13. I want a strong Ladakhi culture in Ladakh.
14. I want Ladakh to adopt cultural elements from Indian culture.
15. I want Ladakh to adopt cultural elements from Western culture.
16. I watch Ladakhi movies and listen to Ladakhi music.
17. I watch movies and listen to music from India (e.g. Bollywood).
18. I watch movies and listen to music from the West (e.g. Hollywood).
19. I like to attend Ladakhi celebrations and parties.
20. I like to attend Indian celebrations and parties.
21. I like to attend Western celebrations and parties.
22. I live according to the Ladakhi way of life and emphasize my distinct Ladakhi cultural identity.
23. I live in India and try to adjust to the Indian way of living, and the related Indian cultural identity.
24. I try to adjust to the Western way of living and the related Western cultural identity.
25. I want my future children to learn the Ladakhi culture and way of living.
26. I want my future children to live according to the Indian way of life.
27. I want my future children to live in accordance with the Western way of life.